



**PROGRAM HANDBOOK  
2010 -2011**

## INTRODUCTION

Welcome to this booklet describing the curriculum at Durham Christian High School. It includes a brief discussion of:

- levels of academic difficulty
- academic policies
- diploma requirements
- a list of courses offered by grade
- program overview and perspective
- a brief description of courses

Programs and courses of study are prepared so that students will encounter a curriculum which enables them to fulfil the mission and goals of our school. We endeavour to prepare students with skills, discernment, understanding, creativity, and confidence so that they are enabled to be witnesses for Jesus Christ.

Students and parents should read through the booklet thoroughly so that the choice of subjects may be done carefully. We will assist you in the process both through guidance sessions held with the different grades, and through one on one sessions with our guidance counsellor.

It is important that all of your questions are answered so that courses are selected which will enable you to be considered for programs in colleges or universities which will prepare you for the career you wish to pursue. If you have questions, do not hesitate to ask.

Through our curriculum, staff, and school life, we trust that, by God's grace, Durham Christian High School will be a place in which students are encouraged to live for Jesus Christ as their Lord and Saviour.

Other information booklets published by the school include:

- **Student Handbook/Academic Planner**  
Contains school year calendar and policies and procedures relevant to student life. Available online at <http://www.dchs.com/pdfdocs/studentplanner.pdf> or by request from the office.
- **Parent Handbook**  
Basic information and school year calendar for parents. Available online at <http://www.dchs.com/pdfdocs/parenthandbook.pdf> or by request from the office.
- **School Directory**  
Contains a listing of the addresses and telephone numbers of staff, board, committees and families.

## DURHAM MISSION STATEMENT

*Durham Christian High School strives to provide an excellent Christ-centred education which enables students to develop their sense of wonder at God's work, their awareness of humanity's role in culture, and their gifts for a life of service to God and others.*

## VISION OF THE SCHOOL

As board, staff, parents and supporting community, we recognize how much we depend on God's grace to:

Provide an academic environment which:

- is embedded in God's word.
- is creative, stimulating, and interactive.
- encourages special gifts and insights.

Establish a community which:

- is conducive of learning.
- provides leadership and discipleship opportunities.
- fosters respect and fairness.

In response, students will:

Grow in their commitment to the Christian faith:

- respecting themselves as image bearers of God.
- understanding the complexity of God's work.
- discerning good and evil in society.

Develop their gifts:

- acquiring solid academic knowledge.
- gaining skill in areas such as technology, arts, sciences, and humanities.

Increase their desire to serve God and humanity:

- displaying integrity in life style.
- demonstrating leadership and service.

## PLANNING A PROGRAM OF STUDIES

### Guidelines

We suggest students follow these guidelines when selecting courses:

1. Choose a broadly based, balanced program in order to be well versed in many areas of God's Kingdom, and to allow for a change of direction in your program to support possible changes in career goals.
2. Choose courses at the highest level of difficulty at which you can work effectively.
3. Plan your program as far into the future as possible.
4. Many subjects such as mathematics and languages should be taken in continuous sequence since they are built upon skills learned the previous year.
5. Seek advice from your teachers and from the Guidance Department. The Guidance Department offers information on universities, colleges, and careers. Personal counselling, interest inventories, etc. are also available. Course transfers during the year are also done through the Guidance Department.

### Note:

1. You may not always be able to take every course you choose because of space and other limitations.
2. Parents or guardians must approve selections.

### The Credit System

Durham Christian High School is registered as a private school with the Ontario Ministry of Education and is authorized to issue the Ontario Secondary School Diploma. The school curriculum is organized along the lines of the credit system as are all the Public and Roman Catholic Separate High Schools in Ontario. The credit system is a means of promotion based on achievement in individual subjects rather than on overall achievement in a grade. A credit is earned for successful completion of a course for which 110 hours of study are scheduled. A course is successfully completed if the student obtains a final mark of 50% or better in that course. Similarly you could earn ½ credit for a course of 55 hours.

### The Semester System

Durham Christian High School operates on a semester system. Students take four courses from September to January and another four from February to June. Some of our courses in grades nine and ten are offered on a full year basis. Students are encouraged to enrol in a course during Ninth period. This full year class offers students opportunities in Junior Band, Praise Team, Drafting, Studio Art and Drama. Students in grades nine and ten must enrol in an Ninth period class.

## **The Grade Nine Program**

The first year of secondary school should be viewed as exploratory. Many students will change their educational goals and wish to undertake a different type of compulsory or optional course. Transferring from one type to another is possible during the semester in cases where the schedule permits it. (See Student Handbook)

## **Revision of Student's Program**

Students can transfer between applied and academic types of courses in going from grade nine to ten. Students may need to take a transfer course in going from some courses in grade ten to some courses in grade eleven. By grades eleven and twelve a student wishing to attempt courses in a university stream may have an accumulated deficiency of prerequisite learning, especially in subjects that are sequential. In such cases, the student could undertake remedial work through independent study, a transition course, or repeat the previous course in the university curriculum stream.

## **Course Codes**

The first three letters of the course code are assigned by the Ministry of Education and represent the discipline, the subject and the course, e.g. Geography of Canada - CGC 1D.

The fourth character refers to the grade:

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

The fifth character refers to course types:

- D - Academic,
- P - Applied,
- O - Open,
- E - Workplace Preparation,
- C - College Preparation,
- U - University Preparation,
- M - University/College Preparation.

## **Records and Transcripts**

An Ontario School Record (O.S.R.) Is established for each student when he/she enters school in Ontario. The record is maintained until the student retires from school.

This record is privileged information for the use of the principal and teachers and is not available to any other persons except with the written permission of the parent or guardian or the student where the student is an adult. A student, and his/her parent or guardian where the student is a minor, is entitled to examine his/her record, upon request to the principal.

An Ontario Student Transcript (O.S.T.) of marks listing courses taken, the course type, the marks, and the credits will be supplied at the request of the student.

For grade nine and ten courses, the official O.S.T. will record only courses which you complete

successfully. For students in grades eleven and twelve there is full disclosure of all courses taken. A percentage grade will be recorded for courses successfully completed, courses repeated, courses failed, and courses from which students have withdrawn. If you take a course a second time to improve your mark, both attempts will be recorded with the marks, but you will receive only one credit. If you withdraw from a course later than five days after the mid-semester report card, the course will be recorded with the mark you have received up to that time.

## **Levels of Instruction**

A new curriculum streaming system was implemented in September 1999 for students beginning grade nine. It introduced a new type of graduated streaming of grades nine through twelve courses that will keep options open for students in the earlier grades and will prepare students in senior grades for their future destinations.

## **Level Distinctions: Grades Nine and Ten**

The courses in grades nine and ten recognize that students enter high school with different gifts, abilities and goals. You can take courses that are suited to your needs and gradually help you work towards your goals through an increasingly specialized four-year program. In grades nine and ten, courses are designated as Applied, Academic, or Open. In disciplines such as the arts, health and physical education, and business studies, all students will take the same type of course. In the core subjects however, students will be able to choose between two different types of courses—applied and academic.

**Applied Courses** focus on practical applications and concrete examples. They cover the essential concepts of a subject. Knowledge and skills will be developed through both theory and practical applications, but the focus will be on practical applications. In applied courses, familiar, real-life situations will be used to illustrate ideas, and you will be given more opportunities to experience hands-on applications of the concepts you study.

**Academic Courses** draw more heavily on theory and abstract examples and problems. In an academic course, you will learn the essential concepts of a subject and explore related material as well. Although your knowledge and skills in the subject will be developed through both theory and practical applications, the emphasis will be on theory and abstract thinking as a basis for future learning and problem solving.

**Open courses** in Grades nine and ten are courses for all subjects other than those offered as academic and applied. An Open course in a subject has one set of expectations for that subject at the Grade nine and ten levels and is appropriate for all students. These courses are designed to provide students with a broad educational base that will prepare them for their studies in Grades eleven and twelve and help prepare them for their role in society.

## **Level Distinctions: Grades Eleven and Twelve**

**University Preparation Courses** are designed to equip students with the knowledge and skills they need to meet the entrance requirements for university programs. Teaching and learning will emphasize theoretical aspects of the course content but will also include practical applications. These courses will emphasize both the development of independent research skills and independent learning skills. Typically, students entering such courses will have successfully completed the academic level courses in grades nine and ten.

**University / College Preparation Courses** are designed to equip students with the knowledge and the skills they need to meet the entrance requirements for specific university and community college type programs. Teaching and learning will emphasize both theoretical aspects and related concrete applications of the course content. These courses will emphasize the development of both independent research skills and independent learning skills. Both Academic and Applied level courses in grades nine and ten serve as prerequisites for these courses. The exception is for grade eleven mathematics.

**College Preparation Courses** are designed to equip students with the knowledge and skills they need to meet the entrance requirements of community college type programs. Teaching and learning will emphasize teaching and learning concrete applications of the theoretical material covered in the course and will also emphasize the development of critical thinking and problem solving skills. These courses will emphasize the development of both independent research skills and independent learning skills. The most typical route to these courses will be the grade nine and ten applied level program, though these courses will also be appropriate for students that have taken courses at the academic level of difficulty.

**Workplace Preparation Courses** are designed to equip students with the knowledge and skills they need for direct entry into the workplace or for admission to apprenticeship programs and other training type programs offered in the community. Teaching and learning will emphasize workplace applications of the course content and will explore the theoretical material that underlies these practical applications. These courses will emphasize the development of generic employment skills as well as independent research and learning skills. Both Applied and Academic level courses in grades nine and ten are considered prerequisites for these courses.

**Open Courses** are appropriate for students regardless of post secondary destination. They are designed to provide students with a broad educational base and to equip them for active and rewarding participation in society.

## **Alternative Ways of Earning Credits Towards the Ontario Secondary School Diploma**

### **Music Programs Taken Outside the School**

A maximum of two credits may be awarded to students taking music programs outside the school through the following processes combined:

For music programs completed by students outside the school, the principal of a secondary school may award a maximum of two credits towards the Ontario Secondary School Diploma. The credits will be awarded upon presentation of the official examination result forms or certificates. Additional music credits earned in school may be counted towards the secondary school graduation diploma. Please ask at the guidance office for details.

### **Prior Learning Assessment and Recognition (PLAR)**

In a few cases students may be eligible to earn credits for courses in which they already know the knowledge and skills. Students who have never left school may earn up to four credits in grade ten to twelve courses by demonstrating through formal tests and other assessments that they have already achieved the expectations of the course. See your principal or guidance counsellor for details. Reference OSS, 6.6.

### **Peer Helping**

A peer helping program is available to students. As peer helpers, students function as a teacher aid or as an academic tutor to individual or small groups of students. Peer helpers assist teachers in preparing for lessons. The goal is to provide the student with a coach or helper who can successfully help an individual or a small group of students improve their academic progress in a particular course. Peer helpers are senior students with positive academic, social and communication skills. Full or partial credit can be earned.

### **Cooperative Education**

Co-operative education allows a student to develop a greater understanding of his/her own God-given talents and abilities and use these for service. It can help a student make more responsible decisions regarding further study and/or career options. Co-operative education is a program which allows the student to have the opportunity to earn high school credits through an “on-the-job” work experience.

### **Correspondence Courses: Independent Learning Centre**

This service is provided by the Ministry of Education. A variety of courses at different academic levels are offered for high school credit. Cost is \$173 per full credit, \$100 per half course. A high level of self discipline and motivation is required for success. See the guidance counsellor for more information.

### **“On-Line” High School Courses**

The “Trillium Board” offers high school credit courses. A prerequisite Electronic Access course is required. See the Guidance Department for details.

## **Summer School**

All students are eligible to take additional course credits through the summer at local High Schools. New credit courses are offered for a duration of four weeks. Remedial courses take two weeks. Applications are usually due by the middle of June. See the guidance department for details.

## **Night School**

The program offered is similar to summer school but fewer courses are offered, and the program of study is spread out over a long period of time. Programs are offered through local public and separate school boards. See the guidance department for details.

## **Ontario Youth Apprenticeship Program (OYAP)**

OYAP offers students the opportunity to enrol in an apprenticeship program and earn credits in cooperative education at the same time. OYAP is available as a cooperative venture between public and separate school boards in the region. Students may choose to enrol for grades eleven and twelve or only for grade twelve. Apprenticeships available include Precision Metal Machining, Millwright, Carpentry, Welder, and Chef/Cook. See the guidance department for details.

## **Diploma Requirements**

Students enrolled at Durham Christian High School must work to complete the credit requirements for the Durham Christian High School Diploma. Upon completing these they will also have earned a diploma from the Ministry of Education.

## **Durham Christian High School Diploma**

To earn the Durham Christian High School Diploma, students must in addition to the OSSD requirements, successfully complete the additional courses as listed below. By setting these requirements, Durham hopes to give students a solid knowledge of the Bible, a perspective on the past, present, and future life in society and a breadth of knowledge and skills with which to enact a Christian lifestyle in contemporary society. The courses required for the Durham Christian High School Diploma also fulfil requirements for the OSSD.

- ▶ Grade Nine Computer Studies (.5 credit)
- ▶ one additional course in Science and in Physical Health Education
- ▶ Grade Ten World Religions
- ▶ Grade Nine Biblical Studies (.5 credit)
- ▶ Grade Eleven Biblical Studies (.5 credit)
- ▶ Grade Eleven Media
- ▶ two credits in Social Science at the senior level. This includes courses in History, Family Studies, Canadian and World Issues, Challenge and Change, Parenting..

1. Students that are enrolled at DCHS from grades nine through twelve are expected to successfully complete all of the requirements.
2. Students that transfer to DCHS part way through their high school program may waive

one of the required courses as a requirement for the DCHS Diploma. They must successfully complete all other requirements as listed.

3. Students that transfer to DCHS from another Christian High School will have the principal evaluate the courses taken by the student at their former school to determine the overlap with the DCHS expectations and make determination with regard to which courses the student still needs to take.

### **Ontario Secondary School Diploma (OSSD)**

All students entering high school after August 1999 will earn this thirty-credit diploma. It includes eighteen compulsory credits. Students are encouraged to take more than the minimum thirty credits to broaden their range of knowledge. Compulsory credits include:

1. four credits in English (one credit per grade)
  2. one credit in French as a second language
  3. three credits in Mathematics (at least one credit in Grade Eleven or Twelve)
  4. two credits in Science
  5. one credit in Canadian History
  6. one credit in Canadian Geography
  7. one credit in the Arts
  8. one credit in Health and Physical Education
  9. one half credit in Civics
  10. one half credit in Career Studies
- plus**
11. one additional credit in English, or French, or Native language, or Classical or International language, or Social Sciences and the Humanities, or Canadian and World Studies, or guidance and career education, or cooperative education
  12. one additional credit in Health and Physical Education, or the Arts, or Business Studies, or cooperative education
  13. one additional credit in Science (Grade Eleven or Twelve) or Technological Education (Grades Nine through Twelve), or French, or computer studies or cooperative education

### **The Certificate of Accomplishment**

Students who leave school before fulfilling the requirements for the Ontario Secondary School Diploma or the Ontario Secondary School Certificate may be granted a Certificate of Accomplishment. The Certificate of Accomplishment may be a useful means of recognizing achievement for students who plan to take certain vocational programs or other kinds of further training, or who plan to find employment after leaving school.

### **The Provincial Secondary School Literacy Test**

All students must meet the provincial secondary school literacy requirement in order to earn the OSSD. Students meet this requirement by either passing the Literacy Test on their first or second attempt or successfully completing the Literacy Course. This course would be taken by students in grade twelve that have not passed the Literacy Test and serves as one of the four English courses required for the OSSD.

The Literacy Test is administered for the Provincial government by the Educational Quality and Accountability Office (EQAO).

### **Accommodations**

The necessary accommodations must be made to ensure that students who are receiving special education programs and services. The accommodations made will be the same as those that are set out in the student's IEP and/or that are available to the student in the course of his or her regular school work, including examinations and other forms of evaluation. While accommodations such as alternative forms of print and extra time are acceptable, the actual content of the secondary school literacy test must not be altered.

### **Deferrals**

If a parent or an adult student requests a deferral, the principal will determine whether or not a deferral should be granted and, if so, for what period of time. A principal may also initiate consideration of a deferral.

### **Exemptions**

Students whose IEP indicates that the student is not working towards the attainment of a secondary school diploma may, with parental consent and the approval of the principal, be exempted from participating in the secondary school literacy test.

### **Community Involvement through Service Hours**

As part of the school diploma and as an OSSD requirement, students must complete forty hours of service. Our Lord calls us to work not only for our own good in completing the task of our schooling, but for the good of others. This diploma requirement recognizes the volunteer service that many of you are already giving your churches and communities. Any volunteer work done in the community such as helping a neighbour, assisting a charity, coaching team sports, work in your church community etc. may be counted toward your service hour requirement. In-school activities such as tutoring a fellow student, Student Parliament, and Yearbook may also be counted. Work done for credit or in-school activities such as playing on a school athletic team or participating in a drama production may not be counted. Durham Service Week activities in grade ten do not count toward this requirement. A record of student service activities is maintained in the office. Forms are available in the office and students are to submit completed forms to the office.

### **Substitutions for Compulsory Courses**

In order to allow flexibility in designing a student's program and to ensure that all students can qualify for the secondary school diploma, substitutions may be made for a limited number of compulsory credit courses using courses from the remaining courses offered by the school which meet the requirements for compulsory credits. To meet individual students' needs, principals may replace up to three of these courses (or the equivalent in half courses) with courses from the remainder of those that meet the compulsory credit requirements.

## **Course Selection and Minimum Course Load**

Students receive group and individual advice with regard to the selection of courses. It is very important that students are aware of the implications of the choices they make. Students need to be aware of the requirements of colleges and universities to ensure that the courses are in place. Parents must approve of the course selection of their children. Students may not drop courses without parental permission.

Students in grade eleven must take a minimum of seven semestered full credit courses and students in grade twelve must take a minimum of three full credit semestered courses each semester. Along with a full load each semester, all grade nine and ten students are required to take a course during Ninth Period.

## **Post Secondary Admission Requirements**

Students who graduate from DCHS are advised to develop a planning process to determine which courses are needed for post secondary admission requirements. Each institution has specific requirements listed in their “calendars”. Students are encouraged to arrange counselling interviews with the Guidance Office. Generally speaking, the following guidelines apply:

### **\_\_\_\_\_Apprenticeships**

\_\_\_\_\_ All students with a high school diploma are eligible to apply to any apprenticeship program.

### **\_\_\_\_\_Community Colleges**

Most community college programs accept graduating high school students with an OSSD with courses at the College Preparation level. Some skill-specific programs have additional requirements, such as nursing (chemistry, biology), electronic engineering (math, physics). Check each college and program.

### **Christian Colleges**

Christian Colleges expect students to have six University or University/College Preparation Courses. If you apply to a college in the United States, such as Calvin or Dordt, an ACT admissions test is also required.

### **Public Universities**

University programs require that a student takes six courses at the University Preparation or University/College Preparation Level for consideration of admission. Please note that there are specific program requirements for different university programs. Check each university calendar and with the guidance office.

## **Course Change Policy**

Should a student need to either change courses or adjust the level of difficulty at which the student is taking the course, the following guidelines will be observed:

- ▶ Students may switch classes within the first twenty school days of the semester. Students who switch classes will be responsible for all of the work missed in the new course, and will be expected to write the exam for the whole course.
- ▶ Level adjustments internal to a course (academic to applied) may occur up to one week after midterm marks are sent home. A ten percent adjustment will be made as the differential between levels of difficulty.
- ▶ Students may switch classes up to the midterm point if the same course is offered during the same period.
- ▶ For all class switches or level adjustments, please see the guidance office. All changes require the permission of your parents/guardian.

## THE ARTS PROGRAM AT DURHAM

### **THE ARTS**

*The arts, through imagination, symbol and coherence, reflect in a special way, the delight, playfulness and creativity that God expects His human creatures to experience. Artistic texts, whether visual or musical, are creations which tell stories, lay bare meaning, teach and entertain. Students in the arts program are encouraged to create, compose, listen, view and critically appreciate in order to fulfill their task of being stewards of creation, participation in culture and servants of others and God.*

#### **Visual Arts, Grade 9: Open Level**

**AVI10**

This course offers 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 material, processes, techniques, and styles. They will learn and use methods of analysis and criticism and will study the characteristics of particular historical art periods and a selection of Canadian art and the art of other cultures.

#### **Visual Arts, Grade 10: Open Level**

**AVI20**

This course emphasizes learning through practice; building on what students know; and introducing them to new ideas, materials, and processes for artistic thinking and experimentation. Student learning will include the refined application of the elements and principles of design, incorporating the creative and design processes, and the relationship between form and content. Students will also learn about the connections between works of art and their historical contexts. Course objectives may be achieved either through a comprehensive program or through a program focussed on a particular art form (e.g. drawing, painting).  
Prerequisite: AVI10

#### **Visual Arts: Grade 11, University/College Level**

**AVI3M**

This course provides students with opportunities to further develop their skills and knowledge in visual arts. Students will explore a range of subject matter through studio activities, and will consolidate their practical skills. Students will also analyse art works and study aspects of Western art history, as well as Canadian art forms and art forms from various parts of the world.

#### **Visual Arts, Grade 12, University/College Preparation**

**AVI4M**

This course focuses on the refinement of students' skills and knowledge in visual arts. Students will analyse art forms; use theories of art in analysing and producing art; and increase their understanding of stylistic changes in modern and contemporary Western art, Canadian (including Native Canadian) art, and art forms from various parts of the world. Students will produce a body of work demonstrating a personal approach.

Prerequisite: Visual Arts, Grade 11, University/College Preparation or Open

#### **Music: Junior Band, Open Level**

**AMU10/AMU20**

This course emphasizes the performance of music at a level that strikes a balance between challenge and skill and is aimed at developing technique, sensitivity, and imagination. Students will participate in creative activities that teach them to listen with understanding. They will also learn correct musical terminology and its appropriate use.

**Music: Jazz Band, Open Level**

**AMH30/AMR30**

**NOTE: This course takes place outside of normal school hours.**

This course stresses the development of musical performance on instruments in a Jazz oriented ensemble setting. Students will be encouraged to exercise and develop their gifts in music and to understand music as an important mode of communication, expression and worship. Time will be spent analysing, rehearsing and performing music in various styles and by various composers. It is expected that students will begin to take on leadership roles in various areas.

Permission of instructor.

**Music: Senior Band, Open Level**

**AMI10/AMI20/AMI30/AMO30**

**NOTE: This course takes place outside of normal school hours.**

This course stresses the development of musical performance on instruments in a larger concert band setting. Students will be encouraged to exercise and develop their gifts in music and to understand music as an important mode of communication, expression and worship. Time will be spent analysing, rehearsing and performing music in various styles and by various composers. It is expected that students will begin to take on leadership roles in various areas.

Permission of instructor.

**Music: Grade 12, University/College Preparation**

**AMU4M**

**NOTE: This course is taught on an alternate year basis.**

This course 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: AMH30, AMI30 or permission of instructor.

**Dramatic Arts , Grade 9: Open Level**

**ADA10**

This course emphasizes the active exploration of dramatic forms and techniques, using material from a wide range of authors, genres, and cultures. Students will construct, discuss, perform, and analyse drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.

**Dramatic Arts , Grade 11 University/College**

**ADA3M**

This course requires students to experiment with forms and conventions in dramatic literature, and to create, script, and present original and adapted works. Students will do research on dramatic forms, conventions, themes, and theories of acting and directing from different historical periods, and apply their Canadian works and works from various cultures in the late twentieth century. Students will also examine the significance of dramatic arts in various cultures.

Prerequisite: None

**Praise and Worship Ensemble**

**AME1/AME2/AME3/AMV3 Open**

This course emphasizes the performance of music in the context of a church setting at a level that strikes a balance between challenge and skill and is aimed at developing technique, sensitivity, imagination and a sensitivity to the role of music in worship. This course is intended to develop in students an understanding and appreciation of music through the application of practical skills and creative work. Students will interact as part of a small ensemble while performing, listening, arranging and analyzing repertoire that can be found in a wide range of church services both from the past and in the present.

This course will also provide students with an opportunity to evaluate the function of music in society, particularly in the setting of a church.

**Media Arts: Grade 10**

**ASM20**

This course will develop student's artistic knowledge and skills by introducing them to current media arts technologies and processes. Student learning will include the analysis, appreciation, and production of media art, using a variety of traditional techniques, (e.g., photography, film, photocopy art, video, analog sound recording), and emergent technologies (e.g., computer, digital camera, scanner, multimedia, animation).

Prerequisite: None.

**Media Arts: Grade 11, Open**

**ASM30**

This course emphasizes the development of the knowledge and skills required for the production of media art works (e.g. digital imaging, photocopy art, computer animation with synthesized sound). Students will develop an appreciation of the history of media arts through analyzing specific works, and will create media art works using a variety of technologies (e.g., digital camera, photo-imaging software, computer-modelling software, synthesizer, multi-track sound recording). A variety of media artworks are critically analyzed from a Gospel perspective as students compare their values to those suggested by the form, content, and context of the artwork studied and created. They recognize the fact that Media arts presents limitless possibilities for exploration, skill development and specialized abilities as given by God and expressed through the uniqueness of each individual.

Prerequisite: Any Grade 9 or 10 course in the arts.

**Media Arts: Grade 12, Open**

**ASM40**

This course emphasizes the development of the knowledge and skills required for the production of interactive media art forms (e.g., interactive art installation, interactive video, simulations, network art). Students will analyse and evaluate media art works, and will create their own works using a variety of technologies and processes (e.g., computer graphics, photo-imaging, digital video production techniques, electro-acoustics). Students will maintain a portfolio of their media art works.

Prerequisite: Any Grade 9 or 10 course in The Arts

**BUSINESS AND TECHNOLOGY PROGRAM  
AT DURHAM**

**BUSINESS AND TECHNOLOGICAL STUDIES**

*The business/technological studies program seeks to equip students to participate meaningfully in their culture as stewardly and Christ-like citizens. Students will learn the skills and attitudes necessary to handle new and emergent technology and to engage in prospective business activity with confidence, competence and an understanding of relevant Christian perspectives. The program enables students to gain a foundational knowledge of technology and business, its role in society, the kinds of opportunities it makes available, the skills it requires for success, and the potential impact that it can have on individual lives and on society in general.*

**Introduction to Information Technology in Business: Grade 9, Open Level (1 Credit)                      BTT10**

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 website 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.

**Technological Design: Grade 10, Open Level    TDJ20**

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 will learn about secondary and postsecondary education and training leading to careers in the field.

Prerequisite: None

**Introduction to Financial Accounting: Grade 11, University/College Preparation                                      BAF3M**

This course introduces students to the fundamental principles and procedures of accounting. Christian ethics and business practices, with an emphasis on accounting procedures used in service and merchandising businesses. 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. Offered on an alternate year basis.

Prerequisite: None

**Entrepreneurship: The Venture, Grade 11, College Preparation    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. All of the above will take place in the context of a Christian world and life view which stresses the responsibility of each citizen to exercise their God-given gifts in culture toward the effective service of God and others. Offered on an alternate year basis.

Prerequisite: None

**BUSINESS AND TECHNOLOGY PROGRAM  
AT DURHAM**

**Communications Technology, Grade 10, Open**

**TGJ2O**

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 interactive new media 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 will explore secondary and post secondary education and training pathways and career opportunities in the various communications technology fields.  
Prerequisite: None.

**Communications Technology, Grade 12, University/College Preparation**

**TGJ4M**

This course enables students to further develop 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.  
Prerequisite: Communications Technology, Grade 11, University/College Preparation

**Communications Technology: Grade 11, University/College Preparation**

**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

**GUIDANCE AND CAREER EDUCATION**

*Guidance courses exist to support the guidance program of the school as we seek to have students gain in self knowledge and awareness in the context of their gifts and abilities. Through these courses students will come to know and appreciate themselves as those that image God, develop relational skills and understanding, explore career and educational opportunities, and gain opportunity for success in their school work.*

**Career Studies: Grade 10, Open (.5 credit)****GLC20**

This course teaches students how to develop and achieve personal goals for future learning, work, and community involvement. Students will assess their interests, skills, and characteristics and investigate current economic and workplace trends, work opportunities, and ways to search for work. The course explores postsecondary learning and career options, prepares students for managing work and life transitions, and helps students focus on their goals through the development of a career plan.

**Learning Strategies 1: Skills for Success in Secondary School, Grade 9, Open Level****GLS10****NOTE: This course is offered for those students who opt out of Core French**

This course focuses on learning strategies to help students become better, more independent learners. Students will learn how to develop and apply literacy and numeracy skills, personal-management skills, and interpersonal and teamwork skills to improve their learning and achievement in school, the workplace, and the community. The course helps students build confidence and motivation to pursue opportunities for success in secondary school and beyond.

**Leadership and Peer Support: Grade 11, Open Level****GPP30**

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.

Prerequisites: None

**Co-op: Grade 12 (Various courses)**

Students earn cooperative education credits by integrating classroom theory with planned learning experiences in the community to achieve learning based on the curriculum expectations of the related course. Placements should provide students with challenging opportunities to apply and extend the knowledge, and practise and refine the skills, acquired in the related course and to demonstrate achievement of placement expectations that reflect current workplace practices and standards.

**Ontario Youth Apprenticeship Program**

OYAP offers students the opportunity to enrol in an apprenticeship program and earn credits in cooperative education at the same time. OYAP is available as a cooperative venture between various school boards in the region. Students may choose to enrol for grades eleven and twelve or only for grade twelve.

Apprenticeships available include: Precision Metal Machining, Millwright, Carpentry, Welder Chef/Cook. See the guidance department for details.

**CANADIAN AND WORLD STUDIES**

*This part of the curriculum consists of History, Geography and Civic Studies. The History program helps students to understand past and present cultures and their contribution to the current state of affairs in the world. Also, students are encouraged to recognize humanity's responsibility for cultural formation and to make a commitment to share in that task in responsible, Christ-like ways. The Geography program encourages students to develop an informed and healthy knowledge of the earth and of humanity in the context of the inter-relationships between the two. When studying human/land interactions, our task as stewards of God's creation is emphasized.*

**Canadian History Since World War I, Grade 10, Academic Level \_\_\_\_\_ CHC2D**

This course explores the local, national, and global forces that have shaped Canada's national identity from World War I to the present. Students will investigate the challenges presented by economic, social, and technological changes and explore the contributions of individuals and groups to Canadian culture and society during this period. Students will use critical-thinking and communication skills to evaluate various interpretations of the issues and events of the period and to present their own points of view.

**Canadian History Since World War I, Grade 10, Applied Level \_\_\_\_\_ CHC2P**

This course explores some of the pivotal events and experiences that have influenced the development of Canada's identity as a nation from World War I to the present. By examining how the country has responded to economic, social, and technological changes and how individuals and groups have contributed to Canadian culture and society during this period, students will develop their ability to make connections between historical and current events. Students will have opportunities to formulate questions, locate information, develop informed opinions, and present ideas about the central issues and events of the period.

**Geography of Canada, Grade 9, Academic Level \_\_\_\_\_ GCC1D**

This course explores Canada's distinct and changing character and the geographic systems and relationships that shape it. Students will investigate the interactions of natural and human systems within Canada, as well as Canada's economic, cultural, and environmental connections to other countries. Students will use a variety of geotechnologies and inquiry and communication methods to analyse and evaluate geographic issues and present their findings.

**Geography of Canada: Grade 9, Applied Level \_\_\_\_\_ GCG1P**

This course focuses on geographic issues that affect Canadians today. Students will draw on personal and everyday experiences as they learn about Canada's distinct and changing character and the natural and human systems and global influences that shape the country. Students will use a variety of geotechnologies and inquiry and communication methods to examine practical geographic questions and communicate their findings.

**Civics, Grade 10, Open (.5 credit) \_\_\_\_\_ CHV2O**

This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy in local, national, and global contexts, about political reactions to social change, and about political decision-making processes in Canada. They will explore their own and others' ideas about civics questions and learn how to think critically about public issues and react responsibly to them.

**World History to the Sixteenth Century, Grade 11, University/College Preparation 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

**Twentieth-Century History: Global and Regional Perspectives, Grade 11, Open CHT3O**

**NOTE: This course takes place on an alternate year basis.**

This course focuses on the major events and issues in world history from 1900 to the present. Students will investigate the causes and effects of global and regional conflicts and the responses of individuals and governments to social, economic, and political changes. Students will use critical-thinking and communication skills to formulate and test points of view, draw conclusions, and present their findings about the challenges that have faced and continue to face people in various parts of the world.

Prerequisite: Canadian History in the Twentieth Century, Grade 10, Academic or Applied

**Regional Geography: Travel and Tourism, Grade 11, Open CGG3O**

This course focuses on travel and tourism as the vehicle for studying selected world regions. Using a variety of geotechnologies and inquiry and communication methods, students will conduct and present case studies that develop their understanding of the unique characteristics of selected world regions; the environmental, cultural, economic, and political factors that influence travel and tourism; and the impact of the travel industry on communities and environments around the world.

Prerequisite: Geography of Canada, Grade 9, Academic or Applied

Note: This course is offered on an alternate year basis.

**World History: The West and the World, Grade 12, University Preparation CHY4U**

This course investigates the major trends in Western civilization and world history from the sixteenth century to the present. Students will learn about the interaction between the emerging West and other regions of the world and about the development of modern social, political, and economic systems. They will use critical-thinking and communication skills to investigate the historical roots of contemporary issues and present their conclusions.

Prerequisite: Any university or university/college preparation course in Canadian and world studies, English, or social sciences and humanities

**ENGLISH**

*The English program involves the study of language, literature and media as part of the created order. It seeks to enable students to appreciate and evaluate various genres of literature as well as to recognize the powerful ways in which literature and media both reflect and shape culture. The program is designed to encourage critical thinking in students, as well as an appreciation of the ways in which they might respond in Christ-like and redemptive ways.*

**English: Grade 9, Academic Level**

**ENG1D**

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 analyse 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 students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12.

**English: Grade 9, Applied Level**

**ENG1P**

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 Grades 11 and 12.

**English: Grade 10, Academic Level**

**ENG2D**

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 oral, written, and media texts in a variety of forms. An important focus will be on the 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: ENG1D or ENG1P

**English: Grade 10, Applied Level**

**ENG2P**

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: ENG1D or ENG1P

**English: Grade 11, University Preparation**

**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: ENG2D

**English: Grade 11, College Preparation**

**ENG3C**

**NOTE: This course is offered on an alternate year basis.**

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: ENG2D or ENG2P

**Media Studies: Grade 11, Open**

**EMS30**

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: ENG2P or ENG2D

**English Grade 12, College Preparation**

**ENG4C**

**NOTE: This course is offered on an alternate year basis.**

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, 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 and developing greater control in writing. The course is intended to prepare students for college or the workplace.

Prerequisite: ENG3C

**English Grade 12 University Preparation**

**ENG4U**

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse 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: ENG3U

**FRENCH**

*The French program aims to prepare students to perform effectively in the challenging world they face, to speak the official language with confidence, and to gain transferable academic and cognitive skills. The learning of a second language offers students opportunities to deal with other cultures with understanding and appreciation. The program celebrates the gifts of communication, and opens students to wide-ranging possibilities with respect to careers and*

**Core French: Grade 9, Academic Level**

**FSF1D**

This course emphasizes the further development of oral communication, reading, and writing skills. Students will build on and apply their knowledge of French while exploring a variety of themes, such as relationships, trends, and careers. Thematic readings, which include a selection of short stories, articles, and poems, will serve as stepping stones to oral and written activities.  
Prerequisite: 600 hours of Elementary French or the equivalent

**Core French: Grade 9, Applied**

**FSF1P**

This course, emphasizes the concurrent development of oral communication, reading, and writing skills, using a broad-based theme such as the media. Students will enhance their ability to understand and speak French through conversations, discussions, and presentations. They will also read short stories, articles, poems, and songs, and write brief descriptions, letters, dialogues, and invitations.  
Prerequisite: Minimum of 600 hours of French instruction, or equivalent

**Core French: Grade 10, Academic Level**

**FSF2D**

This course enables students to increase their knowledge of the French language, further develop their language skills, and deepen their understanding and appreciation of Francophone culture around the world. Exploring a variety of themes, students will develop and apply critical thinking skills in discussion, in their analysis and interpretation of texts, and in their own writing.  
Prerequisite: FSF1D

**Core French: Grade 11, University Preparation**

**FSF3U**

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 gain a greater understanding of French-speaking cultures in Canada and around the world through their reading of a variety of materials including a short novel or a play. Students will produce various written assignments, including a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. Prerequisite: FSF2D

**Core French Grade 12, University Preparation**

**FSF4U**

This course draws on a variety of themes to promote extensive development of French-language skills. Students will consolidate their oral skills as they discuss literature, culture, and current issues. They will read a variety of texts and will write a formal essay. The use of correct grammar and appropriate language conventions in both spoken and written French will be emphasized throughout the course. Prerequisite: FSF3U

**PHYSICAL EDUCATION AND HEALTH**

*The physical education and health program seeks to encourage students to develop the attitude and practice of life-long physical fitness. The program implements this through individual and corporate physical skill training and health awareness to encourage individual motor skill development and community participation. A major aim is also to engender sports and other such skills in order to render students able to participate in organized, structured games and also leisure. Activities allow for consistent, healthy service for the King*

**Healthy Active Living Education: Grade 9, Open Level**

**PPL10**

This course, emphasizes students daily participation in a variety of enjoyable physical activities that promote lifelong healthy and active living. Students will learn movement techniques and principles in a variety of sports and activities; ways to improve personal fitness and physical competence; and safety/injury-prevention strategies. They will investigate health topics such as: sexuality; the uses for and abuses of drugs; and common mental and emotional disorders. Students will participate in activities designed to develop goal-setting, communication and social skills.

**Healthy Active Living Education: Grade 10, Open Level**

**PPL20**

This course is a continuation of Grade nine, and emphasizes students' daily participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students will learn movement techniques and principles in a variety of sports and activities, ways to improve personal fitness and physical competence, and safety/injury prevention strategies. They will investigate health topics such as: sexuality, physical fitness (physiology and training principles), and nutrition. Throughout the course, students will participate in activities designed to develop goal-setting, communication and social skills.

Prerequisite: None

**Healthy Active Living Education: Grade 11, Open Level**

**PPL30**

**Note: This course is offered on an alternate year basis.**

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 as well as personal fitness and lifestyles assessment, the importance and principles of exercise, as well as developing a plan for a personal exercise program.

Prerequisite: none

**Recreation and Fitness Leadership: Grade 12, College Preparation**

**PLF4C**

**Note: This course is offered on an alternate year basis.**

This course focuses on the development of leadership and coordination skills related to recreational activities. Students will acquire the knowledge and skills required to plan, organize, and implement recreational events. They will also learn how to promote the value of physical fitness, personal well-being, and personal safety to others through mentoring. The course will prepare students for college programs in recreational, leisure, and fitness leadership.

**MATHEMATICS**

*Mathematics is a quantitative language that combines discovered truths, abstract reasoning, and creativity to describe numerical, algebraic, and geometric patterns. Mathematics major importance lies in its ability to be applied to real life problems and in developing logic and reasoning. The emphases in the mathematics program is on reasoning; problem solving; understanding ideas, processes, and result; communicating; and the use of appropriate*

**Principles of Mathematics: Grade 9, Academic Level**

**MPM1D**

This course enables students to develop an understanding of mathematical concepts related to 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 linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

**Foundations of Mathematics: Grade 9, Applied Level**

**MFM1P**

This course enables students to develop an 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 relations, and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

**Principles of Mathematics: Grade 10, Academic Level**

**MPM2D**

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: MPM1D or MFM1P

**Foundations of Mathematics: Grade 10, Applied Level**

**MFM2P**

This course enables students to consolidate their understanding of linear relations and extend their 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.

Prerequisite: MPM1D or MFM1P

## MATHEMATICS AT DURHAM

### **Functions: Grade 11, University Preparation**

**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

### **Foundations for College Mathematics, Grade 11, College Preparation**

**MBF3C**

**NOTE: This course is offered on an alternate year basis.**

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, 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, Applied

### **Advanced Functions, Grade 12, University Preparation**

**MCB4U**

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: MCR3U

### **Calculus and Vectors, Grade 12, University Preparation**

**MCV4U**

This course builds on students' previous experience 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: MHF4U

**Foundations for College Mathematics: Grade 12 College Preparation**

**MAP4C**

**NOTE: This course is offered on an alternate year basis.**

This course enables students to broaden their 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

**Data Management: Grade 12 University Preparation**

**MDM4U**

**Available Online Only**

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

## SCIENCE EDUCATION AT DURHAM

### SCIENCE

*The creation is a wondrous, beautiful, complex manifestation of God's majesty: doing science means in the first instance, responding to God's power with awe, and recognizing His omnipotence.*

*Science abstracts, examines and derives laws based on the regularity of God's works in creation.*

*The science program at DCHS seeks a two-fold aim: to successively uncover the beauty and diversity of the creation, and to develop in students a scientific literacy enabling students to have such scientific knowledge, skills and habits of mind to make knowledgeable decisions and to have such positive attitudes to be able to live and work well in God's world.*

#### Science: Grade 9, Academic Level

SNC1D

This course enables students to understand essential concepts of biology, chemistry, earth and space science, and physics; to develop skills in the processes of scientific inquiry; and to relate science knowledge and technological, social, and environmental knowledge. Students will learn about scientific theories and pursue inquiries related to cell division and reproduction, atomic and molecular structures, properties of elements and compounds, the universe and space exploration, and the principles of static and current electricity.

#### Science: Grade 9, Applied Level

SNC1P

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.

#### Science: Grade 10, Academic Level

SNC2D

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: SNC1D or SNC1P

#### Science: Grade 10, Applied Level

SNC2P

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: SNC1D or SNC1P

#### Biology: Grade 11, 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: SNC2D

**Biology: Grade 11, College Preparation****SBI3C****NOTE: This course is offered on an alternate year basis.**

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: SNC2D or SNC2P

**Biology: Grade 12, University Preparation****SBI4U**

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: SBI3U

**Chemistry: Grade 11, University Preparation****SCH3U****This course is offered on an alternate year basis.**

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. The student is encouraged to use the knowledge acquired in this course to become a better steward of God's creation. Emphasis will also be placed on the importance of chemistry in other branches of science.

Prerequisite: SNC2D

**Physics: Grade 11, University Preparation****SPH3U****This course is offered on an alternate year basis.**

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: SNC2D

**Physics: Grade 12, University Preparation****SPH4U****This course is offered on an alternate year basis.**

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 related 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: SPH3U

**Chemistry: Grade 12, University Preparation**

**SCH4U**

**This course is offered on an alternate year basis.**

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: SCH3U

**Chemistry: Grade 12, College Preparation**

**SCH4C**

**This course is offered on an alternate year basis.**

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: SNC2D or SNC2P

**SOCIAL SCIENCES AND HUMANITIES**

Scripture shows a picture of humans in relationship: to God ultimately, and to self, to fellow humans and to created reality. The social sciences take this theme as central, and analyse and interpret actual and normative practices and ideals. Central to the social sciences particularly (and some other programs perhaps more peripherally), is the concept that basic to culture-forming activities and institutions, is the heart-response to God. The program proceeds from the foundational facts of creation-fall-redemption-response.

**Parenting and Family Life: Grade 11, Open**

**HPC30**

**NOTE: This course is offered on an alternate year basis.**

Our families are a key God-given pillar of human society, Here, we can learn love, openness and compassion. This course emphasizes the skills and knowledge needed to promote the positive and healthy christian nurture of these families and children, with some emphasis on the critical importance of the early years of children’s development. Student learning will include how to meet the developmental needs of young children; effective communication and discipline; guiding early behaviour, and practical experiences with infants, toddlers, and pre-school children. Concrete situations from everyday life will serve as a context for this learning. The course also concerns every other phase of family life, from the pre-school children, through developing and understanding positive relationships at the adolescent, teen-age, adult and senior ages.

**Individuals and Families in a Diverse Society Grade 12 University/College Preparation**

**HHS4M**

This course applies current theories and research from the disciplines of anthropology, psychology, and sociology to the study of individual development, family behaviour, intimate and parent-child relationships, and the ways in which families interact within the diverse Canadian society. Students will learn the interpersonal skills required to contribute to the well-being of families, and the investigative skills required to conduct and evaluate research about individuals and families.

Prerequisite: Any college or university/college course in social sciences, humanities, English, or Canadian and world studies.

**Challenge and Change Grade 12 University/College Preparation**

**HHS4M**

This course examines the theories and methodologies used in anthropology, psychology, and sociology to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will analyse cultural, social, and biological patterns in human societies, looking at the ways in which those patterns change over time. Students will also explore the ideas of classical and contemporary social theorists, and will apply those ideas to the analysis of contemporary trends.

Prerequisite: Any university, university/college, or college preparation course in social sciences and humanities, English, or Canadian and world studies

**World Religions**

**HRF30**

Taught in Grade 10, this course exposes students to the religions of the world from the perspective of Christianity. Students explore the meaning and nature of religious sentiment and expression together with its effects in reflecting and shaping culture. It explores the major religions of the world, including Judaism, Islam, Hinduism, Sikhism, Buddhism and Secularism, together with the various branches of Christianity and, its cultic or sectarian offshoots.

Prerequisite: None

**Biblical Studies: Grade 9**

**HRE13**

This course examines the Old Testament from the account of Creation through the fall of Israel and Judah and the beginning of the Exile. Important themes that are traced include the lines of obedience and disobedience, concepts of covenants and choices, and the tools of separation and community that God uses in dealing with humanity. Students will be challenged to internalize the messages and apply them in their own lives through classroom techniques and in the writing of a journal.

**Biblical Studies: Grade 10**

**HRE23**

Taught in grade 11, the main theme of this class lies in the comparison of Christianity and culture as expressed in the New Testament. We will begin with a quick study of the Intertestamental time period and then conduct an in-depth examination of the gospel of Matthew, focusing on how the gospel is organized to demonstrate God reaching out and breaking into our lives. Students will learn effective tools for understanding God's Word and be given opportunities to apply the Biblical message to the world around them. Once this foundation has been laid, students will study some of the Pauline letters and the letters of James, continuing to apply the teaching to their own lives.