## H A VERGALCOLLEGE

Havergal's Uncalendar
2016-2017 ACADEMIC YEAR

A description of Havergal's courses in everyday language for students


## Havergal

COLLEGE


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## THE ARTS

## DANCE

## GRADE 11

ATC3O2 - Dance, Grade 11, Open Semestered 0.5 CREDIT

In the Grade 11 Dance course, you will have many opportunities to develop your movement skills. You will be exposed to and participate in a variety dance forms and styles including jazz, modern, hip hop, tap, African and bellydance. You will learn the elements of movement and how to use them effectively to create your own dances. You will have opportunities to collaborate with others and combine the elements of movement in many interesting ways. You will learn how to talk and write about the dances you see in the classroom and at a live performance at a Toronto theatre. At the end of the course, working with others, you will take everything you have learned and choreograph a longer dance to perform for a larger audience. You do not need any dance experience to take this course-you just need to be willing to try.

## DRAMATIC ARTS

## GRADE 7

## Grade 7 Drama

"I regard the theatre as the greatest of all art forms, the most immediate way in which a human being can share with another the sense of what it is to be a human being." -Thornton Wilder

The Grade 7 Drama course at Havergal seeks to cultivate and enhance students' creative potentials. It provides them with an opportunity to explore emotions, to use their imaginations and their bodies to create other worlds, and to work with other members of a group in investigating traditional and nontraditional dramatic forms. This course will help students develop the confidence to think on their feet, problem solve, work collaboratively with others, meet deadlines, take safe risks, challenge themselves, and appreciate the lives of others by having "walked in their shoes." In Grade 7 Drama, there is a heavy focus on physicality and becoming comfortable with telling stories through our bodies. Success in the Drama classroom means fully participating in activities, learning to work with peers creatively, and giving and implementing thoughtful feedback.

## GRADE 8

## Grade 8 Drama

"The word theatre comes from the Greeks. It means the seeing place. It is the place people come to see the truth about life and the social situation." -Stella Adler

Building on the skills developed in the Grade 7 Drama course, this course helps you hone your concentration and performance skills. Although most Drama students do not become theatre professionals, you can use the skills emphasized in this course in all areas of your life. Each student will present two major monologue performances in the course. The first is a student-written monologue where the emphasis is on accurately reflecting the wants and needs of the character they have created in a process drama, bringing a scripted text alive. The second performance is a memorized monologue where students work to make inferences from the text to influence their choices regarding physicality, voice, and blocking. As a part of the performance, you will design a lighting plot (with technical assistance from the teacher) and include music in the performance. The final unit is a full class process drama centered on the question "What value can be found in the process of going through adolescence?" Over the course of Grade 8 Drama, students will routinely be confronted with the stories of others. Through bringing these characters to life, students will gain a greater understanding of empathy and what it means to walk in another's shoes.

## GRADE 9

ADA 10 - Drama, Grade 9, Open
Have you ever wanted to be on stage? Does making a presentation make you want to hide? Don't you hate it when you walk away from a situation and then you come up with the snappy comeback? Grade 9 Drama can help you. This course will help you learn how to be comfortable in front of others, how to do silly things and how to truly think on your feet. Not only that-you will create a whole new character and become that person (at least while in class). Create his/her background. What does he/ she do? How old is he/she? The only limit is your imagination. This class will also help you see issues from a number of different viewpoints and allow you to question the world around you.

## GRADE 10

ADA2O - Drama, Grade 10, Open
1 CREDIT
Why do we do the things we do? What motivates us? Do you like trying to get into other people's heads to see what they are thinking? Do you like pretending to be someone else? If yes, then this is the course for you. Grade 10 Drama is all about understanding what others are thinking about and the implications of those thoughts. Now, take those thoughts and put them into words and you will take great steps into character development; say those thoughts out loud and you are on your way to performance. The Grade 10 Drama class takes you through the next steps towards becoming a better actor. Understanding subtext and creating real moments on stage is truly what this course is about. You will learn how to look through another's eyes, in another century, and create a new world.

## GRADE 11

ADA3M - Drama, Grade 11, University/College Preparation
1 CREDIT
Is it true-acting, directing and playwriting are all in one course? Can Grade 11 Drama contain so much? Will you really be a playwright who will see her work performed by the end of the year? This is the course that allows you to express yourself in script form and hear your dialogue performed by your peers and possibly by the Havergal community. You will look at what makes a good play from the viewpoint of actors and directors. Additionally, through different exercises, each student will find her own avenue into the world of playwriting: what draws you into the play, the story, the people, the message or any and all of the above? Throughout the year, different professionals will come to our class and share their wisdom about different aspects of theatre. Master classes are created just for us. Come act, direct, write and enjoy.

Prerequisite: Drama Grade 9 or Drama Grade 10 ADA10 or ADA2O

## GRADE 12

ADA4M - Drama, Grade 12, University/College Preparation
1 CREDIT
Here it is, the culminating Drama class at Havergal! This is the class were you get to do it all. You want to act? You're involved in two public performances, a docudrama and a one-act-play. You want to direct? You can direct a one-act-play and parts of your docudrama. You want to write? You get the picture. As well as all the tried and true Drama favourites, the element of design comes into our curriculum. Each of you will be challenged to push yourselves far beyond where you thought you could go, and you will be proud of the outcome. It may be hard work, but it's a lot of fun. After all, there is a reason we call them "plays."

Prerequisite: Drama Grade 11 University/College Preparation, ADA3M

## BAND

## GRADE 7

## Grade 7 Band

Have you ever wanted to learn how to play a band instrument? If the answer is yes, then this is the class for you. In Grade 7 Band you will have the opportunity to choose an instrument, which you will learn to play for the next two years. There is a choice of 13 different band instruments; if you can think of it, we have it! In addition to learning how to play an instrument during the year, you will study the basics of note and rhythm reading. Tone production and composition are also explored and you will work with a classmate to write your own duet. Traditional band music is studied in this class. However, if you are looking for more of a challenge, it's not far away. The Middle School Jazz Band is made up of Grade 7 and 8 students who are interested in exploring the exciting world of jazz. This is a co-curricular activity and all Grade 7 students are welcome.

## GRADE 8

## Grade 8 Band

So now you can play a few notes, write a little music and you are starting to learn about musicianship. What is the difference between music and noise? What are some of the similarities between the music that you play and the music that you listen to on your iPod? In Grade 8 Band we experiment with playing different styles of music. We often choose a piece of music that is more contemporary; maybe even a piece that you listen to on the radio. You will start playing and writing scales and look at how they relate to each other. There is more focus on music theory, but you will find it engaging and fun as we will be using music games and computers. Many of you will have already joined the Middle School Jazz Band, but if you haven't you may want to give it a try this year.

## GRADE 9 OR 10

AMI2O - Music, Band, Grade 10, Open
1 CREDIT
In the Grade 10 Band class we explore playing jazz, contemporary and traditional concert band repertoire. You will develop your personal technique experimenting with how high and how fast you can play. You will work independently on your musicianship but, most of the time, you will be playing in small ensembles or as a large band. Technical development is the key to this year's study. As the classes' technique improves, a greater variety of music is available for students to play. As an extra challenge, students are encouraged to participate in the Symphonic Band, but participation is not mandatory in this grade. We spend a great deal of time listening to and learning about ways that music is made in the world around us. It's a wonderful year full of self-discovery and music making.

[^0]
## GRADE 11

AMI3M - Music, Band, Grade 11, University/College Preparation
1 CREDIT
Challenging yourself musically is the focus of our Grade 11 Band music class. If you enjoy playing your instrument then this is the course for you. We begin by focusing on more difficult repertoire including genres from pop to classical. You will explore and analyse the music that you are performing. You will look specifically at how music is constructed to get a better understanding of the music, which will help you perform more musically. You will often work in small groups, leading yourself through your musical learning and discovery. At the end of the year, you will help to create and design your own performance exams, which includes performing a solo with accompaniment.

Participation in Symphonic Band (Tuesdays and Thursdays, 7:00 am to 8:00 am) and student performances is expected.
Prerequisite: AMI2O - Music, Band, Grade 10, Open

## GRADE 12

AMI4M - Music, Band, Grade 12, University/College Preparation 1 CREDIT
You love your music making, but you want to take it to the next level. Truth is... you want to be a soloist. In Grade 12 Band, you are the leaders in the Symphonic Band, the directors of the small ensemble rehearsals and the soloists in Prayers. You have a very good understanding of musicianship and theory but we will continue to take a more in depth look at musical forms, texture, harmony and duration. This year, you work with an accompanist on a solo piece of your choice, however the piece will be more challenging than in Grade 11. Your choices may include a sonata, a movement from a concerto or a rhythm and blues selection. You will continue to develop your technical expertise and your musical vocabulary will continue to grow. You will enjoy a variety of activities to help you explore your music making and musical journey.

Participation in ensemble and student performances with the Symphonic Band (Tuesdays and Thursdays, 7:00 am to 8:00 am) is expected.

Prerequisite: AMI3M - Music, Band, Grade 11, University/College Preparation. Students not enrolled in the Band courses but who have experience on a band instrument may audition for any of the performing ensembles. Auditions will be held in September.

## GUITAR

## GRADE 9 OR 10

AMG10 - Music, Guitar, Grade 9, Open
1 CREDIT
Have you ever wondered why the guitar is such a popular instrument in so many different cultures? Where did this percussive stringed instrument come from? How did it get here? Through the study of the acoustic guitar, this course will allow students to delve deeper into the study of music. Each girl will need to supply her own acoustic guitar. We will focus on technical development at the outset but as students gain skill and confidence, we will branch off into different aspects of music including advanced theory, chord progressions, scales, history, listening skills, use of technology, just to list a few. By the end of this course, you will have deep understanding of the guitar, know how to continue to improve on your own and learn how the history of music and the history of the guitar are intertwined. In this class, students will complete all of the course expectations from the Grade 9 Music curriculum.

## STRINGS

## GRADE 9 OR 10

AMS2O - Music, Strings, Grade 10, Open
1 CREDIT
In the Grade 10 Strings class, we focus on developing each girl's personal technique. Technical development is the key to this year's study. You can consider it a preparatory year before you join the senior class. You will work on chamber repertoire and solos, which will increase your confidence. A lot of time will be spent playing. You will also learn sonata form analysis and more advanced concepts in music theory like harmony and modes (but don't worry, you will still have lots of fun making music). You will use computers and microphones and also learn about the ways music is made in the world around us. It will be a wonderful year full of self-discovery and music making.

Students enrolled in this course are expected to participate in Senior Orchestra (Tuesdays, 3:45 pm to 5:00 pm and Thursdays, 7:00 am to $8: 15 \mathrm{am}$ ), to explore orchestral techniques and perform throughout the year. This course is open to Grade 9 students.

AMS3M - Music, Strings, Grade 11, Univeristy/College Preparation
Grade 11 Strings is your introduction to the Senior String Ensemble. The class is combined with the Grade 12s, making it a good-sized ensemble. You will be expected to engage with the repertoire and contribute to the best of your abilities. In Grade 11, the expectation is that you might try some leadership roles; but really you are preparing to lead next year. You will continue to develop your understanding of musical forms and harmony. You will engage in in-depth study of the repertoire from as many angles as you can to gain as much insight into performance as possible. Opportunities to perform solos with the ensemble are encouraged but not mandatory.

Students enrolled in this course are expected to participate in Senior Orchestra (Tuesdays, 3:45 pm to 5:00 pm and Thursdays, 7:00 am to 8:15 am).

Prerequisite: AMS2O - Music, Strings, Grade 10, Open

## GRADE 12

AMS4M - Music, Strings, Grade 12, University/College Preparation
1 CREDIT
In your final year of Strings, you will be called upon to lead the ensemble. You will help choose the repertoire and are expected to play a solo or two with the group. Hopefully by now, you're ready to rock. This class provides you an opportunity to engage your technique to the fullest and explore some amazing music, including studying a wildly varied repertoire. This class also provides an opportunity to specialize in certain genres of music if you like. Some students find they love the Baroque period, others the modern repertoire. But whatever your taste in music, this course will allow you to dig deep and get to know it from many angles. Concert and performance opportunities abound during your final year, and you are expected to take advantage of them.

Students enrolled in this course do considerable performing in one or more groups and are expected to participate in Senior Orchestra (Tuesdays, 3:45 pm to 5:00 pm and Thursdays, 7:00 am to 8:15 am).

Prerequisite: AMS3M - Music, Strings, Grade 11, Univeristy/College Preparation
Note: Students not enrolled in the Strings courses but who have experience on a string instrument may audition for any of the performing ensembles. Auditions will be held in September.

## VOCAL MUSIC

## GRADE 7

## Grade 7 Vocal Music

You sing along to the radio and you find yourself humming a tune as you listen to your iPod. Well then, there's good news for you! All girls in Grade 7 will take Vocal Music and in this class you will have the opportunity to develop better singing skills and to learn more about your voice. Havergal College is a school that sings together and in the Grade 7 Vocal Program you will learn House Hymns, work together on Carol Service and Founder's Day repertoire and you will learn basic chords on the ukulele. You will also be invited to sing in the Middle School Choir if you have the time and interest in choral music.

## GRADE 8

## Grade 8 Vocal Music

Last year you had the opportunity to explore your voice. Some of you learned to sing higher and some explored their alto ranges. It was fun and it was a non-threatening environment. Grade 8 Vocal is the continuation of the Grade 7 course but we will learn more challenging repertoire, learn to sing in two and three parts, and focus on vocal technique and voice development. Students selecting this course will have a full credit Vocal Music course that is scheduled every other day. In Grade 8 Vocal, you don't have to sing in front of others but, if you wish, you can work on solo repertoire and potentially sing in Prayers or at other Havergal events. The rudiments of theory will be introduced and you will begin the skill of learning to read music along with studying about music through the ages. The Middle School Choir is where you will learn more challenging music and gain valuable sight-reading skills that will prepare you for the Havergal Senior Choir. You will love having the opportunity to sing in Middle School Choir with special performances at Carol Service and Founders' Day.

## GRADE 9

## AMV10-Music, Vocal, Grade 9, Open

Do you love to sing in the shower? Do you sing along with the radio but you wouldn't dream of singing a solo? Then Grade 9 Vocal is for you! You will learn about your voice and how it works. You will gain confidence in your voice through vocal exercises, choral music and solos. In Grade 9 Vocal, you don't have to sing in front of others but if you wish, you can work on solo repertoire and potentially sing in Prayers or other Havergal events. The rudiments of theory will be introduced and you will begin the skill of learning to read music along with studying about music through the ages from the Renaissance period to the $21^{\text {st }}$ century. If you are a member of the vocal classes, you will be in the Havergal College Senior Choir, which participates in Carol Service, Founders' Day, music nights and the Ontario Vocal Festival.

[^1]
## GRADE 10

AMV2O - Music, Vocal, Grade 10, Open
1 CREDIT
You still love to sing and can't imagine your day without choral music! This course is the continuation of Grade 9 Vocal. The repertoire becomes more challenging but we continue to focus on the voice using choral music and solo repertoire. At this level, you will have gained the ability to sight-read and you have acquired some music theory skills. We spend a great deal of time singing repertoire from different genres and we study how this music is constructed and the beauty of the texts. You will have the chance to work with guest artists both in choir and in class. These artists will help you to develop your voice through master classes and individual coaching sessions. As a member of the Grade 10 Vocal class, you will participate in Senior Choir and this group has numerous performances throughout the year. It is a great year of self-discovery and as you gain more confidence in your voice, you will want to sing everyday!

## GRADE 11

AMV3M - Music, Vocal, Grade 11, University/College Preparation
You love to sing and you love to sink your teeth into challenging choral music. You are keen to take your technique and music making to the next level. We continue to dig deeper into the history of music and the way in which composers set text and melody together to create great musical works. This class is often invited to participate in a concert outside of Havergal. In the past we have collaborated with Exultate Chamber Singers and Pax Christi Chorale. In this course, you will have the chance to study Music Theatre from its early forms to the shows that are on the stage in 2013. This unit will allow you to experience singing as a character on stage as you work on understanding music theatre plots, characters and staging. We continue to work on sight-reading, theory and ear training as this skill will allow you to participate in music long after you leave Havergal College.

Students enrolled in this course are expected to participate in the Senior Choir, which rehearses Thursdays from 3:30 pm to 5:00 pm.
Prerequisite: AMV2O - Music, Vocal, Grade 10, Open

## GRADE 12

AMV4M - Music, Vocal, Grade 12, University/College Preparation
Music is a part of your day at Havergal College. You can't imagine your life without singing and being part of the Senior Choir. You have a good understanding of musicianship and theory but we will continue to take a more in-depth look at musical forms, texture and harmony. You will have the opportunity to work in small vocal ensembles, gaining confidence in the strength of your voice and the ability to sing threeand four-part music, one on a part. The Music Theatre unit continues and you experience this music on a deeper level. You will choose a musical, study a character and bring a solo to life with stage direction, costumes and props. This is your last year in the program and you are the leaders within the Senior Choir. You have continued to develop your technical expertise and this class will continue to build on the skills you need to carry on singing after you graduate from Havergal College.

[^2]Prerequisite: AMV3M - Music, Vocal, Grade 11, University/College Preparation

## VISUAL ARTS

## GRADE 7

## Grade 7 Art

"I can't draw. I wasn't born with the art-making gene. I am so going to fail this class." Do you often find yourself uttering these words? Are you terrified of the Art Room? Or, conversely, can you whip off a drawing with little effort and thought? If so, then Grade Art 7 is the course for you. In this course you will learn what it means to be an artist. You will carry around a sketchbook where you will record anything that inspires you in your choice of media. This sketchbook is also a place for you to keep a record of everything you do in the classroom... helping you sharpen those all-so-important learning skills that you will need as you move forward into high school.

Art will be demystified for you. You will learn how to talk about art and understand the rules that artists use to make good art. It really is quite easy. Using these rules, you will follow the creative process: get inspired, plan and produce your own art. You will learn to write about what you created and why you created it. You will work with a variety of different media in your sketchbook so that you get an idea of what is possible. You will also learn jewelry and clay techniques to create two pieces of art. For the culmination of this course, you will submit your sketchbook, which is a record of your first year in the Middle School.

## GRADE 8

Grade 8 Art
In this course, you will build upon what you have learned in Grade 7 Art. You will continue to keep a sketchbook where you will journal, sketch, make collages and generally record anything that is remotely creative. It is also a place where you will keep your notes and process work for your assignments. You will spend time creating cool, funky layouts and your book will be a piece of art in itself. In the studio, you will delve further into your understanding of principles of design and how to apply them in your art. You will make a really cool drawing using some general rules. You will also expand upon your clay-making skills to create a 3D sculpture. As with Grade 7 Art, there is no test in this course, but there is an expectation that you will develop your skills in understanding the creative process and plan for, refine and reflect on your art and the art of others. These analytical skills will be with you forever regardless of what you are studying or what you are doing in life. Whether you are designing a title page for Biology, writing an English essay or choosing a colour scheme for your first apartment, you will be able to use the skills and concepts you learned in this course.

## GRADE 9

AVI10 - Visual Arts, Grade 9, Open
1 CREDIT
In this course you will explore a variety of materials and methods of creating art. You will try everything from stone carving to quilting... and, of course, you will do some printmaking, painting and drawing too. You will have the opportunity to try out these different ways of creating to see which processes capture your imagination and help you to express your visual ideas. To start the year off, you will take part in a Grade 9 art excursion to an amazing outdoor sculpture centre where you will view hundreds of beautiful works of art and meet artists who work in stone. This excursion will inspire and inform your stone carving back at Havergal and help you to see in three dimensions. Throughout the year you will develop your art skills, learn to take risks, learn about yourself and experience the joy of exploration as you are guided through the creative process!

## GRADE 10

## AVI2O - Visual Arts, Grade 10, Open

1 CREDIT
Have you ever wondered how jewelry or glass artists work? Have you visited the One of a Kind Craft Show and been inspired? AVI2O is now focused on developing your design skills through a variety of craft and fine art projects. For example, in this course you will have the opportunity to work with a silversmith to create a unique piece of jewelry, and you will learn how to shape and design with glass, using our glass fusing kiln to fabricate amazingly colourful and delicate glass objects. If you interested in fashion and fabric, this course will invite you to use your creativity to design and create pieces of wearable art. As well, you will improve your drawing, printmaking and painting skills through a series of sketchbook design projects that connect with the craft processes you are exploring. We invite you to bring your individuality and imagination to this new version of Grade 10 Art.

Open to students in Grades 10 to 12.
Note: This course focuses on studio activities in one or more of the visual arts.

This course is a non-traditional art course. You might think of it as photography, and you would be mostly right. The medium of choice in this course is photography, and you will use it to explore visual arts themes. You don't just learn how to shoot pictures-you will approach photography as artists, looking at things like aesthetics, content and meaning as much as the technical side. From pinholes to pixels, you will start in the wet darkroom and move into the digital realm of photography. In addition to learning how to use a digital SLR, you will develop a working understanding of Photoshop and iMovie. You will also explore time-based media (video art) in this class.

The year unfolds like this: you will begin by learning the basics of capturing light using homemade pinhole cameras and the black and white darkroom. A variety of digital photographic skills will be learned in the classroom and put into practice in your assignments. Still images will be used to create a narrative photo essay using iMovie. Your photo and video artwork will be shared in a blog that you will create and maintain throughout the year. This blog will also be used to explore the history of photography and video art and currents trends and practices. You will create and present a photography history seminar on one of the masters of photography. All students in the course will create work for the CONTACT photography festival at an off-site location in Toronto during the month of May. The year will end with an introduction to experimental film and video art, and the production of a video artwork.

Note: This course emphasizes the production of non-traditional media art works (e.g. photography, experimental video, interactive
media). Students will develop an appreciation of the history of photography and video art, and will create works using a variety of
photographic and video technologies.
Digital SLR camera or a digital camera that allows for manual control of aperture and shutter speeds is required

## GRADE 11

AVI3M - Visual Arts, Grade 11, University/College Preparation
1 CREDIT
Would you like to develop your drawing and painting skills? Have you ever wondered how artists whose work you admire make things look so life-like? Have you said out loud or to yourself, "I could never do that"? Well, if you've ever uttered any of those words or thought any of those thoughts, then this course is a perfect fit for you! In this course you will have the opportunity to explore a range of 2D materials and methods, with an emphasis on representational drawing, oil painting, printmaking and figure drawing. You will focus on observational drawing and study painting techniques of master artists. You will learn to paint in oil on canvas and begin to draw from the figure, capturing gesture, mood and emotion. Another exciting part of the course includes your participation in The Brooklyn Sketchbook Project (BSP), out of NYC. The BSP invites participants from all walks of life to fill the pages of a small sketchbook. When complete your sketchbook is returned to Brooklyn for inclusion in a travelling exhibition, one that visits Toronto's Distillery District each year. Yes, your sketchbook will be part of a permanent collection in the US! This course will also include a couple of exciting art excursions to local and/or not-so-local destinations. As the year progresses you will assemble a portfolio of your strongest work, and we will collaborate to analyse your strengths and identify areas in need of improvement. You will leave this course ready for your senior year in Grade 12 Art, prepared to express your visual ideas and share your art with the community.

Prerequisite: AVI1O - Visual Arts, Grade 9, Open or AVI2O - Visual Arts, Grade 10, Open
Note: This course focuses on studio activities in one or more of the visual arts.

Are you a visual storyteller? Then this art course might be the one for you, because it is all about storytelling and visual narrative! You will begin AWT3M by stepping back in time to experience the roots of photography. You will learn how to shoot, develop and print 35 mm film...yes, that's real film, with a real film camera! You will be encouraged to create a range imagery that is both personal and expressive, while improving your technical and aesthetic skills. As well, your art will be shown as part of the Contact Photography Exhibition, a city-wide exhibit of the photographic arts! Once you have mastered the still image, you will move on to create a digital story. Digital storytelling brings together still imagery, video, sound, narrative and voice to create a short documentary-like film. Through this project you will gain skills in digital photography and editing (PhotoShop), video and sound editing (Adobe Premiere), oral history and interviewing techniques and story writing. As part of the digital storytelling component, we will work with a visiting artist from the Centre for Digital Storytelling. If you are an aspiring photojournalist, journalist, videographer or photographer-or if you'd just like to know more about how to make a great photograph or video sign up for this course.

Prerequisite: AVI2O - Visual Arts, Grade 10, Open or AWT2O - Visual Arts Non-Traditional, Grade 10, Open
Digital SLR camera or a digital camera that allows for manual control of aperture and shutter speeds is required

## GRADE 12

AVI4M - Visual Arts, Grade 12, University/College Preparation 1 CREDIT
This course builds on the knowledge and skills developed in AWT3M and AVI3M. The Art History component of this course covers the entire modern era from 1850 to present. The art projects in this class rely heavily on your own research and development of ideas. You will be taught how to think like an artist and encouraged to experiment with different media throughout the year. The course builds towards the Senior Year Art Exhibition-you will decide what kind of art you want to present. In past years, the show has included art in the following modes of expression: painting, sculpture, photography, digital, video art, installation art, soundscapes, participatory art, performance art and sequential art.

Prerequisite: AVI3M - Visual Arts, Grade 11, University/College Preparation or AWT3M - Visual Arts Non-Traditional, Grade 11, University/College Preparation

## Portfolio Support

This is an opportunity to meet with other students and art staff to prepare a portfolio. Activities centre on the completion of artwork and its presentation.

## BUSINESS STUDIES

## GRADE 9 OR 10

BBI2O - Introduction To Business, Grade 10, Open 1 CREDIT
Have you ever considered a career in business? This new course will introduce you to marketing, economics, accounting, finance, human resources and the importance of ethics and social responsibility. You will have the opportunity to test your business prowess in a stock market competition, interview entrepreneurs at the One of a Kind Show and taste test various foods to determine the difference between branded and generic products. You will also learn how to create budgets, read pay stubs and examine the benefits and drawbacks of various financial instruments. Most importantly, the knowledge and skills you will gain in this class will continue to help you long after you graduate from Havergal.

Students in Grades 9 or 10 may take this course

## GRADE 10 OR 11

BAF3M - Financial Accounting, Grade 11, University/College Preparation
1 CREDIT
Every business needs individuals who understand how to read and interpret financial information. This course will teach you the fundamentals of accounting and how to speak the language of business. At the end of this course you will be able to account for transactions in a sole proprietorship. This course will demonstrate how Microsoft Excel is used in the business world and will focus on skills such as basic formulas and formatting worksheets.

Students in Grades 10 to 12 may take this course

## GRADE 12

## BAT4M - Financial Accounting Principles, Grade 12, University/College Preparation

If you intend on pursuing a degree in commerce, this course is for you! Grade 12 Accounting will build on the foundational concepts introduced in Grade 11 Accounting by examining accounting methods for assets and accounting for partnerships and corporations. You will also learn how to read and interpret financial statements and solve business case studies. Most importantly, you will be prepared to tackle introductory accounting courses at university.

Prerequisite: BAF3M - Financial Accounting, Grade 11

## BBB4Me - International Business Fundamentals, Grade 12, University/College Preparation, eLearning 1 CREDIT

This online course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Students will learn about the techniques and strategies associated with marketing, distribution and managing international business effectively. This course prepares students for post-secondary programs in business, including international business, marketing and management.

BOH4Me - Business Leadership: Management Fundamentals, Grade 12, University/College Preparation, eLearning
This online course focuses on the development of leadership skills used in managing a successful business. Students will analyse the role of a leader in business with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees and planning. Effective business communication skills, ethics and social responsibility will be emphasized throughout the course.

## ENGLISH

## GRADE 7

## Grade 7 English

Think about the last time you heard or read a great story. Perhaps it was a story your friend told you about her weekend, or maybe this story is found in your favourite novel, the one you re-read every summer because you enjoy it so much.

No matter what form a story takes, it has the power to make us laugh, cry, think, and dream. Stories also help us better understand ourselves and the world around us.

The Grade 7 English course focuses on the power of the story and the many forms a story can take. In particular, we look at how stories shape our own identity by exploring "her story": the portrayal of girls and women in literature. We read and discuss different types of stories that represent different types of women: creators, rebels, pioneers, and historical figures. As we learn about the diverse roles of girls and women, we ask ourselves: Where do I see myself in this story? What is MY story? What will my story be?

## GRADE 8

## Grade 8 English

In many respects, Grade 8 English doesn't differ from most other English courses. Are there many different genres? Check. Do we study grammar? Check. Will it cover paragraph writing? Yes. Sounds pretty familiar, right? So what makes this course unique?

First, you will get a chance to read and discuss some interesting, thought-provoking short stories and try your hand at writing your own. Also, you will read three novels-one on your own, two with your classmates-and create a multimedia project related to their themes, as well as a monologue from the perspective of a character of your choice. Later in the year, you will explore the wacky world of fairies and errant mortals in A Midsummer Night's Dream and try your hand at applying Shakespeare's language and ideas to modern contexts in the playbill project. Finally, you will create a rich social media profile based on a novel character of your choice. Through it all, you will make connections with various Jungian archetypes - the Sage, Ruler, Jester, and the Magician - which help us understand basic human motivations as well as our own set of values and personality traits. Ultimately, you will have many chances to become a better writer through practice and a lot of step-by-step instruction to demystify the art of crafting strong, effective paragraphs and creative pieces of writing.
"One must still have chaos in oneself to be able to give birth to a dancing star." -Friedrich Nietzsche
"The outsider" takes many forms in our society: a freak, a rebel, a joke, a stereotype, a scapegoat, a sore, a scar, a mirror, a truth, a hero, a film about greasers and socs. Why are people in our society relegated to the outside? The Grade 9 English course grapples with this question. You will read, analyse and discuss many genres of literature-short stories, the novel, the essay, poetry, and a Shakespearean play-through the lens of "the outsider." In this survey course, you will be introduced to all the essentials of writing skills in addition to the wide variety of literature offered. You will also unlock the mystery of the five-paragraph funnel essay, a key skill to see you through your academic career and beyond. You will learn essential techniques of persuasive writing and speaking that will allow you to convince your audience of your powerful argument. You will also receive your very own "poetry toolbox," chock full of poetic devices; then you will have the opportunity to use the toolbox to build your own forms of poetry such as the simile poem (you will take to the simile poem like a poet to imagery), the sonnet (if we had 14 lines, we could tell you more about the sonnet) and the haiku (why is the number 17 so special?), to name but a few. A variety of media will be used in order to explore in depth, from many angles, a chosen "outsider" from the literature that you have encountered. In a student-centred, discussion-based learning environment, you will work in literature circles, small groups and pairs to investigate why we read stories in all their various forms, and how we connect personally to literature. After all, it is what's on the inside that counts!

## GRADE 10

ENG2D - English, Grade 10, Academic
What is a metaphor? No. Scratch that. Who cares about metaphors? No one. Well, English teachers, I guess. And, possibly, writers-but only the boring ones. Certainly, though, not the teacher. Is this how you feel? In this course, get ready to feel engaged, enchanted and enlightened by the power of metaphor. From blood and guts, fairytale endings to the origins of humanity and what makes a hero, you will travel through a diverse collection of literature together. Do you realize that films, podcasts, paintings, TV shows and photographs are also texts? In this course, you will certainly be reading them. Of course, with incredible reading comes incredible writing. In Grade 10 English, you will discover the tools to master that all-important form you're constantly called upon to produce: the persuasive essay. Alongside this left-brain work, you will indulge your right-brain selves too. For example, in the Facebook universe we call home, text and image so often work together, producing creative new forms of expression. You too will have opportunities to think beyond the traditional line separating word and picture, using both (and so much more) to share your genius with the world. Speaking of which, you will also get many chances to think, write and talk about what is, for most of us, a favourite subject: ourselves.

Prerequisite: ENG1D - English, Grade 9, Academic or ENG1P - English, Grade 9, Applied
"It's not your grandmother's television!" Are you addicted to Facebook? Tumblr? Blogging? BBM? Do you spend hours surfing YouTube or chatting online with your friends? Do you express yourself in 140-character tweets? Is reality television your (not-so) secret guilty pleasure? Do you feel lost without your smartphone or your iPad? If so, this course is for you. Learn how to take control of the media you consume and how media, new and traditional, have the power to influence and shape you. Then, learn to create your own media to influence and shape the world around you. Make a video, design an advertising campaign, create your own multi-media extravaganza on the Internet-you are limited only by your own imagination! If you are interested in a career in business, journalism, communications or media, this course will be of use to you.

In this course, you will garner the skills to help navigate your media-rich world as critical and informed participants. What better way to become a savvy participant in the world of mass media than by studying the masters and then creating your own media works? You will learn how to manage your own digital footprint and create and maintain an individual blog. In addition, you will create a variety of other media works, including print, film and video, Internet-based and audio content. This course emphasizes knowledge and skills that will enable you to understand media communication in the 21st century and to use media effectively and responsibly. Through analyzing the forms and messages of a variety of media works and audience responses to them, and through creating your own media works, you will develop critical thinking skills, aesthetic and ethical judgment, and skills in viewing, representing, listening, speaking, reading and writing.

Prerequisite: ENG2D - English, Grade 10, Academic or ENG2P - English, Grade 10, Applied

## ENG3U - English, Grade 11, University Preparation

Do you ever wonder who people are-really are-underneath the mask? Do you ever read the news and think, "There has to be another story there, somewhere"-a much more interesting story, perhaps?

Do you have a secret desire to sway public opinion, to convince people of the unbelievable, through the sheer audacity and genius of your words?

In Grade 11 English, we will explore the ways we can read to understand the story beneath the story and the ways we can write to influence opinion and to make our readers see the world as we do.

We will read political essays, great novels such as Of Mice and Men and The Great Gatsby, and a range of Romantic and Victorian poetry. We will finish our year by looking at the mystery one of the great historic mysteries of the western world-Who killed the Princes in the Tower? Their uncle, Richard III; Henry Tudor, the man who overthrew him; Buckingham, the great machinator; or someone as yet unknown? We'll read a range of sources-Shakespeare's famous play, snippets from contemporary sources, a murder mystery-and decide who dunnit!

Prerequisite: ENG2D - English, Grade 10, Academic

The ENG4U course is a course about thinking - not WHAT to think but HOW to think. Have you ever had this experience: your teacher assigns a story for the class to read. You read it and have no idea what it means beyond the literal, but your classmates seem to have no end of interpretations, observations, and questions. How do they do it? Well, never fear! After you learn about the conventions of literature in this course, you will have a framework with which to analyze any narrative. But your learning doesn't end just there. You learn what chiasmus is by saying what you mean, and meaning what you say. You will read a selection of modern poetry, and you never know when a line of poetry you read in school will come unbidden into your thoughts during key moments along your journey. In ENG4U you will deepen your understanding of the five core principles of media literacy; observe the conventions of tragedy in action as you see characters in plays subjected to forces that prevent them from attaining their joy; and encounter the imagined life of a protagonist in nineteenth century England and compare her life to that of a character in a modern novel to see if they are really as different as they first appear. You will find out what a social myth is and why playwright George Bernard Shaw remarked that, "a temptation to tell the truth should be just as carefully considered as a temptation to tell a lie." The mission of this course is to the answer the question posed by Canadian literary critic and teacher, Northrop Frye, "What is the good of studying literature?" ENG4U is a journey through essays, ads, speeches, literary criticism, plays, novels, and poems to discover the answer. Warning: taking this course may cause you to educate your imagination.

Prerequisite: ENG3U - English, Grade 11, University Preparation

## ETS4U - Studies In Literature, Grade 12, University Preparation

1 CREDIT
Reading is to the mind what exercise is to the body. -Joseph Addison
The Booker-Prize winning author Julian Barnes says, "When you read a great book, you don’t escape for life, you plunge deeper into it."

Are you looking for a course to help you plunge deeper into life whilst also improving your reading, writing, and critical thinking skills that are so important for university? Look no further! Great writers and thinkers have always been even greater readers. Writer D. H. Lawrence referred to the novel as "the bright book of life." Literature puts ideas upside down for argumentation, shows us ways of being, helps us to navigate the big emotional moments inherent in living a human life, reveals universal truths, and allows us to step into other people's shoes and see the world from another person's perspective. Current research from the University of Toronto demonstrates that exposure to literature not only helps us to deal with uncertainty, ambiguity, and the unknown in our daily lives, but it also opens our minds and improves our creativity.

This course is for both people who like discussing literature as well as those who prefer to reflect on it and write about it quietly. It is also suitable for those who love to read as well as those who want to improve their reading skills and knowledge of Western literature.

Did you know that some police forces, law departments, and medical schools give their students required literary reading lists in order to learn empathy for their clients? If you are looking for a liberal
arts course that can be applied to any university program in the arts or sciences, then this is the course for you.

The course offers a selection of short stories, novels, poems, and plays, and student input in regard to the choice of texts is welcomed.

Some options we could choose for our study include:
Reading a couple of Sherlock Holmes's original stories and comparing them to recent film versions or television episodes of Sherlock based on the iconic detective.

Studying another Shakespeare play such as Julius Caesar, Much Ado About Nothing, Macbeth or The Winter's Tale.

And, of course, your suggestions are most welcome!
Ready to take the plunge?
ENG3U - English, Grade 11, University Preparation

## EWC4U - The Writer's Craft, Grade 12, University Preparation

1 CREDIT
Do you want to write the great Canadian novel? Does the heart of a poet beat within your breast? Do you find yourself answering questions in rhyming couplets? Have you always wanted to ink your own superhero? Do you moan every year, why do we have do write an essay, what about creative writing? If you answered yes to any of these questions, Writer's Craft may be just the course for you. In this class, you will write microfiction pieces, short stories, poems and reviews. We will also read the most recent, most applauded publications in Canada and the world. We form a writing community together, reading each others' pieces, laughing over our comedies and crying with our tragic characters. We try, each one of us, to find a creative writing we love. The highlight of the course is a reading night in May when we come together to do a public reading of our best work and culminating assessment, an opportunity to write whatever you came to Writer's Craft hoping to do. Past offerings have included TV pilots, memoir pieces, poetry collections, children's books and even a few graphic novels.

Prerequisite: ENG3U - English, Grade 11, University Preparation

# GUIDANCE AND GAREER EDUCATION 

## MIDDLE SCHOOL

The purpose of the Middle School Guidance program is to develop a safe, supportive and caring learning environment that fosters individual growth and self-reflection in students.

Students will use an inquiry approach to develop an academic plan based on individual questions that arise during each stage. The academic plan will help students take responsibility for their education, make informed decisions and plan for the future. Developing study skills, interpersonal communication skills, positive attitudes, self-awareness and self-esteem will be incorporated into the program. The students will also participate in a series of workshops that involve personal safety, goal setting, wellness and stress management.

## SENIOR SCHOOL

Guidance and Career Education program goals for Senior School students include:

- understanding the concepts related to lifelong learning, interpersonal relationships (including responsible citizenship) and career planning;
- developing learning skills, social skills, a sense of social responsibility and the ability to formulate and pursue educational and career goals; and
- applying learning to their lives and work in the school and community.

The goals are organized into three areas of knowledge and skills: student development, interpersonal development and career development. The comprehensive four-year school Guidance and Career Education program reflects the interconnectedness of these three areas through an inquiry-based approach to teaching and learning. University counselling is an integral component of the Guidance program.

## GLE2O - Learning Strategies 1: Skills for Success in Secondary School, Grade 10, Open 1 CREDIT

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.

Prerequisite: Recommendation of Principal
This course will be offered when enrolment warrants and may be taken by Grade 9 or 10 Students

## GRADE 10

GLC2O - Career Studies, Grade 10, Open
0.5 CREDIT

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.

This course is an integrated course at Havergal and is completed by all students throughout Grades 9 to 11. Students will be automatically registered in this course.

## HEALTH AND PHYSICAL EDUCATION

## GRADE 7

## Grade 7 Health and Physical Education

During Grade 7 Health and Physical Education, you will learn to stay fit and healthy through a variety of activities, games, sports and health topics. You will also be introduced to all of the Havergal athletic facilities. There are three health units to help prepare students for their teenage years-you will learn about topics like healthy eating, substance use and abuse, stress management and growth and development. The emphasis in this course is on participating, communicating, working in teams, putting forth effort, learning healthy habits and the importance of maintaining lifelong fitness.

## GRADE 8

## Grade 8 Health and Physical Education

During Grade 8 Health and Physical Education, you will play a little bit of everything. You will participate in many different sports like football, basketball, soccer, volleyball, softball, badminton and tennis. You will work on improving your personal fitness by participating in a variety of activities like track and field, yoga, aerobics, dance, rock climbing and swimming. The emphasis in this course is on participating, communicating, working in teams, putting forth effort, learning healthy habits and the importance of maintaining lifelong fitness. There are three health units that discuss topics related to teenage girls that all focus on decision-making skills and leading a healthy lifestyle.

## GRADE 9

## PPL10 - Healthy Active Living Education, Grade 9, Open

The Grade 9 Health and Physical Education curriculum covers everything from invasion territory games, fitness centre training and net/wall activities, to fun and games in the pool and three health units (conflict resolution, substance use and abuse and sexuality). You will get a taste of all the different types of physical activities that you can take in Grade 10 and onward. Throughout the year, you can test your skills at different sports and challenge yourself to overcome obstacles, such as climbing on the indoor rock wall. The class ends up being a small family as you train side by side for the triathlon (swimming, rowing and running) and cheer each other on as you cross the finish line. This class gives you the opportunity to push yourself and your athletic abilities and to learn about your health while still having a blast!

## GRADE 10

PPL2O2 - Healthy Active Living Education, Grade 10, Open Semestered
The Grade 10 Health \& Physical Education course is offered for a half-year (opposite to Civics) and exposes students to a wide variety of activities so that students can play games that are fun and participate for the love of being active. Students will have some choice in what activities will be offered, understanding that their teacher wants to provide a positive experience for all. There is a fourday self-defense course taught by a guest instructor. In this unit, students learn about being aware, avoiding risky situations and learning how to defend themselves. In Health, students continue to learn about staying healthy by revisiting topics on risk-taking, substance use, nutrition, stress management and healthy sexuality. In Health there is a cumulative project of creating a "Teen Survival Kit" so that students leave feeling like they've made personal connections to their own health and well-being. If this is the last PE course you take, you will leave knowing how to lead an active, healthy lifestyle!

## GRADE 11 AND 12

## ATC3O2 - Dance, Grade 11, Open Semestered

See the description for this course in the Dance section on page 1.
PAD30 - Outdoor Education, Grade 11, Open
You don't need to be an intense tripper, know how to cross-country ski or even know how to scale a rock wall to be in the Outdoor Education course. You learn a lot of hard skills like tying knots and centre flipping a canoe along with soft skills such as listening and creative problem solving through initiative games. You will go on three trips: a canoe trip in September to Algonquin Park; winter camping at Kandalore in January; and a trip to Wahanowin doing all the rock climbing and ropes courses and trapeze in May. On these trips, you will live in tents, cabins and will even build and sleep in a quinzee (like an igloo), which actually is a lot warmer than it sounds. The menu is chosen and created by you so you know that it will always be good. In between preparing for the trips you will have a short health unit. You will gain many close friends throughout the classes and the trips. You will have unforgettable experiences and challenge yourself mentally and physically.

## PAF302/PAF4O2 - Personal And Fitness Activities, Grade 11 or 12, Open Semestered

0.5 CREDIT

This course is a fitness-focused course, utilizing the Fitness Centre, the pool and games that will help students develop and improve their fitness levels. Heart rate monitors and training will provide immediate feedback to individual students' personal fitness programs and a wide variety of fitness methods will be used to maintain interest and excitement in the course. The Health unit examines adolescent concerns, including healthy sexuality, risk related behaviours and healthy relationships.

Racquet Sports is a course that allows you to participate in "social" sports. The course covers tennis, badminton, table tennis, squash and pickle ball. A high level of skill in these sports is not required to take the course; it is a way for you to learn how to play, for lifelong enjoyment. Basic concepts (such as serves, forehand and backhand shots) transfer from one sport to the next. So do strategies between the sports. Students will travel to the Cricket Club for squash and compete against each other in friendly competition during the various sports. Additionally, there are classes of health and selfdefense. In health, there is a cumulative project of creating a "Teen Survival Kit." In self-defense, you will learn key points for protecting yourself.

PAO302/PAQ4O2 - Aquatics Certification, Grade 11 or 12, Open Semestered
Aquatics is made up of National Lifeguard Service certification. The course is for students seeking lifesaving certifications through the Canadian Lifesaving Society. This course focuses heavily on aquatic fitness and rescuer training, and you can expect to be in the pool for $90 \%$ of the course. The course follows the Canadian Lifesaving Society for instructions, expectations and level of fitness required by each student. Lifesaving Society examiners are brought in for final testing, while the teacher evaluates other sections.

Prerequisites are needed for this course, which follow the Canadian Lifesaving expectations: you must have Bronze Cross certification prior to taking NLS.

## PPL30/PPL40 - Healthy Active Living Education, Grade 11 or 12, Open

1 CREDIT
These courses are the "traditional" Health and Physical Education courses. Students will choose what they want to do from a variety of units and also provide input as to the activities they would like to do in each unit. This course also includes a trip to Sunnybrook Hospital and Lyndhurst Rehab Centre to participate in the P.A.R.T.Y. program (Prevent Alcohol and Related Trauma in Youth). The emphasis in this course is on participation, communication, teamwork, effort, learning healthy habits and how important it is to maintain lifelong fitness.

## PPL302/PPL4O2 - Healthy Active Living Education, Grade 11 or 12, Open

These courses are the "traditional" Health and Physical Education courses. Students will choose what they want to do from a variety of units and also provide input as to the activities they would like to do in each unit. This course also includes a trip to Sunnybrook Hospital and Lyndhurst Rehab Centre to participate in the P.A.R.T.Y. program (Prevent Alcohol and Related Trauma in Youth). The emphasis in this course is on participation, communication, teamwork, effort, learning healthy habits and how important it is to maintain lifelong fitness.

## PLF4M - Recreation and Healthy Active Living Leadership, Grade 12, University/College Preparation

This course is open to Grade 11 or 12 students who are looking for leadership training in the area of recreation, leisure, and fitness. A variety of leadership theories will be explored that will apply to any field or area of interest. Students will learn about promotion, planning, and facilitating large group events and initiatives and will help other students find ways to be physically active at the school. This is the first year this course has been offered.

Prerequisite: Any Health and Physical Education course

At the beginning of this course, you will learn all of the bones and muscles in the human body. You will spend a lot of time talking about the skeletal system and muscular system, and then you will complete a bell-ringer test. Then, you will study joints and sport-specific injuries. You will study some physiology-how the athlete's body produces and uses energy-and the cardiovascular system. In the nutrition and training principles units, you will create a nutrition plan for a theoretical athlete client in a particular sport and will also create a personalized training plan for a classmate with a particular goal. All students present a seminar and a bulletin board that profile a social issue around Canadian sport and physical activity. The work is fun to do and you will make lots of meaningful and personal connections with the course content.

Prerequisite: Any Grade 11 University or University/College Preparation course in Science or any Grade 11 or 12 open course in Health and Physical Education

## INTERDISCIPLINARY STUDIES

Students may take a maximum of three interdisciplinary studies courses-one each of Interdisciplinary Studies, Grade 11, Open (IDC3O); Interdisciplinary Studies, Grade 12, University Preparation (IDC4U); and Interdisciplinary Studies, Grade 12, Open (IDC4O).

## GRADE 11

## IDC3O - Applied Journalism (Yearbook), Grade 11, Open

1 CREDIT
As part of the yearbook crew, you will develop the school's yearbook from initial planning to final execution and submission for printing. Through the process, the yearbook crew is responsible for planning the look, taking the photos, designing the page layouts and exporting the book for press. You will start the year planning the theme, the physical size and the content of the yearbook. You will then explore graphic design through the planning of page design for the yearbook. These designs are transferred to the computer using page layout applications. For content, you will start the year learning some basics of photo composition and photojournalism. You will then take photos of events, clubs and teams during the year. These images are then colour corrected on the computer and inserted into the layouts. After proofing, the layouts are exported for press and finally distributed to the whole student body. In addition, you will learn project management through the development of a large project that requires cooperation among all of the students in the class.

Special Notes: This interdisciplinary course provides students with an opportunity to create informative print media for the school and community through the production of the school's yearbook. Students investigate sources of information and compare differing perspectives on key issues, developing both a sense of news and news judgment through yearbook entries and photojournalism. They also learn editorial conventions and practices, learn principles of print and management skills and explore legal and ethical uses of information that is made public. Career options in journalism, photojournalism and print production are also explored. This course combines the expectations for Interdisciplinary Studies (Grade 11, Open) with selected expectations from Communications Technology (Grade 11, University/College Preparation), Media Arts (Grade 11, Open) and Media Studies (Grade 11, Open).

Recommended preparation: ENG2D - English, Grade 10, Academic

IDC4U - Education for a Changing World, Grade 12, University Preparation
1 CREDIT
We often hear talk of the "fast pace of our changing world" but what does this mean? What types of changes are occurring? What types of changes do we want? How do we effect change? How do we react to change? At Havergal, we have taken as our motto the statement, "Preparing young women to make a difference." This motto of course implies change, and this interdisciplinary course, Education Toward a Changing World, explores the concept of change in depth. As such, this course is linked to the work of the Havergal Institute which is currently helping to guide our understanding of change and action by posing the question, What kind of world do you want? The course is structured into four integrated units: Philosophy of Education, Sustainability and the Environment, Identity and Diversity, and Global Connections. Some questions and concepts that are explored in this course are: What is education for? Can we learn goodness? What is the nature of sustainability? How do we envision our environment? What happens when we encounter difference? How can we best live in a culturally diverse world? How should we act? The course takes an interdisciplinary approach: that is, it draws on multiple disciplines to explore the importance of understanding the interconnectedness of things, people and ideas. At times, more than one teacher, representing diverse disciplines, team-teach in the classroom together. Classes are conducted using a model whereby students and teachers engage in discussions, or "learning conversations", based on close, textual study of key readings or other materials. Students are expected to prepare in advance for each class. In addition to classroom study, students design and take part in action projects that range in scope from our own campus to regions and groups well beyond. To this end, experiential components to this course are built in each year.

The course draws on multiple disciplines to explore the interconnectedness of things, people and ideas.
Prerequisite: Any University or University/College preparation course

## LANGUAGES

## FRENCH

## GRADE 7

## Grade 7 French

Learning a language is learning to think in a different way. In Grade 7 French, you will jump into a French milieu, increasing your mental flexibility and creativity, and growing competent and confident in your usable command of one of Canada's official languages. From authentic starting points such as the Grade 7 Camp Kilcoo trip, favourite photos, Québec penpal correspondence, class celebrations, physical activity, and, of course, food(!), you will listen to and read modelled French so as to learn to express effectively your own daily reality, interests, and questions. Sing along to popular French songs. Follow Lafontaine's endearing, salutary fables of mice, lions, tortoises and hares to make them come alive on stage. Delve into your subscription to a teen magazine to discuss current events. Expand your knowledge of the francophone world while learning about French in the Americas - French Canada, New England, Louisiana, Martinique, Haïti, and French Guyana. The growth of your oral and written comprehension and communication skills will be evaluated throughout this course. Your personal learning journal will provide a fascinating track record of your progress from September to June. By fully and attentively engaging in the language experience, you will be able to strengthen your French proficiency for use in everyday situations. Building your second language skills throughout your life is an opportunity and an advantage that opens doors to the world-après vous, mademoiselle!

[^3]
## GRADE 8

## Grade 8 French

Do you like to tell stories? You will have the chance to tell lots of them in Grade 8 French; about yourself, your tastes in fashion and music, your travels, your heroes, and much more! Since learning a new language is learning to think in a different way, you will continue training your brain to think in French by hearing, seeing, using, and reusing the language inside and outside of class. You will learn to express your ideas in more sophisticated French, with new vocabulary and grammatical structures, using various supports as needed. Our focus will be to provide daily opportunities for interaction with your peers in meaningful and authentic settings in order to help you build confidence in your French abilities. You will write texts of different lengths in various forms, and will explore readings from magazines and short stories alike. Evaluations will demonstrate the growth of your oral and written comprehension, as well as your oral and written production skills. Incorporating social media and current pop culture trends, we will discover the richness of the Francophone world in both Canadian and European communities. Are you ready to share your story?

Students who complete the Grade 8 French course in their Grade 7 year may be enrolled in FSF1D (Grade 9 French) with the permission of the Languages Head. Students taking this option are often students coming from an immersion or extended French program.

All students in Grade 9 will complete a year of French while at Havergal, except under special circumstances.

## GRADE 9

## FSF1D - Core French, Grade 9, Academic

Grade 9 French invites you to a new level of independence as a French speaker. You will learn to define yourself as you explore what interests you, what you care about and what is fun for you. You will extend and refine your skills with past tenses and pronouns and master reflexive verbs and the simple future. You will read a mystery novel, turn yourself into a monster, an interior designer, a time-traveller and an environmental activist. FSF1D students frequently report experiencing their first thoughts or dreams in French. Welcome to the adventure!

[^4]The Grade 10 French course invites you to explore the many faces of the Francophone world. through such themes childhood memories as what people eat, the stories they tell, food and the music they create and the way they celebrate. Basically, you will find out what it means to be a Francophone. You will spend a lot of time telling, listening, reading and watching stories since it's the best way to gain a better appreciation of other people. As the French novelist Marcel Proust said: "The real voyage of discovery consists not in seeking new landscapes but in having new eyes." And so, you will see things differently through conversations about your discoveries and through improvisations where thinking on your feet and putting yourself into someone else's shoes are the name of the game. This course also deepens the skills you learned in Grade 9 French so that you can speak and write more like a native speaker. By the end of the course, you will be able to describe your own childhood stories, navigate your way through Francophone menus, cuisines, and traditional festivals, imagine and describe your dream home, use French teens' lingo in conversation and, like Dr. Phil, help other people solve their problems. Along the way, you will read short stories, magazine articles and two novels meeting such interesting characters as Nicolas and his gang of endearingly mischievous friends, the timeless and heart wrenching characters of Victor Hugo's Les misérables, enigmatic Petit Prince and a teenaged psychologist named Ariane who has a few issues of her own to solve.

Prerequisite: FSF1D - Core French, Grade 9, Academic or FSF1P - Core French, Grade 9, Applied

## GRADE 11

FSF3U - Core French, Grade 11, University Preparation
Learning a language is learning to function with different worldviews. Grade 11 French invites you to develop your skills with analysis and empathy. This goal is met best when classmates, who feel at ease with one another, learn from each other through discussions. As a class, we will determine together how best to build the learning community the class wants. Along the way, you will play word games and explore things you love in French; write in a variety of forms from letters to essays; and read poems, stories, two novels, a play, multiple news articles and historical documents. You will prepare a speech or memorize a poem, keep a listening journal, read a novel independently and play the role of a character in a play in a few different contexts. To help you in all of these tasks, you will learn to use more sophisticated language tools as you refine your ideas on the themes of language play, imagining a different reality, knowing the other and moving toward freedom. You will review all simple verb forms before adding the compound forms, and you will master the 50 most frequently used verbs in all their forms. Similarly, you will review pronoun forms from previous grades before adding new pronouns, which will allow you to express ideas with a wider range of nuance.

Prerequisite: FSF2D - Core French, Grade 10, Academic

## GRADE 12

FSF4U - Core French, Grade 12, University Preparation
1 CREDIT
The famous French singer Edith Piaf sang Non, je ne regrette rien and, like her, you will not regret stretching your French skills further in the Grade 12 French course. This is a chance to master skills you have already learned and to add a few more nuances. A wide variety of texts and media will inform our conversations about the following themes: personal and public identities, beauty and aesthetics, contemporary life, global challenges, science and technology and families and communities. Throughout the year, you will maintain your own portfolio of Francophone resources inspired by these themes and share your discoveries with classmates.

What is a French course without French and Francophone culture and history? Meet a local French café owner and taste the regions of gourmand France. Participate in the Toronto French Theatre urban tales contest through an actor-led workshop, an excursion to youth-written plays, and submission of your own dramatic creation. Understand what it means to be an immigrant or a refugee in modernday Québec through Kim Thuy's novel Ru. Learn about 17th century France through an excerpt from Molière, Shakespeare's French counterpart. Explore the masterpieces that fill the galleries of the Louvre museum in Paris. Learn about the legacy of the French Revolution and its connection to human rights. Discover the history and track current events of a Francophone region just like a journalist.

Prerequisite: FSF3U - Core French, Grade 11, University Preparation

## FSF4UP - Core French, Grade 12, University Preparaton (Advanced Placement) <br> 1 CREDIT

This course includes the course content for FSF4U. In addition, students will be prepared to write the AP French Language exam. The AP French exam in May is a great opportunity to test your skills and understanding of French and Francophone culture. In preparation for the exam, you will have many opportunities to become familiar with the format of the exam and practise the different components, such as reading and responding to an email, writing a persuasive essay, carrying on a conversation with a native speaker and presenting a topic of cultural interest.

Prerequisite: FSF3U - Core French, Grade 11, University Preparation

## CLASSICAL LANGUAGES

## LATIN

## GRADES 9 TO 12

| LVLBD - Classical Languages, Level 1 Latin, Academic | 1 CREDIT |
| :--- | :--- |
| LVLBDe - Classical Languages, Level 1 Latin, eLearning | 1 CREDIT |
| LVLCU - Classical Languages, Level 2 Latin, University Preparation | 1 CREDIT |
| LVLDU - Classical Languages, Level 3 Latin, University Preparation | 1 CREDIT |
| LVV4U - Classical Civilization, Grade 12, University Preparation | 1 CREDIT |
| LVV4Ue - Classical Civilization, Grade 12, University Preparation, eLearning | 1 CREDIT |

Listen in on the following conversation between two Havergal students. It may help you discover what really goes on in a Latin classroom.

Simplicianna: Prudence, why are you studying Latin? No one speaks it any more! Isn't it a dead language? Why waste your time?

Prudence: By Jove, Simplicianna. Latin dead? What are you talking about? I fear that it's your own imagination that's dead, not Latin.

Simplicianna: But what can you do with Latin? Does it make a difference? Can it make a difference? I mean, what do you do with a language you can't speak?

Prudence: You read it.
Simplicianna: Read? Why? Can't I just watch the movie?
Prudence: Yes, there are lots of film clips in Latin. You learn that Rome is the New Troy. So, yes, go ahead watch the movie Troy, but don't forget to read the Aeneid. Don't forget that it's not just reading that will prepare you for college. Reading is about waking up and discovering yourself-discovering how you think; it's all about thinking, questioning, wondering. That's what Latin and learning are all about.

Simplicianna: How does it do that? I've always heard it was deadly dull and unbelievably boring!
Prudence: Words, Simplicianna, words. Latin helps you expand your vocabulary and your mind. It helps prepare you for college. You learn that many English words have interesting and exciting histories.

Simplicianna: Like what?
Prudence: There are many examples. Try these: take the English word "study". It comes from the Latin studere, which means "to be excited about something," "to be keen," "to be engaged" with something. Don't you think it's true that we want to know more about the things we are excited about, or keen on or engaged with? We want to study them.

Simplicianna: Interesting. I'm always keen to know who's in the latest issue of People or Glamour magazine.

Prudence: Speaking of glamour, did you know that our English word glamour is really connected to the word grammar?

Simplicianna: What? You must be joking!
Prudence: No, really. The word glamour really does derive from grammar. Another word may help you see the connection. The English word "form" comes from the Latin word forma, which means "form" or "beauty." This word hints at what the ancient philosophers tell us that when you can see the form of something, you can see its beauty. The form and beauty of a language is (believe it or not) its grammar. And the grammar of Latin is its beauty and pleasure.

Simplicianna: Pain! Surely you mean that grammar is painful.
Prudence: Pleasure. Grammar is about thinking-it's thinking in the thickest and richest sense of the word: grammar is about thinking, understanding, interpreting, explaining and imagining. Thinking is being and being is life...

Simplicianna: What? What are you talking about?
Prudence: That's more philosophy. But think about talking. Have you ever realized that a conversation is different from a discussion?

Simplicianna: How so?
Prudence: Conversation is from the Latin verb vetere (to turn) and the prefix con- (together); so a conversation is when we turn together to face one another and we take turns speaking. In contrast, a discussion (an English word with the same Latin root as concussion and percussion) is when we beat, hit, strike or shake the ideas that the other person expresses; we beat the ideas in order to beat the person; it's like boxing, and there is blood. In a discussion there are winners and losers.

Simplicianna: Interesting. I never saw that before. But weren't we talking about Latin? What has conversation to do with Latin?

Prudence: Everything. Did you know that Latin classes are taught around a Harkness table? We learn not only Latin, but also how to voice, listen, respect and suspend judgment. We learn how to think together-which is hard-but it's a lot more fun than struggling on your own.

Simplicianna: I like talking. Does that mean l'll like Latin?
Prudence: Latin's not just about talking, Simplicianna. It's about learning to voice your ideas. Quiet students enjoy Latin too.

Simplicianna: But will I like it? Will it be fun?
Prudence: I love it. Why don't you try it? If you like words and the history hidden in words-as I've just showed you-and if you like thinking, then maybe you'll like Latin. We often search for hidden forms and hidden meanings in words and texts. It's like trying to solve a riddle.

Simplicianna: Latin sounds puzzling.

Prudence: That's because it is. Latin is a rich riddle. Remember, your own language is puzzling too. You just don't see it. You're too familiar with it. Learning Latin helps you to learn English grammar and the grammar of your own language.

Simplicianna: I didn't know that. But I'm still worried about it being dead and dull.
Prudence: Simplicianna! What more can I say? Think about your school yearbook, Ludemus. It was once part of the original Havergal motto, opera peracta, ludemus ("when are work is finished, we shall play"). Now we have the motto, vitai lampada tradens; it's a line from a famous Latin poem and it means "passing on the torch of life." Can't you see how Latin is really all around you, once you open your eyes?

Simplicianna: l'm beginning to.
Prudence: Good. So it's time for you to carpe the heck out of diem and discover for yourself why Latin is such an adventure in learning.

Simplicianna: Ok, l'll look into it. I'm going to talk to that Latin guy to find out more. What was his name again?

Havergal College offers three years of Latin which includes LVLBD Latin Level 1, LVLCU Latin Level 2, LVLDU Latin Level 3 and LVV4U Classic Civilization. The goal of the Latin program is to teach students how to read Latin. Students enrolled in Level 1-3 learn the grammar of the Latin language while following the life of the Roman poet Horace. Horace lived at the time of Julius Caesar: it was one of the most troubling times in Roman history, as Caesar's own murder shows. Students learn some culture as well. Then, in the last half of the third year of study, students begin to explore original Latin (i.e. Latin that has not been adapted or simplified for textbooks). In LVV4U, students study classic civilizations and gain a better understanding of how people lived in ancient times.

# INTERNATIONAL LANGUAGES 

## MANDARIN

## GRADES 9 TO 12

LKMBD - International Languages, Level 1 Mandarin, Academic 1 CREDIT
LKMBDe - International Languages, Level 1 Mandarin, Academic, eLearning
"A picture is worth a thousand words." Chinese is a language that stems from pictures and there is no conjugation at all! Learning Mandarin with its 5,000 years of history and culture is an adventurous journey. It reflects individual personalities and refines one's self-value through the study of philosophical poems and idioms. This course is designed to emphasize the development of Mandarin oral communication, reading and writing skills to enable you to communicate with native speakers. During the first year's study, you will fully grasp pronunciation skills and gradually build 250 to 300 Chinese characters. You will be able to use key sentences to communicate numbers, dates and time, family members and personal information, countries and languages, occupations and modes of transportation. You will start to explore Chinese culture, including social customs and the arts, by participating in cultural events and activities involving both in and out of school studies and excursions. There are no prerequisites for this course.

LKMCU - International Languages, Level 2 Mandarin, Academic
1 CREDIT
With 5,000 years of history, one-fifth of the world population and the fact that Chinatowns exist in all major cities in the world, Chinese influence is everywhere. Learning Mandarin provides a way for you to deepen your thoughts and widen your vision. In this course, you will continue to develop and apply your oral communication skills and improve your reading comprehension and writing skills by participating a variety of learning activities. You will be able to start expanding your vocabulary by making different combinations of individual characters you have previously learned. You will be able to communicate colours and clothing, weather and vacation, hobbies and daily routine, school subjects and facilities and make phone calls and requests. You will continue to explore Chinese culture, including traditional Chinese festivals, social customs and the arts, by participating in cultural events and activities involving both in and out of school studies and excursions. LKMBD or the same level of knowledge is required.

Prerequisite: LKMBD - International Languages, Level 1 Mandarin, Academic

## 欲穷千里目，更上一层楼

＂If you want to see 1,000 miles wider，you need to climb one storey higher．＂This is from one of the most famous Chinese poems and it appropriately describes the third year of Chinese study：aiming higher achieves more．In the third year of Chinese study，you will explore more traditional Chinese idioms to enhance your language ability and thinking skills throughout the year．You will learn to describe appearance and health，food and nutrition，shopping and decision－making，community and living environment，life and home．You will continue to explore Chinese culture by participating in cultural events and activities involving both in and out of school studies and excursions．LKMCU is required．

Prerequisite：LKMCU－International Languages，Level 2 Mandarin，Academic

## LKEDUe－International Languages，Level 4 Chinese（Native Speakers），University Preparation／ AP Mandarin Language \＆Culture Exam Preparation，eLearning 1 CREDIT

This course prepares students for university study in Mandarin．Students will enhance their ability to use the language with clarity and precision，and will develop the language skills needed to engage in sustained conversations and discussions，understand and evaluate information，read materials for both study and pleasure and write clearly and effectively．Students will also have opportunities to add to their knowledge of the culture of countries where the language is spoken through the use of community resources and computer technology．

Prerequisite or co－requisite：LKMDU－International Languages，Level 3 Mandarin，University Preparation
＊A language placement test is required for admission．The optional AP segments will prepare highly motivated students to write the $A P$ Chinese（Mandarin）Language and Culture exam in May．

## SPANISH

## GRADES 9 TO 12

## LWSBD - International Languages, Level 1 Spanish, Academic

1 CREDIT
This is the first year of Spanish for students who have not previously enrolled in Spanish.

## ¡Bienvenidas al mundo hispano!

Learning a new language is learning to think in a different way. In your first year of Spanish, you will definitely be thinking in a different way because you will become a citizen of a country in the Hispanic world! You will become acquainted with the culture and customs of your country and feel more and more like a true citizen of that country. You will learn key phrases useful in the classroom and for basic conversation. From there, you will be able to engage solely in Spanish-it may be a little at first, but it will increase as you learn to use vocabulary and structures within diverse themes, such as school, family, pastimes, vacations and shopping. Through a variety of listening, speaking, writing and reading activities, you will develop your skills and feel more comfortable applying them in a range of scenarios, from dialogues to skits in class. Finally, you will deepen your understanding about Hispanic culture through short films, articles and magazines and outings in the city. Are you ready to immigrate to the Hispanic world? If yes, say "Si" to LWSBD.

LWSCU - International Languages, Level 2 Spanish, Academic
1 CREDIT
¡Viva el Español!
This course invites you to continue to learn Spanish on a voyage of discovery of yourself and the world around you. It is an exploration of how history, prose and film open doors into Hispanic cultures. You will strive to put yourself in someone else's shoes in order to begin to understand other realities; and by communicating your understanding in Spanish, you will participate in that reality. You will begin the year by reviewing the vocabulary themes and grammar structures you acquired last year, through informal conversations, songs and games. You will also reacquaint yourself with your Spanish speaking country as you rediscover yourself as a citizen of the Hispanic world. Throughout the year, you will learn to use both past tenses and the imperative mood in order to read, write and speak about your daily routine, food, celebrations, health, technology and the home. You will discover the history of Spain from the prehistoric era to the 16th century, watch a movie set in 1970 Central and North America and read three edited Latin American novels of the mid-19th century. Through our examination of historical events and figures, plots, themes and characters, you will gain a deeper understanding of the Hispanic culture. Don't lose your Hispanic passport-the adventure has only just begun!

Prerequisite: LWSBD - International Languages, Level 1 Spanish, Academic

This course will give you the opportunity to live the Spanish language and culture without taking a step outside Toronto. Your discovery of more complex structures and vocabulary and of culture and history presented through conversations, literature and movies, will lead to a more profound understanding of the Hispanic people. Through informal conversations, songs and games, you will begin the year by reviewing the vocabulary themes and grammarstructures you acquired over the past two years. One of your main objectives will be to discover the Hispanic presence in Toronto. Your year-long adventure will begin with a scavenger hunt in Kensington Market, which will be followed by two other cultural experiences of your choice. Throughout the year, you will learn to use the future, conditional and compound tenses and the imperative and subjunctive moods in order to read, write and speak about nature, the city, well-being, the workplace, the arts and current events. Your exploration of Spanish history will lead you through the Hapsburg and Bourbon dynasties to the Spanish Civil War and into the $21^{\text {st }}$ century. As you watch the movie La historia oficial, you will learn about the Argentine "dirty war"; finally, the pages of Cervantes' La gitanilla and Carmen Laforet's Nada will transport you from $16^{\text {th }}$ to $20^{\text {th }}$ century Spain through the eyes and experiences of two very different young women. This is only the beginning-the Hispanic world is waiting for you!
Prerequisite: LWSCU - International Languages, Level 2 Spanish, Academic

## LWSDUP - International Languages, Level 4 Spanish, University Preparation, Advanced Placement

1 CREDIT
This course includes the course content for LWSDU. In addition, students will be prepared to write the AP Spanish Language exam.

Prerequisite: LWSDU - International Languages, Level 3 Spanish, University Preparation

## MATHEMATICS

## GRADE 7

## Grade 7 Mathematics

Students enter Grade 7 with a wide range of interests and abilities in Mathematics. With this in mind, you will be offered opportunities for challenge and remediation throughout each unit of study. The main objectives of this course are to strengthen your basic numerical skills with whole numbers, integers and fractions, while introducing you to new algebraic and geometric concepts. In addition to developing computational skills, emphasis will be placed, whenever possible, on applications and problem solving. In this course, you will use experiments to model situations and predict outcomes, and study how probabilities can be determined through tables, organized lists and tree diagrams. You will learn how the language of algebra is used to generalize patterns and relationships and how algebra is used as a tool to solve various problems. In the geometry unit, you will explore and develop relationships among the angles within triangles and the intersection of lines. In the measurement units, you will develop and then apply procedures and formulae for finding measures of length, area, surface area and volume.

## GRADE 8

## Grade 8 Mathematics

How many times have you heard: "Math is more than a subject we learn in school. Math is every breath we take and every second of the day. From the moment we wake up in the morning, math is at the core of everything we do." Put your thinking cap on, because in the Grade 8 Math course, you will discover why this is said. Over the course of the year, you will work through the five strands of math knowledge. Fractions, decimals, integers and percents will be studied and expressed in a variety of forms. The discovery will be made as to why/how algebra uses numbers and symbols to communicate ideas. You will come to understand why probability is considered to be the mathematics of chance and that statistics is the science of collecting facts and making predications based on the facts. With the investigation of the size, shape and positioning of 2D shapes and 3D figures, you will recognize that geometry is used daily by almost everyone and that measurement is all around us. Emphasis will be placed on developing your numeracy and problem-solving skills. Several web-based mathematics programs are incorporated into the course including Geometer's Sketchpad, Wired Math and Mathletics. Foundation skills will first be strengthened, and then a number of culminating performance tasks that reflect real-life mathematics applications will be performed. Assessment will also include unit tests, checks for understanding, numeracy scales and projects. Your progress will be measured with not just how you "answered" a math problem, but the problem-solving approach with which and how you came up with the answer.

## Reach Ahead Mathematics in Grade 8

During their Grade 7 year at Havergal, students in Grade 7 Mathematics may apply for Reach Ahead Math 8 for their Grade 8 year. Students selected for this course will complete both the Grade 8 and Grade 9 curricula during their grade 8 year and proceed to take Grade 10 mathematics during their Grade 9 year. Grade 7 math teachers describe the two courses and review the criteria to their students in the fall of Grade 7. Applicants are then assessed based on multiple data points collected throughout the year, including but not limited to: student initiative and aptitude, contest results, Thinking and assessment results, teacher feedback and observations, final exam and overall mark, as well as a placement test results. Students selected for Reach Ahead Math 8 are not "streamed" or separated into a "special" class in their subsequent years; Havergal's Grade 10 to 12 Math classes consist of girls from both Reach Ahead Math 8 and Math 8. Regardless of which of these two courses a student takes during her Grade 8 year, all students have equal access to the full range of mathematics courses offered up to Grade 12 courses including Advanced Placement (AP). For more information on math pathways, please consult your teacher.

## GRADE 9

MPM 1D - Principles of Mathematics, Grade 9, Academic 1 CREDIT

In Grade 9 Math, you will continue to build upon your algebra, numeracy, thinking and problem-solving skills. This year you will extend proportional reasoning to making predictions, and analyzing the influence of Barbie on girls' image of the ideal. You will master equations of lines, relate them to graphs on a grid and use your skills to conduct your own research project. You will pose your own question based upon your curiosity and interests to see if there's a relationship between two variables, e.g., text messages and Facebook friends, number of sports you are involved in and how far you can be and still get a paper cup toss in. You will design your research project and identify how best to choose a sample of data. You will then collect, measure, analyse and present your data and conclusions using linear equations to make predictions. This will give you an opportunity to further discuss the meaning of rates, equations, slope and intercepts in a creative and engaging context. This is just one of the ways where you will apply newly acquired skills. You will expand upon your toolbox of working with algebraic expressions by manipulating exponents, coefficients, polynomials and systems of equations. Toward the end of the year, we also expand upon your geometry skills in two and three dimensions. Wherever possible, activities and lessons focus around balancing applications in real-life while challenging your ability for abstraction to help solidify your foundation for success in mathematics by framing math as a both a tool for informed decision-making and robust problem-solving.

## GRADE 10

MPM2D - Principles of Mathematics, Grade 10, Academic
In Grade 10, you will extend your skills from graphing lines to graphing curves, expand your knowledge of triangles from Pythagoras to working with angles and sides using trigonometry and manipulate equations to solve more complex problems involving mixtures, geometry and informed decision-making.

One of the activities we did last year involved taking measurements using a mirror, straw, thread and protractor to estimate an inaccessible height or distance. Another involved providing mathematical evidence as an expert witness about the trajectory for Angry Birds who are on trial. Wherever appropriate, your teachers will challenge you to apply your learning in creative but mathematically rigorous ways to help you practice newly acquired skills. Among the many important skills you will take away this year are: factoring, working with parabolas, trigonometry, solving multiple equations.

Across the units, you will often find there are several possible methods of solving problems. Your mathematical work can lead to you one, two or even some "impossible" results. As always, you will be challenged to develop and compare strategies of solving problems, communicate your reasoning and discuss the reasonableness of your results clearly and convincingly.

Prerequisite: Principles of Mathematics, Grade 9, Academic, MPM1D

## GRADE 11

MCF3M - Functions and Applications, Grade 11, University/College Preparation 1 CREDIT

The big idea of this course is that real-world scenarios are built on relationships between independent and dependent variables. These relationships form patterns that can be represented using words, tables of values, equations, mappings, sets of ordered pairs and graphs. The three basic relationships studied in this course include the quadratic, trigonometric and exponential functions. In order to work with these functions, you will consolidate the algebraic concepts and procedures required to manipulate these functions in equation form and will use technology to investigate patterns and solve problems based on graphical representations of these functions. The course finishes with an investigation of financial mathematics as an application of exponential functions. Although algebraic solutions to many problems will be required, this course will be less algebra intensive than MCR3U. Students who successfully complete this MCF3M course may proceed onto the Grade 12 MDM4U Data Management course. The pace of this course allows students to review and focus on the essential skills needed to see real-life connections to quadratic, exponential and trigonometric equations.

[^5]Prerequisite: MPM2D - Principles of Mathematics, Grade 10, Academic

This course explores the characteristics and properties of functions. You will investigate and apply transformations that were applied to quadratic functions to a variety of different functions including square root, absolute value, reciprocal, inverse, polynomial, exponential, logarithmic and trigonometric. You will develop some understanding of the mathematics associated with the financial applications of sequences and series. As well, you will refine your use of mathematical processes necessary for success in problem-solving. You will apply these skills to various real-life situations such as how to maximize the area created with a certain amount of fencing, minimize the cost of producing products or determining simple interest and many other applications. This MCR3U course serves as a prerequisite for Grade 12 Mathematics courses; those students who excel in MCR3U may also consider AP Stats or AP Calculus.

It is recommended that most students wishing to enrol in Calculus and Vectors do so in their Senior Year. Students wishing to select this course prior to Senior Year must consult with the Mathematics Department and must have the required prerequisite courses.

Prerequisite: MPM2D - Principles of Mathematics, Grade 10, Academic

## GRADE 12

MCV4U - Calculus and Vectors, Grade 12, University Preparation
The first part of this course introduces students to algebraic and geometric vectors. You will explore vector properties in two and three dimensions, properties of lines and planes, and you will apply your knowledge to solve a wide variety of vector problems in two and three dimensions. These applications involve velocity and force, the concept of deductive proof, for example, with a strong focus on the strategies involved in solving problems. The second part of this course builds on your knowledge of a variety of functions to explore rates of change, derivatives and the application of derivatives. You will learn how to apply derivatives to solve problems involving motion, optimization problems (involving, for example, maximum volume, minimum cost, least time) and sketching curves. 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. This course can only be taken after or concurrently with MHF4U Advanced Functions.

Prerequisite: MCR3U - Functions, Grade 11, University Preparation; MHF4U - Advanced Functions, Grade 12, University Preparation must be taken prior to or concurrently with MCV4U - Calculus And Vectors, Grade 12, University Preparation

# MCV4UP - Calculus And Vectors, Grade 12, University Preparation (Advanced Placement) 

MHF4UP - Advanced Functions, Grade 12, University Preparation (Advanced Placement) 1 CREDIT

This two-section course prepares students to write the AP Calculus (College Board, Calculus AB) standardized exam in May. Due to the amount of content learned in a relatively short period of time, this course is fast-paced. It is recommended for students who are strong independent learners and love math. The course is taught similar to that of a first-year university course. Many colleges and universities (especially in the United States) will offer a math credit to students who score well on the College Board's AP Calculus exam.

The Calculus section of this course addresses concepts taught in MHF4U (Advanced Functions), the Calculus concepts taught in MCV4U (Calculus and Vectors), along with all Calculus concepts from the AP Calculus (College Board) syllabus.

Program content:

- Unit 1 - Characteristics of Functions (MHF4U)
- Unit 2 - Rates of Change and Limits (MCV4U)
- Unit 3 - Trigonometric Functions (MHF4U)
- Unit 4 - Derivatives (MCV4U)
- Unit 5a - Log Functions (MHF4U; Unit 5b Derivatives of Log Functions MCV4U ext)
- Unit 6 - Applications of Derivatives (MCV4U)
- Unit 7 - Differential Equations, Integrals and their Application (MHF4U ext)

The Vectors section of this course introduces students to algebraic and geometric vectors. You will explore vector properties in two and three dimensions, learn about properties of lines and planes and apply your knowledge to solve a wide variety of vector problems in two and three dimensions. These applications involve velocity and force, the concept of deductive proof, for example, with a strong focus on the strategies involved in solving problems. The second part of this course builds on your knowledge of a variety of functions to explore rates of change, derivatives and the application of derivatives. You will learn how to apply derivatives to solve problems involving motion, optimization problems (involving, for example, maximum volume, minimum cost, least time) and sketching curves. Program content: Unit 1 Introduction to Vectors; Unit 2 Vector Applications; Unit 3 Equations of Lines and Planes; Unit 4 Points Lines and Planes.

This course is intended for students who choose to pursue careers in fields such as science, mathematics, 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.

[^6]This course can be divided into three overarching sections. In the first section, you will be introduced to counting techniques and fundamental probability calculations. You will investigate and answer such questions as: "in how many ways can you arrange ten flowers on a window ledge?" and "what is the probability that when you arrange ten flowers on a window ledge the red and white geraniums are next to each other?" In the second section of this course, you will develop formulae to determine various probability distributions. A sample problem would be: "when forming a five-person committee from a group of eight males and nine females, what is the probability of each scenario with respect to the number of females chosen for the committee?" In the third section of the course, you will investigate relationships between data using one- and two-variable statistical analysis techniques. A sample investigation would be: "is there a relationship between the amount of sleep a person gets and their time on a reaction test?" While hands-on activities and investigations using technology are embedded within each unit of study, a major component of this course involves a culminating project in which you will choose a topic for investigation and present your findings on probability and statistical analysis.

Prerequisite: MCR3U - Functions, Grade 11, University Preparation or MCF3M - Functions And Applications, Grade 11, University/College Preparation

## MDM4UP - Mathematics of Data Management, Grade 12, University Preparation (Advanced Placement Statistics)

The purpose of the AP course in statistics is to introduce you to the major concepts and tools for collecting, analyzing and drawing conclusions from data. The mathematics is fairly simple and the graphing calculator does much of the work. Most questions take the form of a word problem that must be interpreted carefully so that the appropriate statistical technique is applied and appropriate conclusions may be drawn. There are four general topics: data description (straightforward); experimental design (requiring terminology and common sense); probability (requiring mathematical logic); and statistical inference (requiring probability, procedures and terminology.) It is important to study statistics as collecting data on subsets of the population (samples) can give valid information about the whole population: knowing what has happened in the past can help answer questions about the present and future; and knowledge helps plan future tests, determines resource allocation and improves quality. Statistics is used in a wide range of areas including business, government, health sciences, environment and physical sciences.

Prerequisite: MCR3U - Functions, Grade 11, University Preparation
MHF4U - Advanced Functions, Grade 12, University Preparation
This course continues to explore the characteristics and properties of functions. You will investigate and apply these properties to a variety of different functions: polynomial, rational, exponential, logarithmic and trigonometric. You will broaden your understanding of the mathematics associated with rates of change and apply this knowledge to start to discuss the concept of a limit and derivative. You will also refine your use of mathematical processes necessary for success in problem solving. You will apply these skills to various real-life situations such as the pH scale used in chemistry and rates of change of volumes of containers, to name a few. For those students interested in enrolling in MCV4U Calculus and Vectors, this MHF4U course must be taken before or concurrently with MCV4U Calculus.

[^7]
## RELIGIOUS EDUCATION

Religious education at Havergal is a compulsory, non-credit program for students in Grade 7 and 8. The Religious Education course seeks to examine the structures and paradigms of religions - using Christianity as our template - as an aspect of global capability. Students will understand the religion of people around the world and how it motivates them and forms them in community. The program is objective in its approach to religion, and students are encouraged to share their own background and experience of religion with each other in class.

## GRADE 7

## Grade 7 Religious Education

The focus of the Grade 7 program is on the way in which Judeo-Christian religious values are manifested: in the Anglican tradition, in society at large, and here at Havergal. We examine the celebration of holidays, rituals, vocabulary, and beliefs while attempting to answer the overarching question: "How do Jews, Christians, and Muslims keep their values front and centre?"

This course is designed to bolster a student's knowledge of religious traditions and develop the communication and thinking skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyze and interpret texts, with the Bible serving as a primary example. The course is intended to better ensure that students can become globally capable.

## GRADE 8

## Grade 8 Religious Education

The focus of the Grade 8 program is on the way in which Judeo-Christian religious values and the Anglican tradition, in particular, have been imprinted upon Havergal College. By pursuing this kind of analysis, students will also enhance their understanding of Havergal's four values: integrity, inquiry, compassion, and courage. This exploration will be shaped by an attempt to answer an overarching question: "How have religious values left an imprint upon Havergal?"

This course is designed to bolster a student's knowledge of religious traditions as well as develop the communication and thinking skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyze and interpret texts, with the Bible serving as a primary example. The course is intended to better ensure that students can become globally capable.

## SCIENCE

## GRADE 7

## Grade 7 Science and Technology

"All things are made of atoms-little particles that move around in perpetual motion attracting each other when they are a little distance apart, but repelling upon being squeezed into one another. In that one sentence... there is an enormous amount of information about the world, if just a little imagination and thinking are applied." -R. Feynman, Nobel Prize-winning Physicist

In Science 7 we begin to learn how to be scientists. Our goal by the end of the year is to be able to design and carry out experiments to produce meaningful results for a wide variety of scientific questions. You will also learn how to analyse results and present them in a way that is easily understandable, honest and convincing. Secondly, you will begin to look at the world as being made up entirely of atoms. You will use this model to explore many different things. What are gases, liquids and solids, and why one can turn into another? What is "heat" and how does it transfer itself? What is dissolving, and why do some things do this while others do not? You will also be investigating structures, and why they don't fall down (or sometimes do), as well as trying to understand our own place as humans in the natural world of living things.

## GRADE 8

## Grade 8 Science and Technology

Science 8 continues where we left off in Science 7. You will continue to develop yourself as scientists.
The aim is to finish the year with you having a strong ability to design and perform laboratory experiments of increasing complexity, and to present your results in a meaningful, honest and convincing fashion. You will also aim to deepen your ability to work with the atomic model you began to look at in Science 7. Along the way, these laboratory methods will be used to help you investigate all manner of fascinating and important topics, such as:

- Simple Machines or "Why I can lift five ton rocks by simply standing on a lever"
- Cells or "What are living things made from, and how is it possible that plants make themselves out of thin air?!"
- Fluids or "Why do thousand-ton boats float (usually) while tiny rocks don't (usually)?"

Finally, you will be studying water, one of the world's most amazing substances, with the goal of understanding both what is amazing about water, and why it is this way.

In Grade 9 Science, you will explore our universe, starting from the very beginning-the Big Bang. You will learn where building blocks of our known universe come from, and how they are used in our daily lives. You will connect your understanding of the universe to technology, electricity and the environment. You will also explore current issues in science, such as asteroid mining, availability of rare earth elements and sustainability. You will further develop your inquiry and presentation skills.

## GRADE 10

## SNC2D - Science, Grade 10, Academic

1 CREDIT
In Grade 10, students use science as a way of looking at the world and as a lens through which we make informed decisions. This course will enable you to use patterns and evidence to understand and explain concepts in biology, chemistry, earth and space science and physics. There is something to interest every student. You will learn about living organisms, from cells to tissues and organ systems, and you will discover the ways in which recent discoveries are used to solve interesting and complex medical problems, some of which will also touch the heart and explore personal relationships. Chemical reactions are performed and patterns discovered; you will then apply those patterns to your understanding of human impacts on the environment. Further exploration will allow you to connect with and find out why certain everyday optical phenomena actually occur. Hands-on activities include the use of microscopes, safe handling of biological material, chemicals and apparatus and manipulation of optical devices.

Prerequisite: SNC1D - Science, Grade 9, Academic or SNC1P - Science, Grade 9, Applied

## GRADE 11

## SBI3U - Biology, Grade 11, University Preparation

1 CREDIT
The Grade 11 Biology course touches on many different aspects of the biological sciences from the sub-cellular level, including learning about DNA and genes, to larger topics such as the various ways in which living organisms are classified. You will study the diversity of living things, genetics, evolution and plant and animal structures. The course will require you to use an advanced-level textbook, which is supported with comprehensive course notes. Furthermore, there are also many exciting activities built into learning such as multimedia options, including videos, online tutorials and computer simulations, as well hands on labs and dissections. Assessments are extremely varied in the form of laboratory investigations and simulations, oral and visual presentations, individual and group projects and unit tests. It is an interesting course focused on the big ideas of biology-evolution as a unifying principle, structure and function and balance in and among living organisms.

Prerequisite: SNC2D - Science, Grade 10, Academic

Have you ever had an existential moment where you look at a glass of water and wonder: Why do ice cubes float? Why does water evaporate? Why does water exist everywhere? Why don't I melt like the wicked witch when I drink water? Chemists too ponder these questions and use models to understand the behaviour of matter. In this course you will be amazed by the patterns in the behaviour of solids, liquids, gases and solutions both theoretically and in the physical realm. You will develop explanations for these observations of the world, perfect precise lab techniques to quantify and qualify matter, and discover new functions on the TI-83. Program content: Unit 1 Matter, Chemical Trends and Chemical Bonding; Unit 2 Chemical Reactions; Unit 3 Quantities in Chemical Reactions; Unit 4 Solutions and Solubility; Unit 5 Gases and Atmospheric Chemistry; Unit 6 Scientific Investigation Skills and Career Exploration (Integrated).

Prerequisite: SNC2D - Science, Grade 10, Academic

## SPH3U - Physics, Grade 11, University Preparation

All around us, the physical world is in constant motion: pole vaulters sail through the air, the Earth whips through space at 30 kilometres a second going around the sun, and even tiny electrons jump through the air when you touch a metal doorknob in winter. In this course, we begin the task of finding and understanding patterns in these motions, aiming to make sense of what nature shows us and finding, along the way, that mathematics is just another way of expressing these relationships. The application of this knowledge produces the technology all around us, which affects our lives, society and the environment. The course will take us through the following topics:

- Kinematics or "How do things move?"
- Forces or "Why do things bother to move to begin with?!"
- Energy or "We all think we have it, but we keep wanting more-a double-edged problem for society?"
- Electricity and Magnetism or "Why do electrons in wires make my hairdryer work and what could this possibly have to do with a magnet anyway?!"
- Waves and Sound or "Why does something bumping way over there make a noise in my ears way over here?"

Prerequisite: SNC2D - Science, Grade 10, Academic

## APBIO - Advanced Placement Biology Tutorial

This course runs once a week for 30 weeks to prepare students to write the AP Biology exam by exploring the AP Biology Investigations. Students must also be enrolled in SBI4U in order to be eligible for this course. Students must also have completed SCH3U and SCH4U is strongly recommended. This is a non-credit course.

## SBI4U - Biology, Grade 12, University Preparation

This course provides students with the opportunity for in-depth study of the concepts and processes associated with biological systems. You will consider how life works by studying the theory and conducting investigations into populations (population genetics and population ecology), homeostatic mechanisms (hormones and the nervous system), biochemistry (cellular respiration and photosynthesis) and molecular genetics (DNA replication and protein synthesis). Emphasis will be placed on the achievement of the detailed knowledge, refined skills and deep understandings needed for further study in various branches of the life sciences and related fields.

Prerequisites: SBI3U - Biology, Grade 11, University Preparation
SCH4U - Chemistry, Grade 12, University Preparation
This course delves into the theoretical explanations of matter that would enable a student to manipulate the forces of nature, but only for good purposes: like creating self-warming hot-dogs or non-irritating contact lenses. Labs are designed to complement course content while further refining technical laboratory skills. Opportunities to quantify matter will significantly expand your understanding of multiplication and division. You will be given an opportunity to explore academic research and develop the communication skills with the scientific community. Program content: Unit 1 Energy Changes and Rates of Reaction; Unit 2 Structure and Properties of Matter; Unit 3 Organic Chemistry; Unit 4 Chemical Systems and Equilibrium; Unit 5 Electrochemistry; Unit 6 Scientific Investigation Skills and Career Exploration (Integrated).

Prerequisite: SCH3U - Chemistry, Grade 11, University Preparation
SES4Ue - Earth and Space Science, Grade 12, University Preparation, eLearning 1 CREDIT
This course develops students' understanding of the 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 examine the Earth's place in the solar system and, after a general introduction to Earth science, will explore in more detail the materials of the Earth, its processes and its history. Throughout the course, students will learn how these forces, processes and materials affect their daily lives. The course draws on astronomy, biology, chemistry, mathematics and physics in its consideration of geological processes that can be observed directly or inferred from other evidence.

Prerequisite: Science, Grade 10, Academic, SNC2D

In Grade 12 Physics, it's time to deepen your understanding of the world around you, but also push the envelope to the world beyond everyday life-quantum mechanics and relativity. Your imagination and math muscles will get a workout. The course will take you through the following topics:

- Dynamics or "How do I launch things to get them into the waste basket?" or "Is it possible to orbit around a black hole without getting sucked in?"
- Energy and Momentum or "Why it's a good idea to follow through when you catch a hard fast ball?" or "What you need to know before bungee jumping?"
- Fields (gravity, electrical, magnetic) or "How does the Earth actually make apples fall or the Moon stick around without touching them?"
- Wave Nature of Light or "Is light wavy and why can't I see the waves?"
- Special Relativity or "Can you go faster than the speed of light (otherwise known as "warp speed" to Trekkies)?"

Prerequisite: SPH3U - Physics, Grade 11, University Preparation

## SOCIAL SCIENCES

## GRADE 7

## Grade 7 Social Studies (History and Geography)

Have you ever wondered why there are so many gigantic rocks and trees at your cottage, but not as many around Toronto? Or why we speak French and English in Canada? In this course, you will learn about the natural environment around the world: how the land is formed and worn down; what climate is and the types of vegetation plants that grow in different regions; what natural resources are; and the human interaction with each of these. In the second half of the year, you will learn about the French and British explorers in early Canada, their interactions with the First Nations and Americans, and how they have influenced our culture today through their rebellions, revolutions and agreements. From "travelling" the world creating postcards to write home to your family and becoming a historical figure for a Heritage Day party to field trips around Toronto to see our local landforms and re-enact the War of 1812, you will find activities that help you understand where we live and why we are here through a multitude of stories and perspectives.

## GRADE 8

## Grade 8 Social Studies (History and Geography)

Having left off history at the 1837 Rebellions in Upper and Lower Canada, you will uncover how Canada became a united nation of very diverse people through a variety of storytellers and lenses. In history, you will explore Confederation through drama, debate and documents-you will become a historian as you find evidence to prove industrialization was positive, or negative, for Canada. The second half of the year, you will examine why people live where they do, introducing you to economics, current immigration trends and quality of life characteristics. You will get to create your own village, build your own business and trade with other countries, and become a Canadian immigrant-it's by far the best final assessment of any course you will ever take-just ask the older girls!

## CANADIAN AND WORLD STUDIES AND SOCIAL SCIENCES AND HUMANITIES

## GRADE 9

CGC1D - Issues in Canadian Geography, Grade 9, Academic

Canada believes it owns the North Pole, but so do the Russians. Can you resolve this conflict? Canada makes a lot of money selling oil to the United States. The United States says Canada's oil is "dirty" and they don't really want to buy it. Can you determine if Canada's oil is too dirty? Should we be ashamed to sell it? The Inuit language and culture is under threat of disappearing. Should you care? What exactly are we losing? Toronto is Canada's largest city, but did you ever stop to think why? Why isn't Halifax or Québec City the largest? Both of these cities started long before Toronto. Will Toronto still be the largest city in Canada when your daughters are attending Havergal? Things change, you know?

To be sure, there is a lot going on in Canada's physical and human geography and this course gets to the bottom of it. There is only one thing that is certain: the only constant is change. Our landforms are changing, our cities are changing, the climate is changing, our economy is changing. And our vast country is incredibly diverse, changing from end to end. It rains in the west and it is dry in the north. In some parts there are mountains, while elsewhere it is flat. There are rocks and trees everywhere... almost. And in all this we make our homes, our neighbourhoods, our communities. The environment supports us and shapes us in more ways than we can count. And what we do in our daily activities in turn shapes the environments around us. This course explores this dynamic relationship, giving you the knowledge to make the important decisions that shape our land and our lifestyles.

## GRADE 10

CHC2D - Canadian History Since World War I, Grade 10, Academic
1 CREDIT
If you think Canadian history is boring, you won't by the end of this course. Actually, within the first few weeks of this course you will be a budding historian. We begin with the bloody and violent slaughter of World War I (1914-1918), when boys as young as 14 left the Canadian "Dominion" for the battlefields of Europe, many to never return home. In this war, so the story goes, a nation was born-and you will spend the year exploring the development of this Canadian nation. From the hopelessness of the Great Depression and the psychological warfare of the Cold War to the terrorist turmoil in 1970s Québec, you will ask yourself "what creates a nation?" and has Canada, in fact, built itself into a nation of which you can and should be proud.

CHV2O - Civics and Citizenship, Grade 10, Open Semestered
0.5 CREDIT

Have you ever watched the parliamentary channel on television? Did you hear blurbs on the radio last year about the provincial election? And most importantly, did you know what was going on? This course will give you the basic information you need for confident political talk around the dinner table. You will finally know what the Prime Minister does and what a political party is. With this knowledge under your belt, we will explore the meaning of "democracy" and examine what it looks like around the world. Finally, you will participate in the Youth and Philanthropy Initiative. This is a chance for you to learn about a social issue and a charitable cause of personal interest, to advocate for and get involved in your chosen charity, and perhaps even win $\$ 5,000$ for that charity... stay tuned!

This course explores the geography of Asia, including its land and people and its connections to other regions of the world. This course primarily takes a project-based approach, exploring topics around Asia's mountains, lowlands and archipelagos through a series of case studies. The course emphasizes the links between human and physical geography. Students will explore geographic issues related to the region's environmental, economic and social/cultural characteristics, including physical geography, resource sustainability and import/export relationships. With a focus on the Indian sub-continent, East and South East Asia, students will investigate current regional patterns and trends and begin to predict future directions for the region and its partnerships.

What countries are included in "the Indian sub-continent, East and South-East Asia"? The Indian sub-continent - Pakistan, India, Nepal, Bhutan, Bangladesh \& Sri Lanka. East Asia - China, Mongolia, North \& South Korea, Taiwan \& Japan. South-East Asia - Myanmar, Thailand, Laos, Cambodia, Vietnam, Malaysia, Singapore, Brunei, The Philippines, Indonesia \& East Timor

This course can be taken in Grades 10 or 11. This course acts as a prerequisite for the Grade 12 Social Science courses. By taking this course in Grade 10, you are able to take Grade 12 Social Science courses in Grade 11
Prerequisite: CGC1D - Issues in Canadian Geography, Grade 9, Academic

## CGF3M - Forces of Nature: Physical Processes and Disasters, Grade 11,

 University/College Preparation1 CREDIT
What caused Typhoon Haiyan in the Philippines? Why was this storm so destructive? What was the difference between the earthquake that struck Haiti on January 12, 2010 and the earthquake that struck Japan on March 11, 2011? What could be done in the future to limit the impact of disasters like these? Is it true that natural disasters are more destructive today than they were in the past?

People around the world live in areas that experience volcanic eruptions, earthquakes and tsunamis, extreme weather, or flooding rivers. Forces of nature can significantly affect and displace human populations. The disasters that often accompany natural hazards, damage property and put lives at risk. Why do people continue to choose to live in areas prone to a natural disaster, and how can they better protect themselves and their property? In this course, students attempt to answer these questions from a geographic perspective by examining the physical processes and contributing human factors that influence natural hazards, the dangers associated with them, and the methods used to forecast damaging events. Students will also make predictions related to natural disasters and create plans to prepare for and/or respond to them.

This course can be taken by students in Grades 10 or 11. This course acts as a prerequisite for the Grade 12 Social Sciences courses. By taking this course in Grade 10, you are able to take Grade 12 Social Sciences courses in Grade 11.
Prerequisite: CGC1D - Issues in Canadian Geography, Grade 9, Academic

As Canadians, we live so close to the United States but how much do we really know about this country and its people? Are Americans a lot different than Canadians and if so, why? This course examines American life from the pilgrims (1600s) to the present day. You will learn about American history through the mouths and eyes of the people who lived it (think music, personal narratives and archival footage). And you will look at the American nation as a conscious creation rather than a "happy accident." Indeed, this is a nation built on conviction, whether it be the religious dogma of early settlers, the political ideals of Revolutionary and Civil War leaders (1700s/1800s) or the human rights beliefs of Martin Luther King Jr. and civil rights supporters (1960s). You will explore this building of the American nation and ask yourself: What do Americans believe about themselves and their nation? Why are some national stories particularly strong, and which, if any, stories need replacement or reinvention?

Prerequisite: CHC2D - Canadian History Since World War I, Grade 10, Academic or CHC2P - Canadian History Since World War I, Grade 10, Applied or ENG2D - English, Grade 10, Academic

CHA3Ue - American History, Grade 11, University Preparation, eLearning 1 CREDIT
This course traces the social, economic and political development of the United States from colonial times to the present. Students will examine issues of diversity, identity and culture that have influenced the country's social and political formation and will consider the implications of its expansion into a global superpower. Students will use critical-thinking and communication skills to determine causal relationship, evaluate multiple perspectives and present their own points of view.

Prerequisite: CHC2D - Canadian History Since World War I, Grade 10, Academic or CHC2P - Canadian History Since World War I, Grade 10, Applied or ENG2D - English, Grade 10, Academic

## "Interpreting the puzzles of the ancient world."

Have you ever wondered how our world came to be the way it is? Do you fancy yourself a sleuth in pursuit of insight into some of the most puzzling questions in history? Have you ever wondered what archaeology is and where you might meet a real-life Indiana Jones? If so, World History is the course for you. You will gain a thorough training in the methodology of history before launching on an expedition to learn more about some of the most influential and fascinating civilizations in the history of the world. These civilizations are drawn from around the world, including Egypt, Rome, Muslim Spain and Mongolian China. Along the way, you will learn how to interpret and appreciate art, culture, philosophy, politics and myths like an historian. The course ends with the opportunity for you to explore and investigate a civilization that fascinates you and that has not been covered earlier in the year. The choices are almost limitless.

The class is largely conversational in the pursuit of insight into our historical puzzles. The point is that you will quickly learn to think, write and speak like an historian. You will leave the course with thorough preparation not only for the course's sequel (The West and the World, CHY4U), but also further studies in the social sciences and humanities.

## Program Content:

- Course Question: What happens when cultures meet?
- Unit 1 -Historical Techniques and Methods
- Unit 2 - The Mystery of Monotheism in Ancient Egypt
- Unit 3 - The Mighty Have Fallen - The Assassination of Julius Caesar
- Unit 4 - The "Mongolian Horde" and the Invasion of China
- Unit 5 - Al-Andalus: Spain under Muslim Rule; Culminating Unit - The Tapestry of Time: Investigating a Civilization

Prerequisite: CHC2D - Canadian History Since World War I, Grade 10, Academic or CHC2P - Canadian History Since World War I, Grade 10, Applied or ENG2D - English, Grade 10, Academic

## HRT3M - World Religions and Belief Traditions: Perspectives, Issues, and Challenges, Grade 11, University/College Preparation

This course provides students with opportunities to explore various world religions and belief traditions. Students will develop knowledge of the terms and concepts relevant to this area of study, will examine the ways in which religions and belief traditions meet various human needs and will learn about the relationship between belief and action. They will examine sacred writings and teachings, consider how concepts of time and place influence different religions and belief traditions and develop research and inquiry skills related to the study of human expressions of belief.

Prerequisite: none
This course can be taken by students in Grades 10 or 11. This course acts as a prerequisite for the Grade 12 Social Sciences courses. By taking this course in Grade 10, you are able to take Grade 12 Social Sciences courses in Grade 11.

What does it mean to be human? What makes people act like they do? In a nutshell, those are the kinds of questions psychologists, anthropologists and sociologists ask-and attempt to answer. We kick off in the fall with the psychology unit, in which we explore the well-known theories and ideas of Freud, Jung, Maslow and others. You will analyse the usefulness and limitations of their ideas, compare them to each other and to your own experiences and apply them to the lives of famous writers, artists and performers. You will also look at basic brain physiology and learning theories, including theories of motivation and behaviour. You will have an opportunity to play with these theories and "try them on" yourself as a learner. In unit two, you will assume the (sometimes challenging) role of an anthropologist and examine the stages of life (birth, childhood, adolescence, love and marriage, old age, death) from the perspectives of a variety of different cultures. We end the course with a unit on sociology, or the study of social groups, roles, values and norms. The final project allows you to be a real social scientist-you will create a research question, conduct fieldwork and report on your research findings about a social issue of your choice. If you like writing, thinking and talking about human identity and behaviour from a variety of perspectives-and if you're comfortable working with areas of gray, with no easy answers or bottom lines-then this is the course for you!

Prerequisite: ENG2D - English, Grade 10, Academic or CHC2D - Canadian History Since World War I, Grade 10, Academic

## HSP3Ue - Introduction to Anthropology, Psychology and Sociology, University Preparation, eLearning

This online course introduces the theories, questions and issues that are the major concerns of anthropology, psychology and sociology. Students will develop an understanding of the way social scientists approach the topics they study and research methods they employ. Students will be given opportunities to explore theories from a variety of perspectives and to become familiar with current thinking on a range of issues that have captured the interest of classical and contemporary social scientists in the three disciplines.

HZB3M - Philosophy: The Big Questions, Grade 11, University/College Preparation 1 CREDIT
This course offers a lively, eclectic introduction to philosophy by encouraging an exploration of some of its biggest and most intriguing questions, such as: What is a meaningful life? What separates right from wrong? What makes something beautiful? How do you know what you know? What are the underlying properties of being? In this course, you will develop critical thinking and reasoning skills as you explore how philosophers have responded to the big questions before applying their perspectives to advertisements, television shows, video games, visual art and the world at large. Ultimately this course trains a student's ability to examine the arguments that surround big questions, as well as the strategies of argumentation required to justify corresponding answers.

Prerequisite: None
This course can be taken by students in Grades 10 or 11. This course acts as a prerequisite for the Grade 12 Social Sciences courses. By taking this course in Grade 10, you are able to take Grade 12 Social Sciences courses in Grade 11.

What are the most pressing global issues of our time and why are they significant? This course examines current issues that we hear about on a regular basis (but know little about) and some that you may not be aware of. For example, how important is it for people and places to have access to technology and be connected digitally? Or what role has climate change played in the recent civil war in Syria? What is poverty and what does it look like in the 21st century? Is the world overpopulated (and what does it mean for the world to be overpopulated)? How has a nurse in Malawi helped people infected with HIV lead healthy lives? Are our lives sustainable or will we face the same fate as Easter Islanders?

This course examines global issues from a geographical perspective. This involves examining physical characteristics such as the role that location, land, climate and vegetation play in issues as well as the role that human factors including the number of people, culture, history, economics and politics play. In this course you will read, write, talk, listen, meet interesting guests, examine graphs, maps and visuals, research ideas of interest to you, develop ideas and, most importantly, raise many questions about the world we live in.

CHY4U - World History Since The Fifteenth Century, Grade 12, University Preparation
CHY4U examines the Western world as it progresses, changes and evolves beginning in the mid-15th century to the present day. You will critically examine revolutions, world wars, treaties, economic and ideological theories, important men and cultural movements not just of western history, but also their connections to other changing parts and emerging powers of the world in a Harkness-style, university preparatory class. It's not just a straightforward history of the "this battle happened in this year" variety because the western world is so complicated and nuanced, so you will have to draw on knowledge from all over the place. You will really understand, analyse and dissect history rather than just absorb it. Examples of assignments: Harkness discussion on texts by philosophers such as JeanJacques Rousseau, Herbert Spencer and Adam Smith; writing a creative response about the French Revolution in character; writing test-format answers to overarching questions using prior knowledge of the unit with the help of primary documents.

Prerequisite: Any University or University/College Preparation course in Canadian and World Studies, English or Social Sciences and Humanities

## CIA4U - Analysing Current Economic Issues, Grade 12, University Preparation

Do you know the exhilaration of shopping for a new dress, finding the perfect item and then finding out it is on sale? Did you ever eat one-too-many Godiva chocolates? Do you regret buying the fascinator that you thought you just couldn't live without? Then you have already tasted the exhilaration of learning economic principles and the cost of crossing the laws of diminishing marginal utility and been swept along in demand shifts. Concept by concept, this course shines light on our behaviour, individual and collective. Nicknamed the science of common sense, economic understanding is a valuable tool in every walk of life. You will also look at the role for government in the economy and the way in which government uses economic principles to influence individual spending choices.

Prerequisite: Any University or University/College Preparation course in Canadian and World Studies, English or Social Sciences and Humanities

Have you ever felt a bit lost while watching an episode of Law \& Order? This course will give you the knowledge you need to navigate the show, from police investigation to trial and conviction. As well, you will ponder important questions like: Why do we have laws? What is justice? And how does law actually impact my life? World conflicts like the former genocide in Rwanda and the current civil war in Syria will be explored from a lawyer's perspective, namely can international laws end these conflicts and if not, why not? Finally, the course ends with a showcase of your newfound legal skills: a moot before an appeal court judge on a current and controversial legal issue (e.g. the right of gay men to donate blood, rights of Canadians facing the death penalty abroad and the right to computer privacy).

Prerequisite: Any University or University/College Preparation course in Canadian and World Studies, English or Social Sciences and Humanities

## CLN4Ue - Canadian and International Law, Grade 12, University Preparation, eLearning 1 CREDIT

This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop their understanding of the principles of Canadian and international law when exploring rights and freedoms within the context of topics such as religion, security, cyberspace, immigration, crimes against humanity and environmental protection. Students will apply the concepts of legal thinking and the legal inquiry process when investigating these issues in both Canadian and international contexts, and they will develop legal reasoning skills and an understanding of conflict resolution in the area of international law.

## CPW4U - Canadian and World Politics, Grade 12, University Preparation

1 CREDIT
Politics is one of the three things you are never supposed to bring up at a dinner party because not many people know as much about it as they think they do. This course is your opportunity to be one of the few. World Politics is about the ideas behind what creates a functioning political society and applying them to countries around the world. You will start by looking at democracy as a system of government. What does it do well? What does it not? You will then study authoritarian regimes like North Korea and Iran and communism in USSR and China. Finally, you will look at what is going on in the rest of the world and how Canada is tied in and how international relations and foreign policies work.

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## HHG4Me - Issues in Human Growth and Development, Grade 12, University/College Preparation

This course offers a multidisciplinary approach to the study of human development throughout a lifespan. Students will learn about a range of theoretical perspectives on human development. They will examine threats to healthy development as well as protective factors that promote resilience. Students will learn about physical, cognitive and social-emotional development from the prenatal period through old age and will develop their research and inquiry skills by investigating issues related to human development.
(Plus AP Psychology Preparation)
Prerequisite: Any University or University/College or College Preparation course in Social Sciences and Humanities, English or Canadian and World Studies
This full AP course will prepare students to write the AP Psychology exam in May.
HSB4Ue - Challenge and Change in Society, Grade 12, University/College Preparation,
eLearning
1 CREDIT

This online 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

## HZT4U - Philosophy: Questions and Theories, Grade 12, University Preparation

1 CREDIT
Charles Schultz, the creator of the enduring comic strip Peanuts, once had his beloved worrier Charlie Brown tell his reader to, "never lie in bed at night asking yourself questions you can't answer." That the comedic impossibility of this request should strike the reader with surprise is assured-Peanuts is one of the most philosophic works of art of the $20^{\text {th }}$ century-but to the philosopher it would appear unacceptable: life is about asking unanswerable questions.

What is the purpose of life? Who am I? Out of what material and from where did everything come from? How can I be good? How can I be sure about my most fundamental beliefs? How can I even be sure that I exist at all, or that this isn't just a dream? These are just some of the questions that might keep us up at night. For this reason, we will draw them out into the daylight and interrogate them on their own grounds in our course.

To reflect on and to find answers to these questions, philosophy has established a long tradition of disciplined thinking. Philosophical inquiry assumes that if we are really going to know or, at least, begin to understand something, then we must be prepared to think as clearly and thoroughly as possible about it.

In this tradition, this course will serve as a broad survey of Western philosophy: from the time of the Pre-Socratics, through to the enlightened Europe, up until our present day. Through the task of close reading, reflection and debate we will test the limits of our knowledge and break new ground of philosophical discovery together in HZT4U.

[^9]HZT4Ue - Philosophy: Questions and Theories, Grade 12, University Preparation, eLearning 1 CREDIT
This course enables students to acquire an understanding of the nature of philosophy and philosophical reasoning skills and to develop and apply their knowledge and skills while exploring specialized branches of philosophy (the course will cover at least three of the following branches: metaphysics, ethics, epistemology, philosophy of science, social and political philosophy, aesthetics). Students will develop critical thinking and philosophical reasoning skills as they formulate and evaluate arguments related to a variety of philosophical questions and theories. They will also develop research and inquiry skills related to the study and practice of philosophy.

Prerequisite: Any University or University/College Preparation course in Social Sciences and Humanities, English or Canadian and World Studies

## TECHNOLOGICAL EDUCATION

## GRADE 9 OR 10

TGJ2O - Communications Technology, Grade 10, Open
1 CREDIT
This course is an introduction to Communication Technology. How can we use technology to help us effectively communicate our ideas? This course will give you an introduction to a number techniques and concepts that are used to help people communicate ideas in innovative ways, including graphic design, documentary filmmaking and animation. You will begin to explore graphic design through the development of poster and product design projects, which focus on the principles of design and composition. You are then introduced to the structure and format of newscasts; their focus is the language of television and documentary filmmaking as a way to communicate information. At the end of the year, you will develop a short animation and explore how the medium affects the audience's perception of a story. This project includes the development of all aspects of the production of an animated short, including story idea generation, storyboarding, filming, video editing, creation of original soundtracks and the art of titles in film and promotion.

## GRADE 10 OR 11

ICS3U - Introduction to Computer Science, Grade 11, University Preparation
1 CREDIT
A computer, broken down into its most basic form, is nothing more than a bunch of tiny electronic switches that can be set to either a 1 or 0 (on or off, also known as binary). By getting the computer to set these tiny switches on or off in a certain pattern, you can get the computer to actually do whatever you'd like it to do. The computer does not know how to do this by itself though. A person has to instruct it to do this through programming.

The focus of this course is to introduce computer programming. You will design software independently and as part of a team, using industry-standard programming tools, and by applying the software development life-cycle model. You will develop creative solutions for various types of problems as your understanding of the computing environment grows. While programming languages change over time, this course offers a good foundation of programming concepts that will transfer easily to the syntax of any new programming language. In addition to programming, you will also explore environmental and ergonomic issues, emerging research in computer science and global career trends in computerrelated fields.

## TGJ3M - Communications Technology, Grade 11, University/College Preparation

## The Art and Science of Filmmaking

"Good design is in the details...the best thing that young filmmakers should do is to get hold of a camera and some film and make a movie of any kind at all." -Stanley Kubrick

The primary focus of this course is on narrative film production. You will explore the language of moving images, including sound production, through analysis of classic films drawn from key historical and contemporary sources. As you develop your understanding of film language, you will apply this language to produce your own films. In the year, students produce approximately five films of increasing complexity, culminating in a final extended project. In addition, you will learn project management, the stages of film and television production, principles of design and composition, scriptwriting, film acting, managing equipment, creating special effects and compositing, poster design, sound engineering and more. You will sharpen your analytical and aesthetic skills as you evaluate the effectiveness of the media you watch, including your own and your peers' projects. Finally, we will investigate the multitude of creative and technical career opportunities available in the film and television industries.

Program content:

- Unit 1 - Introduction to Composition and Digital Imaging
- Unit 2 - Communicating in Moving Pictures (developing the grammar of film)
- Unit 3 - Sound Engineering, Animation and Compositing
- Unit 4 - Full-Scale Production
- Unit 5 - Issues and Careers in Film and Television Production

Note: the units listed above will be woven together throughout the year. For example, you will explore issues and careers throughout the course and will weave audio and visual components into several projects.

## TGJ3Me - Communications Technology, Grade 11, University/College Preparation,

## eLearning

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 explore college and university programs and career opportunities in the various communications technology fields.

## GRADE 12

ICS4U - Computer Science, Grade 12, University Preparation
1 CREDIT
In the Grade 11 Computer Science course, you learned how to program using a structured language and learn how to solve problems using a computer program as a problem-solving aid. The focus of this course is to help you to further develop your knowledge and skills in programming using an objectoriented language. Object-oriented programming is different from structured programming. Most conventional software is written from scratch, one line at a time, with very little reuse of procedures from other programs. In object-oriented programming, classes that are created are building blocks that model real-world entities rather than performing specific tasks. This makes them easy to reuse. As more and more classes are created, programmers may spend as little as $20 \%$ of their time creating new ones, and the rest of the time assembling proven components into new systems. You will learn how to access and use these classes to develop your own software. This Computer Science course will prepare you for an increasingly technological world. A foundation in this discipline, you will be introduced to the excitement and opportunities afforded by this field, and the course will begin to prepare you for careers in information technology.

Program content:

- Unit 1 - Designing and Implementing Data Structures
- Unit 2 - Designing Modular Programs
- Unit 3 - Topics in Computer Science
- Unit 4 - Applying Project-Management Software-Development Skills

[^10]
## Animation \& Graphic Design

"Animation can explain whatever the mind of man can conceive. This facility makes it the most versatile and explicit means of communication yet devised for quick mass appreciation." -Walt Disney

There are two main focuses in this course. You will explore the art and science of animation and extend your knowledge of graphic design. You will explore the language and structure of animation shorts through the analysis of short films that represent a variety of media and styles. As you develop an understanding of the short story as it is developed in animation, you will apply this approach to write and produce a stop-motion animation. This project includes the development of all aspects of the production of an animated short, including story idea generation, scriptwriting, set and character building, storyboarding, filming, creating special effects, video editing, creation of original soundtracks, the art of titles in film and promotion. You will explore graphic design through the development of a range of logo, poster and page layout design projects, both for yourself and for clients outside the classroom. The focus is on typography and the principles of design and composition in graphic design. In addition, you will learn project management through the development of large projects that require cooperation among all of the students in the class. We will also investigate careers in communication technology in the film and design industries.

Program content:

- Unit 1 - Animation
- Unit 2 - Special Effects \& Post Production
- Unit 3 - Audio Development
- Unit 4 - Print Production
- Unit 5 - The Global Context of Communication Technology.

Note: the units above are not entirely addressed separately and are integrated throughout the year. For example, audio development is considered as it applies to animation. The global context of communications technology addresses careers and issues in technology and this is interspersed through assignments at different times of the year.

Prerequisite: TGJ3M - Communications Technology, Grade 11, University/College Preparation

## Havergal COLLEGE

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[^0]:    Participation in ensemble and student performances with the Concert Band is expected. Advanced students may audition for the Symphonic Band (Tuesdays and Thursdays from 7:00 am to 8:00 am). This course is open to Grade 9 students.

[^1]:    Emphasis in this course will be placed on personal vocal development and choral ensemble skills such as reading, intonation and musicianship. Repertoire for the course will be varied and students are expected to participate in the Senior Choir, which rehearses Thursdays from 3:30 pm to 5:00 pm.

[^2]:    Students enrolled in this course do considerable performing in one or more groups and are expected to participate in the Senior Choir, which rehearses Thursdays from 3:30 pm to 5:00 pm.

[^3]:    Some students in Grade 7 may take Grade 8 French with the permission of the Languages Head. Students taking this option are often students coming from an immersion or extended French program.

[^4]:    Prerequisite: Minimum of 600 hours of elementary Core French instruction, or equivalent

[^5]:    Students selecting MCF3M may only proceed to MDM4U. Students should check the prerequisites of the Mathematics $4 U$ level courses when selecting their Grade 11 level course.

[^6]:    Prerequisite: MCR3U - Functions, Grade 11, University Preparation; Corequisite MHF4UP - Advanced Functions, Grade 12, University Preparation (Advanced Placement)

[^7]:    Prerequisite: MCR3U - Functions, Grade 11, University Preparation

[^8]:    Prerequisite: Any University or University/College Preparation course in Canadian and World Studies, English or Social Sciences and Humanities

[^9]:    Prerequisite: Any University or University/College Preparation course in Social Sciences and Humanities, English or Canadian and World Studies

[^10]:    Prerequisite: Computer and Information Science, Grade 11, University Preparation, ICS3U

