

# GRADE 11 COURSE DESCRIPTIONS 2011–12

## *English and Math Choices*

Choosing which English or Math course is most appropriate depends on a student's ability and career plan. Students should consult their English and Math teachers to determine which course best suits their abilities. They should check the websites of post-secondary schools and consult with their Careers teachers, and/or Guidance to determine the courses required for their career choices.

**ENGLISH UNIVERSITY (ENG3U)** *One of two credits which will be part of the two-credit English and Perspectives Block.*

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

**ENGLISH COLLEGE (ENG3C)** *One of two credits which will be part of the two-credit English and Perspectives Block.*

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory Grade 12 college preparation course. (Prerequisite: English, Grade 10, Applied)

**ENGLISH WORKPLACE (ENG3E)** *One of two credits which will be part of the two-credit English and Perspectives Block.*

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course. (Prerequisite: English, Grade 10, Applied)

**MATHEMATICS UNIVERSITY (MCR3U)**

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems. (Prerequisite: Principles of Mathematics, Grade 10, Academic)

*Note: This course is usually taken by students who wish to take Math, Science, Engineering, and some Business Courses at University. It is a prerequisite for Advanced Functions 12U and Calculus & Vectors 12U.*

**MATHEMATICS UNIVERSITY/COLLEGE (MCF3M)**

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems. (Prerequisite: Principles of Mathematics, Grade 10, Academic, or Foundations of Mathematics, Grade 10, Applied)

*Note: This course is usually taken by students who desire to take only Data Management 12U. Students who wish to take Math, Science, Technology, Engineering and Business Courses at College also usually take this course.*

**FOUNDATIONS FOR COLLEGE MATHEMATICS (MBF3C)**

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

*Note: Usually students who need college-level mathematics enroll in the U/C course. If students find it too difficult, the MBF3C can be earned in that setting.*

**MATHEMATICS WORKPLACE (MEL3E)**

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. (Prerequisite: Principles of Mathematics, Grade 9, Academic, or Foundations of Mathematics, Grade 9, Applied)

## ***Science Choices (including Green Industries)***

Notes:

1. Students should be careful to choose the science courses that fit their career plan. Consulting with their grade ten science teachers is helpful as each of the three main sciences has a particular focus.
2. Taking all three sciences in grades 11 and 12 at the university level is difficult as they take up over  $\frac{1}{3}$  of the remaining courses in high school. Failure to choose the correct one(s) in grade 11 often limits or complicates choices in grade 12.
3. For each of Biology, Chemistry and Physics College, in the Ontario curriculum there is only one senior high school course. Biology College is a grade 11 credit, while Chemistry College and Physics College are grade 12 credits. TDChristian usually offers Physics each year and Chemistry in even years and Biology in odd years. Students who require more than one college science are urged to take them as soon as they can.

### **GREEN INDUSTRIES (THJ3M) *\*\*NEW for 2011-12\*\****

This course enables students to develop knowledge and skills related to agriculture, forestry, horticulture, and landscaping. Students will study the identification, growth, and management of plants and animals and develop process, design, and management skills required in the green industries. Students will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and will explore postsecondary education programs and career opportunities. (Prerequisite: None, so students may take it even if they did NOT take E-Block in grade 10)

### **BIOLOGY COLLEGE (SBI3C)**

This course focuses on the process involved in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, animal anatomy and physiology, plant structure and physiology, and environmental science. Emphasis will be placed on the practical applications of concepts, and on the skills needed for future study in various branches of the life sciences and related fields. (Prerequisite: Science, Grade 10, Academic or Applied) *Note: There is no Grade 12 College Biology.*

### **CHEMISTRY COLLEGE (SCH4C) – NOT OFFERED in 2011-12**

This course introduces students to the concepts that form the basis of modern chemistry. Students will study qualitative analysis, quantitative relationships in chemical reactions, organic chemistry and electrochemistry, and chemistry as it relates to the quality of the environment. Students will employ 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 in the development of new technologies and products. (Prerequisite: Science, Grade 10, Academic or Applied) *Note: There is no Grade 11 College Chemistry.*

### **PHYSICS COLLEGE (SPH4C)**

This course develops students' understanding of the basic concepts of physics. Students will explore these concepts as they relate to mechanical, electrical, fluid (hydraulic and pneumatic), and communications systems, as well as to the operation of commonly used tools and equipment. They will develop scientific-inquiry skills as they verify accepted laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment. (Prerequisite: Science, Grade 10, Academic or Applied) *Note: There is no Grade 11 College Physics.*

### **BIOLOGY UNIVERSITY (SBI3U)**

This course furthers students' understanding of the processes involved in biological systems. Students will study cellular functions, genetic continuity, internal systems and regulation, the diversity of living things, and the anatomy, growth, and functions 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)

### **CHEMISTRY UNIVERSITY (SCH3U)**

This course focuses on the concepts and theories that form the basis of modern chemistry. Students will study the behaviours of solids, liquids, gases, and solutions; investigate changes and relationships in chemical systems; and explore how chemistry is used in developing new products and processes that affect our lives and our environment. Emphasis will also be placed on the importance of chemistry in other branches of science. (Prerequisite: Science, Grade 10, Academic)

### **PHYSICS UNIVERSITY (SPH3U)**

This course develops students' understanding of the basic concepts of physics. Students will study the laws of dynamics and explore different kinds of forces, the quantification and forms of energy (mechanical, sound, light, thermal, and electrical), and the way energy is transformed and transmitted. They will develop scientific-inquiry skills as they verify accepted laws and solve both assigned problems and those emerging from their investigations. Students will also 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)

## **Perspectives Course**

Elements and themes from these Courses are in the ENGLISH and PERSPECTIVES two-credit block.

### NEW TESTAMENT (HRE23)

This course is designed to deepen the students' awareness of and insight into what it means to be a Christian in contemporary society.

### WORLD RELIGIONS (HRT3M)

This course is designed to be both a theoretical study of religions and a personal investigation into faith. The academic nature of the course is necessary to promote an informal, respectful approach to the religions that influence our world today. Emphasis will be placed on biblical investigation to confirm and evaluate the truths of the Christian faith. Students will then immerse themselves into comprehensive studies of five world religions: Judaism, Christianity, Islam, Hinduism, and Buddhism. Finally, the course will end with a unit introducing the rest of Christian Apologetics.

## **French, Geography, History, Media Studies or Video Block Choices**

### FRENCH UNIVERSITY (FSF3U) *Ms. Joosse*

In this course, students will learn the finer points of French grammar, including reading skills, writing comprehension, oral comprehension, and oral expression. One of the main emphases of this course is the art of storytelling. For this unit, a variety of sources are used including newspapers, magazines, and videos. One of the major components of this course is an oral presentation wherein individual students instruct the class in a given skill. Students will also be required to read one of a number of selected novels. (Prerequisite: French Studies, Grade 10)

### PHYSICAL GEOGRAPHY UNIVERSITY/COLLEGE (CGF3M) *Mr. Robinson*

This course examines the main elements of the physical environment (climate, soils, landforms, oceans, vegetation), the processes that shape them, and the relationship between the environment and human beings. Students will apply a wide range of geographic tools and methods to explore the distribution and ongoing evolution of the elements of the physical environment on a variety of scales, from local to global. *(This course includes a fall camping trip which students are required to go on and that incurs an extra cost.)* (Prerequisite: Geography of Canada, Grade 9, Academic or Applied)

### WORLD HISTORY TO THE 16<sup>th</sup> CENTURY UNIVERSITY/COLLEGE (CHW3M)

This course investigates the history of humanity from earliest times to the sixteenth century. Students will analyse diverse societies from around the world, with particular regard to the political, cultural, and economic structures and historical forces that form the foundation of the modern world. They will examine the influence of selected individuals and groups, as well as of particular innovations, and will develop skills of historical inquiry, organization, analysis, and communication. (Prerequisite: Canadian History in the Twentieth Century, Grade 10 Academic or Applied)

### MEDIA STUDIES (EMS3O)

This course emphasizes knowledge and skills that will enable students to understand media communication in the twenty-first century and to use media effectively and responsibly. Through analysing the forms and messages of a variety of media works and audience responses to them, and through creating their own media works, students will develop critical thinking skills, aesthetic and ethical judgement, and skills in viewing, representing, listening, speaking, reading, and writing. (Prerequisite: English, Grade 10, Academic or Applied)

### VIDEO BLOCK (EPS3O and TGJ3M) *Mr. Godber and/or Mr. Peters (as of Spring 2011)*

Video Block is an interdisciplinary programme, emphasizing a team approach, where students learn ways of solving problems in order to complete video projects for school viewing and possibly for use outside of school. Students, largely through experience and practice, learn how to plan for, act in, film, and/or edit videos. In addition, students will identify how media is or can be used in positive and negative ways. Christians must strive to be able creators, as well as informed and incisive critics of media. This course is offered as a two period block in the morning or the afternoon for one semester. A course emphasis is to learn what is necessary to be effective in front of the camera, as well behind it. (Prerequisite: None)

Notes:

1. Students apply and *may* be interviewed before being accepted (Grade twelve students *may* also apply). They must be dedicated to completing the course, using time wisely when not supervised, working with others unlike themselves, thinking creatively, listening to others and coming to a consensus on project details. *Not all students who request the course get in.*
2. In order for this block to run, 18 students need to enroll and be approved.
3. For more information about Video Block, contact Mr. Godber or Mr. Peters.

## **Other Courses** (Note: Many of the above listed courses may be selected under Other Courses, as well.)

Note: To learn more about each of these courses, feel free to talk to or e-mail the teacher in that subject area.

### SPECIAL PERMISSION COURSES

At TDChristian, we offer special permission courses in order to challenge and/or support our students. These courses have included such things as Resource (non-credit) (*Ms. Vanderheide*), Yearbook (*Mr. VanEerden*), Acting (*Mr. Peters*), Extra Shop (*Mr. Huyer or Mr. Vanderkloet*), Computer Science (*Mr. Hagen*), and Music (*Mr. Hayward*) courses. To explore other options, students need to connect with teachers who may be able to support them in their endeavours/studies.

### CO-OP EDUCATION (FULL or HALF DAY)

Students interested in full or half day co-operative education (which includes work experience) should indicate this in the course selection process. They should also contact *Mr. Bentum*. Usually, students work with the school to find a suitable co-op placement. (Prerequisite: None)

### INTRODUCTION TO FINANCIAL ACCOUNTING UNIVERSITY/COLLEGE (BAF3M) *Mr. Hagen or Mr. Buwalda*

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)

### ACOUSTIC GUITAR (No Previous Musical Experience Needed) (AMG3O) *Mr. Fluit*

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, may also plan, market, and produce music productions, making use of appropriate technology, and will evaluate the result. This course will focus on the acquisition of basic guitar performance skills. All students will be loaned acoustic guitars as they would textbooks. (Prerequisite: None)

### CABINET MAKING (TECHNOLOGICAL DESIGN) (TDJ3M) – OFFERED in 2011-12

This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs, using working drawings and other communication methods to present their design ideas. They will develop an awareness of environmental, societal, and cultural issues related to technological design, and will explore career opportunities in the field, as well as the college and/or university program requirements for them. (Prerequisite: None)

### CONSTRUCTION TECHNOLOGY (TCJ3C) – NOT OFFERED in 2011-12

This course focuses on the development of knowledge and skills related to residential construction. Students will gain hands-on experience using a variety of construction materials, processes, tools, and equipment; learn about building design and planning construction projects; create and interpret working drawings and sections; and learn how the Ontario Building Code and other regulations and standards apply to construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore career opportunities in the field. (Prerequisite: None)

### DRAMATIC ARTS (ADA3O) *Mr. Peters*

This course requires students to create and to present dramatic works. Students will do research on and study such types of contemporary theatre as docudrama and forum theatre. They will interpret and present works in a variety of dramatic forms; create and script original works; analyze and reflect on dramatic works; and develop their communication skills and other skills useful in a variety of careers. (Prerequisite: None)

### ENTREPRENEURSHIP: The VENTURE (BDI3C) *Small Business—students in this course help run the school store*

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)

### HEALTHY ACTIVE LIVING EDUCATION (PHYS. ED.) (PPL3O) *Mrs. Dengerinik or Mrs. VanSchepen*

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)

### HEALTHY ACTIVE LIVING EDUCATION (PHYS. ED.) (PPL40) *Mrs. Dengerinik or Mrs. VanSchepen*

This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others. (Prerequisite: None)

### MUSIC (AMI30) *Mr. Hayward*

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. (Prerequisite: Music, Grade 10 or permission of the teacher)

### TRANSPORTATION TECHNOLOGY (OR SMALL ENGINES) COLLEGE (TTJ3C) *Mr. Klompmaker*

This course examines the infrastructure required for the operation of land, air, and/or marine vehicles. Students will design, construct, and modify vehicles, and apply safe work practices and procedures using current technology. They will also develop effective communication and teamwork skills when developing solutions to managing vehicle support systems; investigate the educational requirements for career opportunities in the transportation sector; and analyse the impact of transportation technology on society and the environment. (Prerequisite: None)

### VISUAL ARTS (AVI30) *Mrs. Tenyenhuis*

This course is an introduction to the drama of modern ideas in art. Students will explore the processes of conceptual development in the following areas: advanced design, surrealist painting, realistic drawing, and three-dimensional space. The major project in this course is the design a children's storybook. The art history component will focus on Baroque and Renaissance art. (Prerequisite: Visual Arts, Grade 9 or 10)

## ***Half-Credit Courses***

### CONCERT BAND (AMR20)

This half-credit course is an opportunity for the motivated instrumentalist to explore concert band repertoire on a broader scale. The emphasis in this course is on technique, ensemble playing, and interpretation. Band practices take place twice every week before school and work toward performances.

### CONCERT CHOIR (AMV20)

This half-credit course is based on the belief that we all have voices which can be trained to sing well. Students need no musical background, only a love for singing in order to participate in the choir. In this course students will learn the fundamentals of vocal and performance technique and acquire a sensitivity toward choral music. Choir practices take place twice every week during school time and work toward performances.

## ***Interest in International Block Program***

INTERNATIONAL BLOCK (Currently 2 credits: Introductory Spanish and Interdisciplinary Studies. In addition, students in International Block who are Grade 11 take English and Perspectives Block in Semester 2 as their third and fourth credits.)

TDChristian is currently running a full second semester International Block program that includes a two-month trip to the Dominican Republic. This is our fifth International Block. Students are asked to indicate their interest in this type of program for 2011-12 in the course selection process. Those who do so will be contacted if the program is to be offered next school year. An application process and interviews were part of the selection process in for the past three years. We anticipate the same for 2011-12. Not all students who apply or who are interviewed are accepted. Students should fill in their Course Selections as if there were no International Block. For more information, please see the Link near the bottom left of the TDChristian Splash page.

***FINAL NOTE: Courses will only run if there are enough students enrolled, there is a qualified teacher, and a suitable teaching space.***