GRADE 11 COURSE DESCRIPTIONS 2017−18

English and Math Courses

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 as a Second Language courses are available for International Students: usually two of ESLCO, ESLDO and ESLEO.

ENGLISH UNIVERSITY (ENG3U)
This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse challenging literary texts from various periods, countries, and cultures, as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course. (Prerequisite: English, Grade 10, Academic)

ENGLISH COLLEGE (ENG3C)
This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory Grade 12 college preparation course. (Prerequisite: English, Grade 10, Applied)

ENGLISH WORKPLACE (ENG3E) ** This course runs in the same room and time as other English classes. **
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)

MATHEMATICS WORKPLACE (MEL3E) ** If offered, it will run in the same room and at the same time as MBF3C. **
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)

Perspectives Course

Students in grade 11 must take HRE33 (which includes a required 3-day service trip to Toronto) unless they are accepted into International Block or Internship Block.

CONTINUING THE STORY OF REDEMPTION (NEW TESTAMENT) (HRE33)
This course provides students with opportunities to explore the Story of Redemption against the backdrop of other world religions and belief traditions, starting with the coming of Jesus Christ. The gospel of Matthew reveals the fulfillment of the Jewish prophecies in the Old Testament and the continuous Story of Redemption. The book of Acts outlines the initial work of Jesus' Spirit-filled disciples, the conversion of Paul, and his teaching for the early Christian church. Paul's letter to the church at Ephesus outlines God's kingdom plan of redemption. The pastoral letter of James speaks to the issue of how a genuine and living faith is expressed in daily life. Other world views and life philosophies are explored as the topics arise, but the thrust of the course will be an examination of the Christian faith. Students will develop knowledge of the terms and concepts relevant to this area of study and develop research and inquiry skills related to the study of human expression of belief. This is a locally-developed course approved by the Ministry of Education. (Prerequisite: None)

Note: If a student takes Internship Block or International Block, they need not take the above Perspectives course.

Science Courses (or Green Industries)

Notes:
#1. Students should be careful to choose the science courses that fit their career plan. Consulting with science teachers is helpful.

#2. Taking all three sciences in grades 11 and 12 at the university level is difficult as they take up over ⅓ of the remaining courses in high school. Students should carefully check possible future programs to determine which science courses to take.

#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 does not usually offer the college courses every year. Students who require more than one college science are urged to take them as soon as they can. Provisions can usually be made for students to take a college course online if needed.

GREEN INDUSTRIES (THJ3M)
This course enables students to develop knowledge and skills related to agriculture, forestry, horticulture, and landscaping. Students will study the identification, growth, and management of plants and animals and develop process, design, and management skills required in the green industries. Students will also examine social and economic issues related to the green industries, learn about safe and healthy working practices, study industry standards and codes, and will explore postsecondary education programs and career opportunities. (Prerequisite: None, so students may take it even if they did NOT take E-Block in grade 10)

BIOLOGY COLLEGE (SBI3C) ** Likely offered next in 2018-19. **
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. This course may be offered online and supervised by one of our science teachers.*

CHEMISTRY COLLEGE (SCH4C)
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. This course may be offered online and supervised by one of our science teachers.*

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. This course may be offered online and supervised by one of our science teachers.*

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 can also be taken as part of Internship Block. **
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)

EARTH AND SPACE SCIENCE 12 UNIVERSITY (ALGONQUIN TRIP: SES4U) *Mr. Robinson*
This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence. (Prerequisite: Science, Grade 10, Academic)
This course includes a required fall camping trip to Algonquin park that incurs an extra fee. Enrollment is limited though the maximum of 22 is not often reached.

Optional Courses **(Note: Some of the above listed courses qualify as optional 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.

INTRODUCTION TO FINANCIAL ACCOUNTING UNIVERSITY/COLLEGE (BAF3M)
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. 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, 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)

COMMUNICATIONS TECHNOLOGY (TGJ3M)
This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also develop an awareness of related environmental and societal issues, and will explore college and university programs and career opportunities in the various communications technology fields. (Prerequisite: None)

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) *This course may be taken only by special permission as it is likely to run during period 5.*

CO-OP EDUCATION (FULL or HALF DAY)
Students can earn credits by working in an approved co-op placement. Students who are interested in gaining credits in this way should seriously consider Internship Block (see description later in the document) as well as contact their guidance counselor to determine ways to find an acceptable co-op workplace. (Prerequisite: None)

DRAMATIC ARTS (ADA3O/4M) *Mr. Peters*
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) *This credit may be earned as part of Show Period or part of the Sketch Period – both are multi-grade classes.*

ENTREPRENEURSHIP: The VENTURE (BDI3C)
This course focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. Students will create a venture plan for a school-based or student-run business. Through hands-on experiences, students will have opportunities to develop the values, traits, and skills most often associated with successful entrepreneurs. (Prerequisite: None)

FRENCH UNIVERSITY (FSF3U)
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) *This course may include a required trip that incurs an extra cost.*

HEALTHY ACTIVE LIVING EDUCATION (PHYS. ED.) (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)

INTERNATIONAL BLOCK (Currently 4 credits: English 11, Philosophy 11 [HZB3M] and two co-operative education credits.)
Students who are accepted into the International Block Program go abroad for about two months in addition to classroom and project work before and after their trip. Students who complete International Block complete their Grade 11 Perspectives requirement through the philosophy course. This program usually involves an application process, interviews and extra fees $5000 to $6000. At present, details about this program are being determined. *Interested students and families should connect with Mr. Groot.*

INTERNSHIP BLOCK 11/12 (Offered, if numbers merit, in both semesters.)
This semester project-based program allows students to relate what happens in the work place to their learning in school. The block uses experiential learning in work places to highlight practical ways for students to learn to serve and work with others through their internships. Their experiences also qualify them for the Grade 11 Perspectives requirement. Students attend school for three days (Monday, Wednesday, and Friday) to work at earning an English credit (ENG3U, ENG3C, ENG4U or ENG4C) and a Manufacturing Technology (TMJ3M/C/E), Chemistry (SCH3U), or agreed upon Grade 12 credit. On most Tuesdays and Thursdays, students earn the two related co-operative education credits through their approved Internship (or co-op) placement. Grade 11 students who take Internship Block are not required to take HRE33. Grade 12 Students are not required to take Grade 12 Perspectives. Finally, students are given the opportunity to earn a fifth credit by taking an online course. *When submitting your course selection sheet, include the required application. See the Splash page link for the application form.*

MUSIC (AMI3M/4M) *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) *Music may be taken in both semesters with permission of Mr. Hayward.*

PHILOSOPHY: THE BIG QUESTIONS (HZB3M) **** NEW ****
This course encourages exploration of philosophy's big questions, such as: What is a meaningful life? What separates right from wrong? What constitutes knowledge? What makes something beautiful? What is a just society? Students will develop critical thinking and philosophical reasoning skills as they identify and analyse the responses of philosophers to the big questions and formulate their own responses to them. Students will explore the relevance of philosophical questions to society and to their everyday life. They will develop research and inquiry skills as they investigate various topics in philosophy. (Prerequisite: None)

PHOTOGRAPHY (AWQ3M)
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 photography, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. (Prerequisite: Visual Arts, Grade 9 or 10, Open)

SHOP: CUSTOM WOODWORKING 11 (TWJ3E) ** Offered yearly in Grade 10. Offered in 2017-18 for Grades 11 and 12. **
This course enables students to develop knowledge and skills related to cabinet making and furniture making. Students will gain practical experience using a variety of the materials, tools, equipment, and joinery techniques associated with custom woodworking. Students will learn to create and interpret technical drawings and will plan, design, and fabricate projects. They will also develop an awareness of environmental and societal issues related to the woodworking industry, and will explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation. (Prerequisite: None)

SHOP: CUSTOM WOODWORKING 12 (TWJ4E)
This course enables students to further develop knowledge and skills related to the planning, design, and construction of residential and/or commercial cabinets and furniture. Students will gain further experience in the safe use of common woodworking materials, tools, equipment, finishes, and hardware, and will learn about the entrepreneurial skills needed to establish and operate a custom woodworking business. Students will also expand their awareness of health and safety issues and environmental and societal issues related to woodworking, and will explore career opportunities that may be pursued directly after graduation. (Prerequisite: Custom Woodworking, Grade 11, Workplace Preparation)

SHOP: CONSTRUCTION ENGINEERING TECHNOLOGY (TCJ3C) ** Next offered in 2017-18 for Grades 11 and 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)

VISUAL ARTS (AVI3M)
This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. (Prerequisite: Visual Arts, Grade 9 or 10, Open)

WORLD HISTORY TO THE 16th 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)

PRINT AND GRAPHIC COMMUNICATIONS (YEARBOOK) TGG3M/4M
This course is based on the Communications Technology guidelines and can be earned by taking the Yearbook course. The Grade 11 course is followed by the Grade 12 one for students who progress in the area of Print and Graphic Communications.

SPECIAL COURSES
At TDChristian, we offer special courses in order to challenge and/or support our students. These courses may include Resource (non-credit), Yearbook *(Mr. Buwalda)*, further Shop courses *(Mr. Vanderkloet)*, Computer Science *(Mr. Hagen)*, and further Music courses *(Mr. Hayward)* courses. To explore options, students need to connect with appropriate teachers. Also, some grade 11 students take grade 12 courses. Decisions to do so are made on an individual basis once the time table is constructed. Finally, some students work as Student Assistants. Arrangements can be made to earn a credit, in some cases. The form to become a Student Assistant must be completed and signed by the student, his or her parent or guardian, the supervising teacher and the principal.

Half-Credit Courses

BAND (AMR2O)
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.

CHOIR (AMV2O)
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.

DRAMA IMPROVISATION, Open or Univeristy/College (ADG2O, ADG3M) – *Special Permission is required from Mr. Peters*
This half-credit course explores the fundamentals of improvisation. Students will learn the craft of acting without scripts. Using their minds, voices and bodies as tools for expression students will grow as actors: individually, and in ensemble. Students will reflect on their experiences in a variety of ways. Class time includes a heavy emphasis on performance with live audiences weekly, hands-on workshops, and numerous improvisational competitions. (Prerequisite: ADA1O)

DRAMA PRODUCTION, Open (ADD2O) – *Special Permission is required from Mr. Peters*
This half-credit course provides opportunities for students to explore dramatic conventions and techniques specifically connected to drama production. Students will assume responsibility for decisions made in the creative and collaborative processes, specifically related to the production of the school's mainstage show, and will reflect on their experiences. (Prerequisite: None)

A Final Reminder: A course will run if there are enough students enrolled and there is a qualified teacher and a suitable teaching space.