



SOUTHRIDGE.
We are all one.

Senior School CURRICULUM GUIDE

2018 – 2019

VISION

A community where every spirit soars.

MISSION

Southridge develops well-rounded students with a deep sense of personal integrity who have the moral character, love of learning and self-confidence to realize their full potential in a post-secondary environment and in society at large.

Each student is encouraged and challenged to become someone who:

- Is a lifelong learner
- Has study, critical thinking and communication skills
- Is a creative and independent thinker
- Has a positive attitude
- Seeks their passion
- Believes in the values of truth, tolerance, compassion and respect
- Understands the sacrifice and rewards of community service
- Has an appreciation of, and desire for, lifelong physical activity and fitness
- Appreciates the arts and their contribution to a richer life
- Can work effectively as part of a team

IN SUMMARY: Someone who makes a difference in the world.

OUR GUIDING PRINCIPLES

As members of the Southridge community, each of us has both the privilege and responsibility to choose how we influence our community and the world.

Shaping our relationships are the values of truth, tolerance, respect and compassion.

We act, knowing our children are watching.

Our behaviour influences all; every member is a role model for everyone in the school community and society. We commit to the power of community. At the foundation is the trust born of knowing that our values are shared and lived.

The students, parents, teachers, staff, alumni and alumni parents and grandparents create a supportive, safe and loving environment through their positive, caring relationships.

By providing a light-hearted place of serious purpose, one where our students can take risks in finding their potential, they find joy.

With commitment to our shared vision and highest aspirations, we have the power to make a positive difference in the world. Contribution is at the heart of what we inherit and what we pass on.

"Every spirit soaring" is made possible by the contributions – the passionate and compassionate selflessness – of everyone, from a small kindness to investing one's life in the greater good.

Membership in the Southridge community has always called us to shift our emphasis to "we" from "me."



Senior School

CURRICULUM GUIDE

2018 – 2019

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SENIOR SCHOOL EDUCATIONAL PROGRAM MODEL



Senior School Educational Program

As a university preparatory day school, Southridge provides a stimulating diverse academic Grade 8 – 12 program with an enriched curriculum that is consistent with BC Ministry of Education guidelines.

This challenging program of studies is designed to prepare students for post secondary school courses of study, while allowing them to pursue their individual passions and abilities. A full range of academic electives is introduced in Grade 11. Students select individual programs according to their strengths and preferences and are guided in their decisions by the University Guidance Counsellors and the Vice Principal, Senior School Learning. The Southridge academic program covers all prerequisites for studies in the arts, sciences, engineering, business and foreign languages at universities in Canada, the United States, and Europe. We also offer Advanced Placement (College Board) courses and examinations in several disciplines through which students earn university level course credits that are recognized at schools around the world. We believe that a student’s attitude to his or her studies is also a vital component of academic success and we foster independence and an innovative, creative approach in our students. We believe that critical thinking and problem solving, communication, collaboration and personal and social responsibility are essential skills that will enable our students to fully realize their potential in the dynamic and constantly changing environment of the 21st century. To this end we foster a student-centred, discussion based model of education, which is further enriched by the judicious use of technology. In many of our classrooms students are seated in small groups or gathered around a large table, explaining a point, seeking clarification from the teacher or their peers, offering an opinion, challenging an assumption, asking a key question – we encourage students to become active participants in their own learning.

While we focus on building a sound knowledge base for our students, we are equally committed to nurturing the development of students who are engaged with each other and the world around them; students who are thoughtful, compassionate citizens. The development of sound character and personal integrity is central to our educational mandate, as it is in all areas of school life. Sound character and integrity guide the useful application of knowledge in contributing to community, which is one of Southridge’s guiding principles.

Students who come to Southridge are quick to embrace the stimulating atmosphere generated by a comprehensive educational program in which academics, participation in the arts and athletics, service learning, outdoor education and experiential learning are all essential components of a carefully crafted program. Our hope is to inspire each student towards academic excellence, personal fulfilment, and compassion for others. Our expectation is that all our graduates will go on to post-secondary institutions and will thrive there.

REQUIRED COURSES:	
Subject Area	Minimum Credits
Career Education 10	4
English 10	4
English 11	4
English 12	4
Mathematics 10	4
a Mathematics 11 or 12	4
a Fine Arts and/or Applied Arts 10, 11 or 12	4
Social Studies 10	4
a Social Studies 11 or 12	4
Science 10	4
a Science 11 or 12	4
Physical and Health Education 10	4
Career Education 12	4
	52 Credits
ELECTIVE COURSES:	
Students must earn at least 28 elective credits Additional Grade 10-12 credits* 28 credits	
*Of the 80 credits for graduation, 16 must be at the Grade 12 level, including a Grade 12 English course.	

Graduation Requirements

GRADUATION REQUIREMENTS FOR 2018-2019

To graduate, students will require 80 credits total, with a minimum of 16 at the grade 12 level, and 28 elective credits. 52 credits are required from the following:

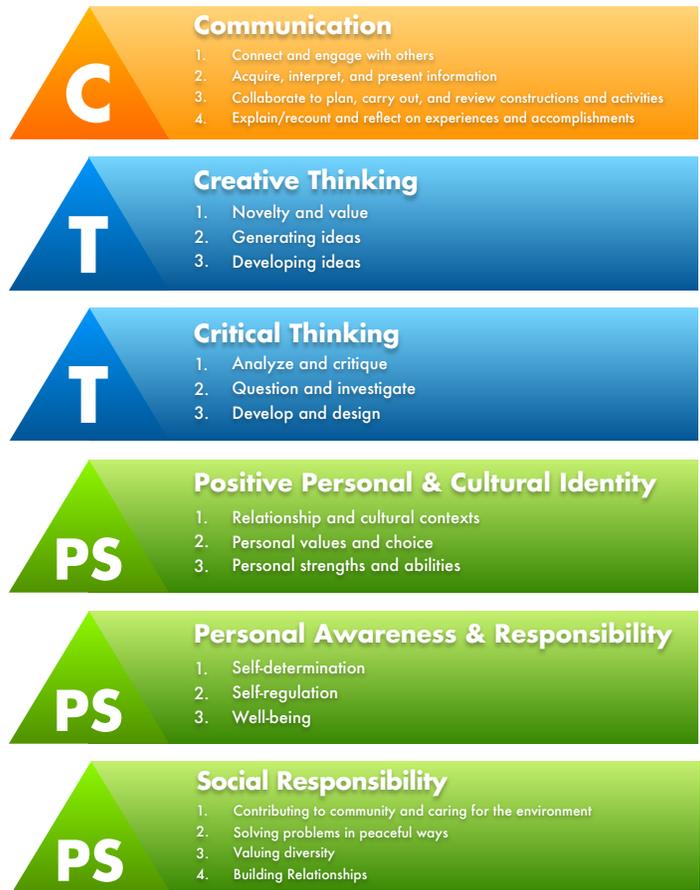
- Two Career Education Courses (total 8 credits)
(Replaces Planning 10 and Graduation Transitions)
- Physical and Health Education 10 (4 credits)
- Science 10 (4 credits), and a Science 11 or 12 (4 credits)
- Social Studies 10 (4 credits),
and a Social Studies 11 or 12 (4 credits)
- A Math 10 (4 credits), and a Math 11 or 12 (4 credits)
- A Language Arts 10, 11 & 12 (12 credits)
- An Arts Education 10, 11 or 12 and/or an Applied Design,
Skills and Technologies 10, 11 or 12 (4 credits)
- Write the Numeracy Assessment before graduation
- Write the English 12 Provincial Exam before graduation

STUDENT SELF-ASSESSMENT AND REPORTING OF THE CORE COMPETENCIES

The BC Ministry of Education, responding to the need for education change and the development of children's divergent aptitudes and abilities, has made substantive changes to the curriculum and to assessment, laying a foundation that emphasizes the need for 'deep' understanding and 'big' ideas over rote learning and memorization. They have also introduced core competencies, which combined with numeracy and literacy assessments will form the essential elements of the redesigned curriculum. Students will be required to self-assess their development in the areas of competency outlined by the Ministry. There are: communication, creative thinking, critical thinking, personal and cultural identity, personal awareness and responsibility, and social responsibility.

Students will be required to assess their own skills and abilities in these areas and report back to parents and guardians on the development of these competencies. Students will report at the end of Term 1 in early December, in their Student led conferences in February and finally at the end of the academic year in June.

MINISTRY OF EDUCATION CORE COMPETENCIES



Southridge School Academic Program

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
REQUIRED SUBJECTS	REQUIRED SUBJECTS	REQUIRED SUBJECTS	REQUIRED SUBJECTS	REQUIRED SUBJECTS
English	English	English	English AP EN	English AP ELC
Social Studies	Social Studies	Social Studies	HI 12 EC 12 LAW 12 PHIL 12 AP HI AP HG AP Micro 1 minimum	Career Education
Mathematics	Mathematics ADST	Mathematics	PREC 11 FOM 11	ELECTIVE SUBJECTS
Science	Science	Science	BI 11 BI 11(H) BI 12 CH 11 CH 11 (H) GEOL 12 PH 11 AP PHY 1 1 minimum	HI 12 EC 12 LAW 12 PHIL 12 AP HI AP HG AP Micro 1 minimum
French	French	French or Spanish	FR 11	PREC 12 FOM 12 CALC 12 APCALC AB AP CALC BC
Band	Physical and Health Education	Physical and Health Education	Active Living 11 Fitness and Conditioning 11	BI 12 AP BI CH 12 AP CHE GEOL 12 PH 12 AP PHY 2
Art	Career Education	Career Education	Career Education	FR 12 AP FRL
ADST	ELECTIVE SUBJECTS	ELECTIVE SUBJECTS	ELECTIVE SUBJECTS	Active Living 12 Fitness and Conditioning 12
Drama	Spanish	Spanish	Spanish (SP 11 SP 12)	Band
Physical and Health Education	Band	Band	Band	Art
Career Education	Jazz Studies	Jazz Studies	Art	Media Arts
	Art	Art	Media Arts	TPA 12 Theatre Co 12
	Drama	Media Arts	TPA 11 Theatre Co 11	ICTS 11 ICTP 12 ³
		DRG 10 Theatre Co 10	ICTS 11 ICTP 12 ³	
		ICTS 11 ICTP 12 ³		

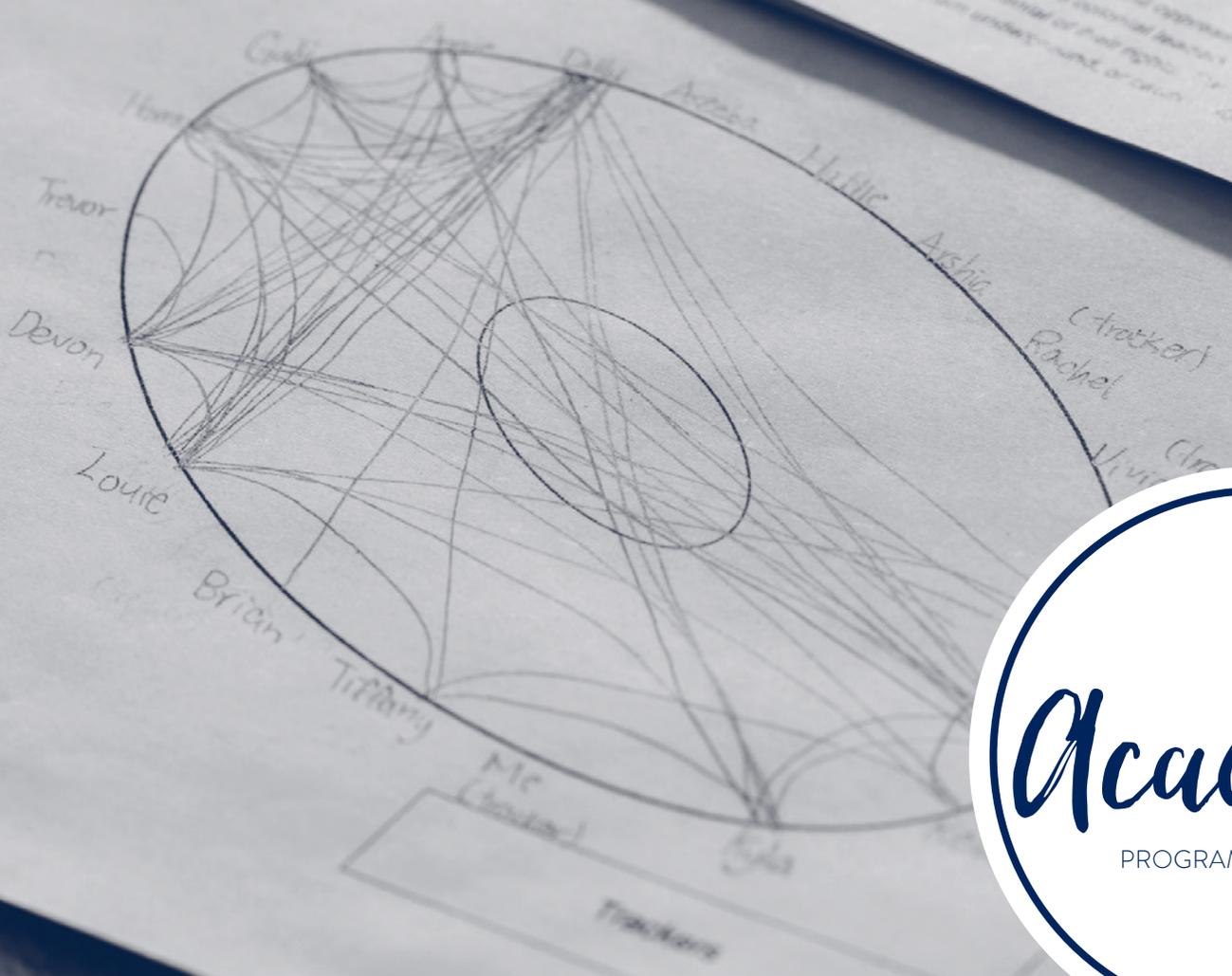
| NOTES |

Southridge requires students to take the following:

- a grade 11 Language, can be either French or Spanish
- a grade 11 or 12 level fine or performing arts elective
- Active Living or Fitness and Conditioning in Grade 11

• ADST 8 required course is completed through IT 8 and Media Arts 8 rotation

• English 12 options include: English 12, English 12: Creative Writing or English 12: Journalism



Academic
PROGRAM OVERVIEW

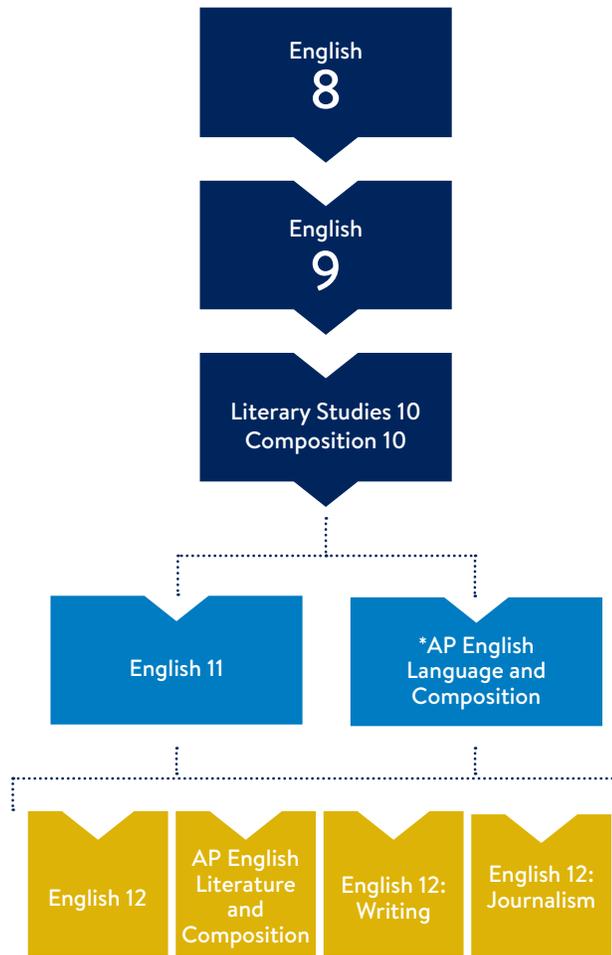
English

The central purpose of our comprehensive English program is to develop skills of expression, both written and oral, and to promote creative, critical, and reflective thinking about language and texts. As students move through this program their learning will be individualized and differentiated, primarily through their encounters with texts that become increasingly sophisticated and complex, as well as assignments that challenge them to develop these qualities in their writing. In every grade, students write in various forms and read works that share common themes, although they represent diverse voices and experiences. In Grade 12, an additional focus is placed on preparation for the English 12 Provincial Examination.

Throughout the English program, the learning process is also enriched by our use of technology. Students are supported to become critical and ethical users of digital media, capable of adapting to new modes and tools of language use. To promote and appreciate reading, we co-facilitate the Accelerated Reader Program with the Senior School Library. The English Department actively works to promote and appreciate the craft of speech arts and writing. Our popular annual events include the invitation of local authors into classes during Authors' week, live theatre performance viewing, cross-examination debates, and the Southridge School Speech Day.

Finally, students who are prepared and interested in pursuing Advanced Placement Courses have the option of studying AP English Language and Composition and AP English Literature and Composition.

* AP English Language and Composition is now able to be taken by Grade 11 students or Grade 12 students concurrently with either English 11 or English 12

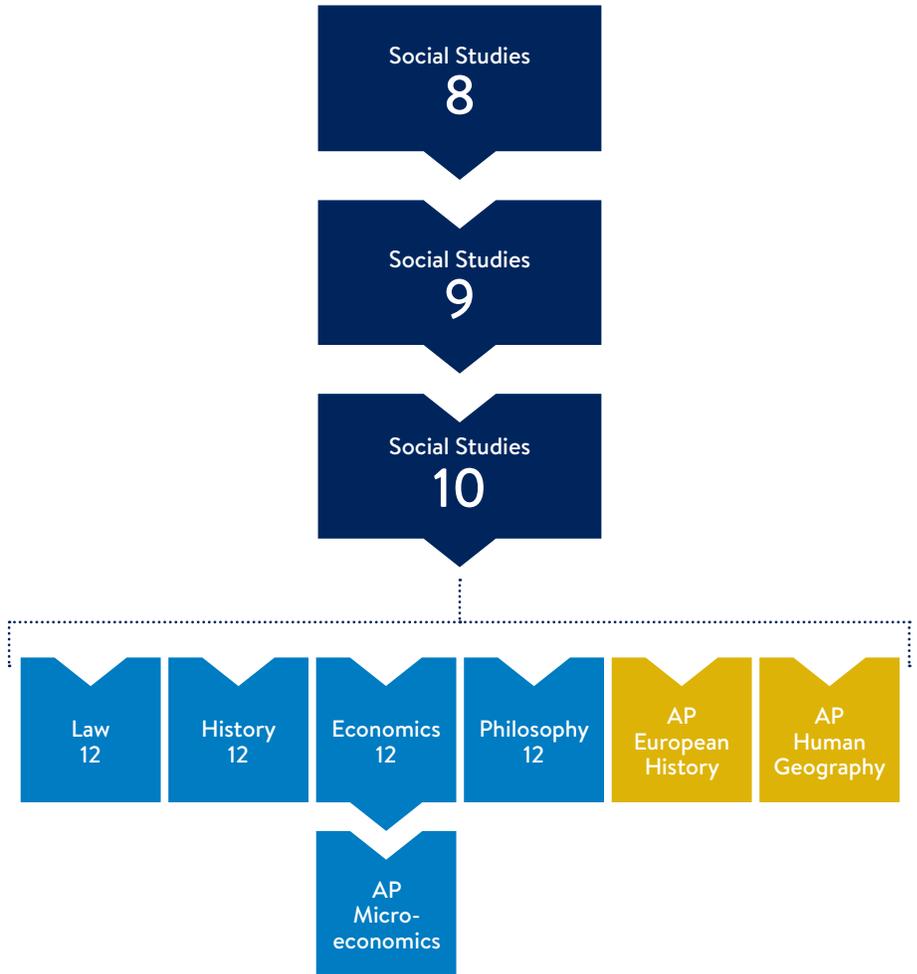


Social Studies

The Social Studies department teaches students about the world in which they live. A multidisciplinary approach is used to draw from the social sciences and humanities to study human interactions and natural and social environments.

Students are encouraged to become thoughtful, responsible, active citizens who are able to consider multiple perspectives and to make reasoned judgements. Student-centred learning is encouraged through current events, group discussions and Harkness philosophy.

Students are frequently given the opportunity to work on research projects with peers, often on topics of their own interest. This opportunity to construct their own knowledge base is often integrated with technology, through the use of the internet, and other web-based programs. Students in each grade further develop their writing skills by completing a documented research essay.



Mathematics

The Ministry of Education has three mathematics “pathways”: “Apprenticeship and Workplace Mathematics”, “Foundations of Mathematics”, and “Pre-Calculus Mathematics”. The goals of all three pathways are to provide prerequisite attitudes, knowledge, skills and understandings for specific post-secondary programs or direct entry into the work force. All three pathways provide students with mathematical understandings and critical-thinking skills. When choosing a pathway, students should consider their interests, both current and future.

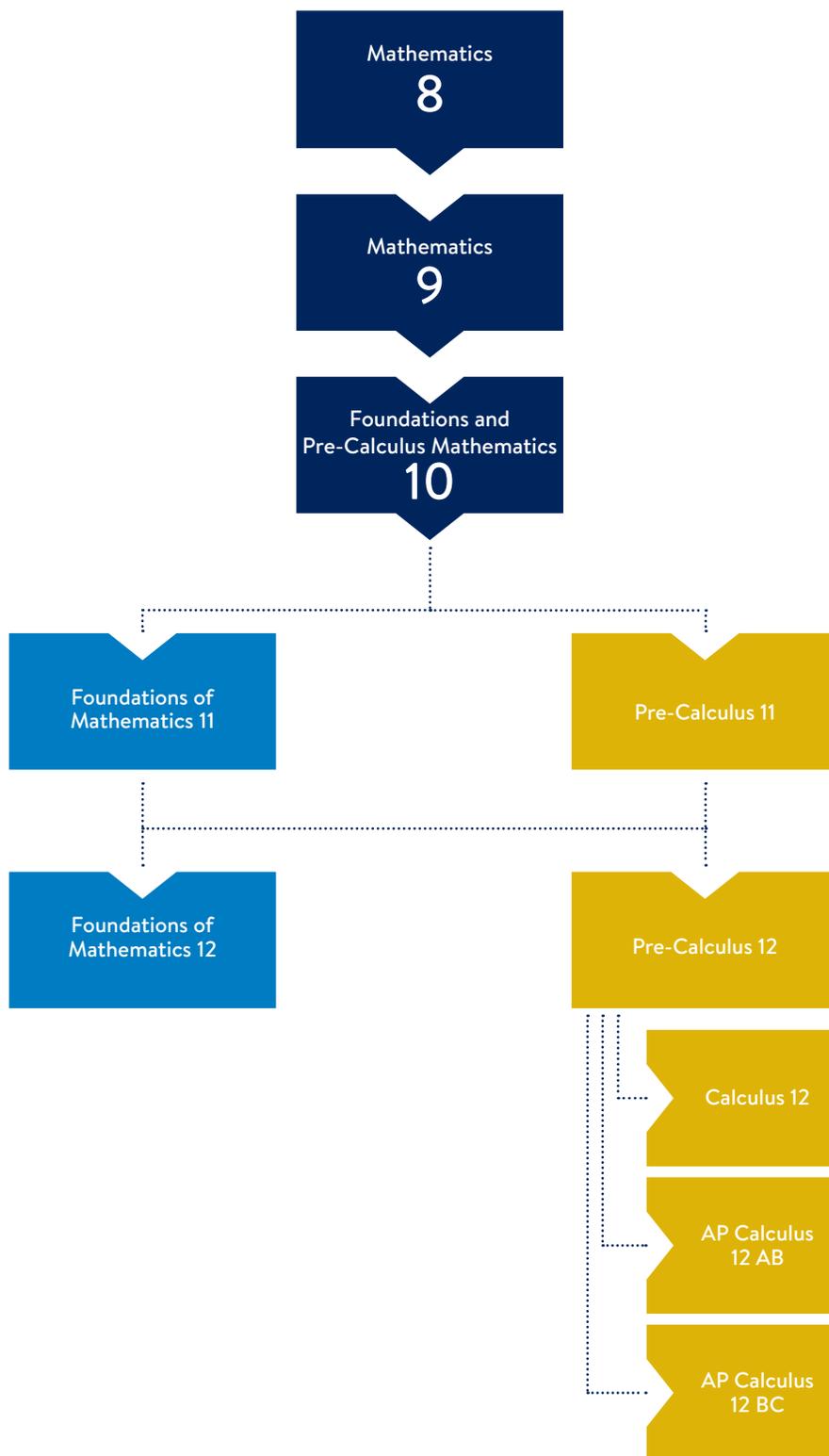
Students, parents and educators are encouraged to research the admission requirements for post-secondary programs of study as they vary by institution and by year.

ACCELERATED PROGRAM

Selected students in Grade 8 will have an opportunity to accelerate their high school mathematics learning. This program allows students to complete Pre-Calculus Mathematics 12 course by the end of their Grade 11 year and allow them more flexibility in choosing their Grade 12 course options.

PLEASE NOTE:

Southridge School only offers courses in the “Foundations of Mathematics” and “Pre-Calculus Mathematics” pathways as these are the courses required for entrance to university programs. Pre-Calculus 12 leads to any of the three highest level Calculus courses.



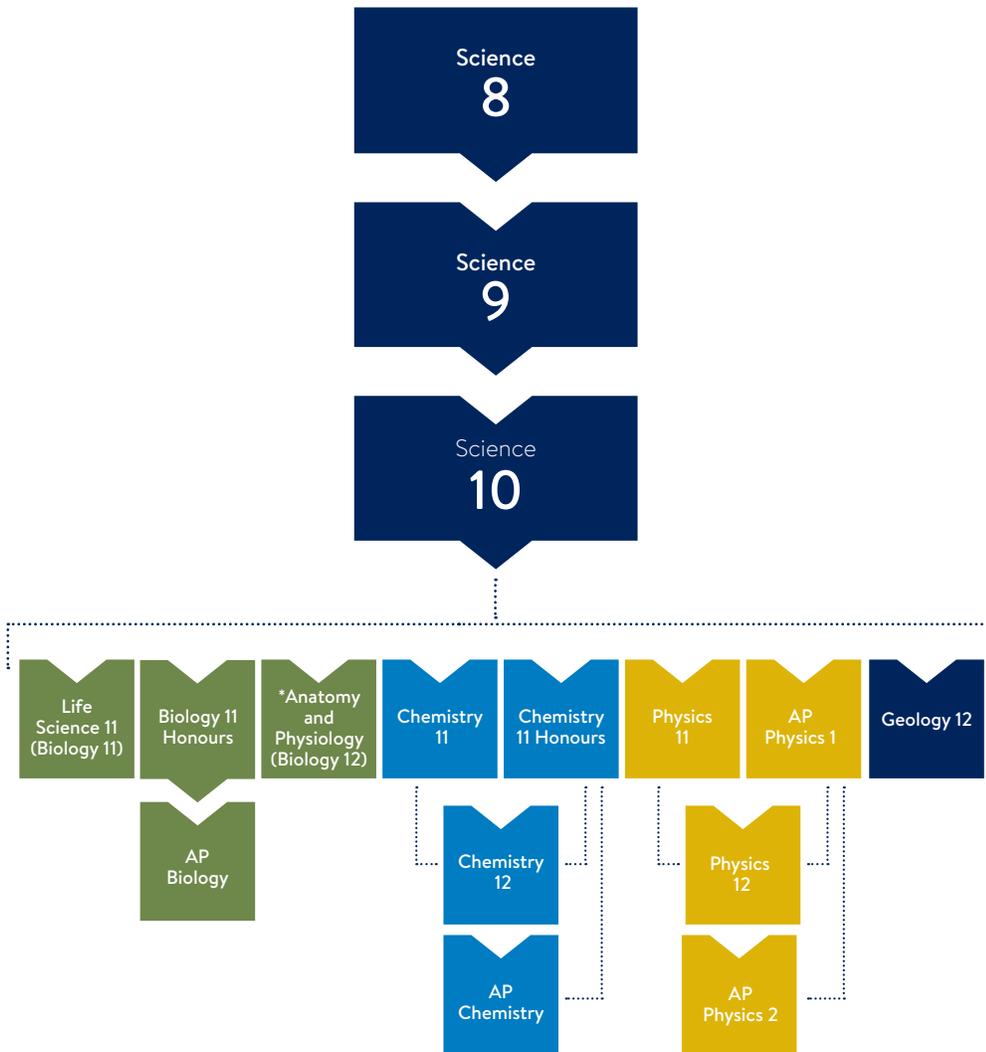
Sciences

Science at Southridge is an interactive experience. Students enjoy the benefits of laboratories custom designed for each subject area. This allows for specialized equipment and specimen collections. Through the process of experimentation, students learn to hypothesize, design procedures, think critically, communicate effectively, and analyze results. Specialty teachers make these experiences more exciting by teaching the course components which fall into their area of expertise.

Southridge groups Science 8, 9 and 10 into four courses of study: biology, chemistry, physics and earth science. Enrichment occurs by teaching additional AP topics or by expanding a given topic to challenge problem solving and critical thinking skills.

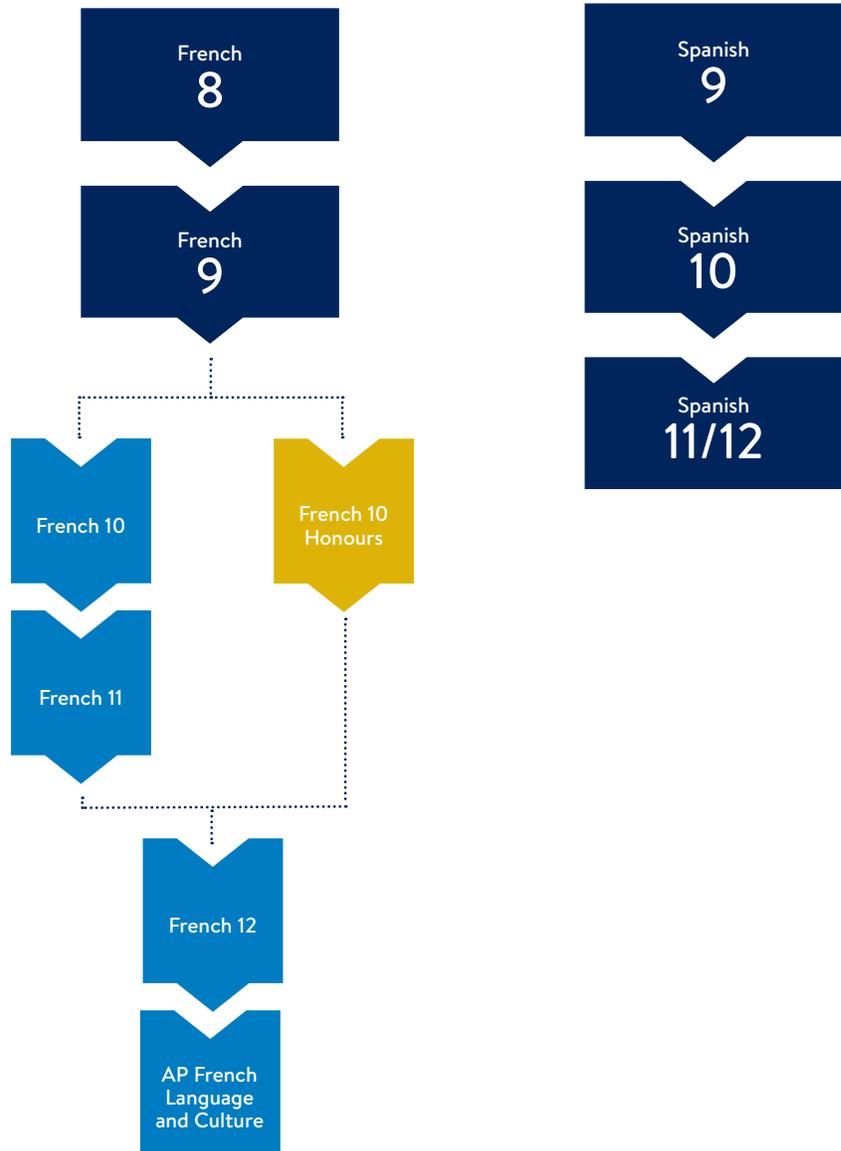
The science faculty has formulated an engaging and challenging program to capture the interest and imagination of students so they will see the value of science in their everyday life and acquire the knowledge and skills for a successful university experience.

* Life Sciences 11 (Biology 11) is not a prerequisite for Biology 12. Students with a Science 10 mark of 86% or higher can take Anatomy and Physiology 12 (Biology 12) directly.



Modern Languages

The Modern Language Department uses the communicative-experiential approach to second language learning. In our classrooms we employ a variety of strategies ranging from class roundtable conversations and group skits to individual listening and writing tasks in order to develop the knowledge and skills required to communicate effectively in other languages. Students also gain insights and appreciation for the many ways in which language can provide access to other cultures and world views. This aspect of the program is supported by exposure to short stories, novels and foreign films as well as field trips that allow/enable students to immerse themselves in local and international arts and culinary events. The program is enhanced by the success of our exchange programs, that fosters strong relationships between our students and the students of El Limonar School in Spain and Collège François-de-Laval School in Québec City.



ACCELERATED PROGRAM

After completing French 9 academically strong and motivated students will be able to join an accelerated program that allows them to complete French 12 in Grade 11. The French 10 class will cover French 10 and 11 and the Grade 11 class will follow the French 12 curriculum.

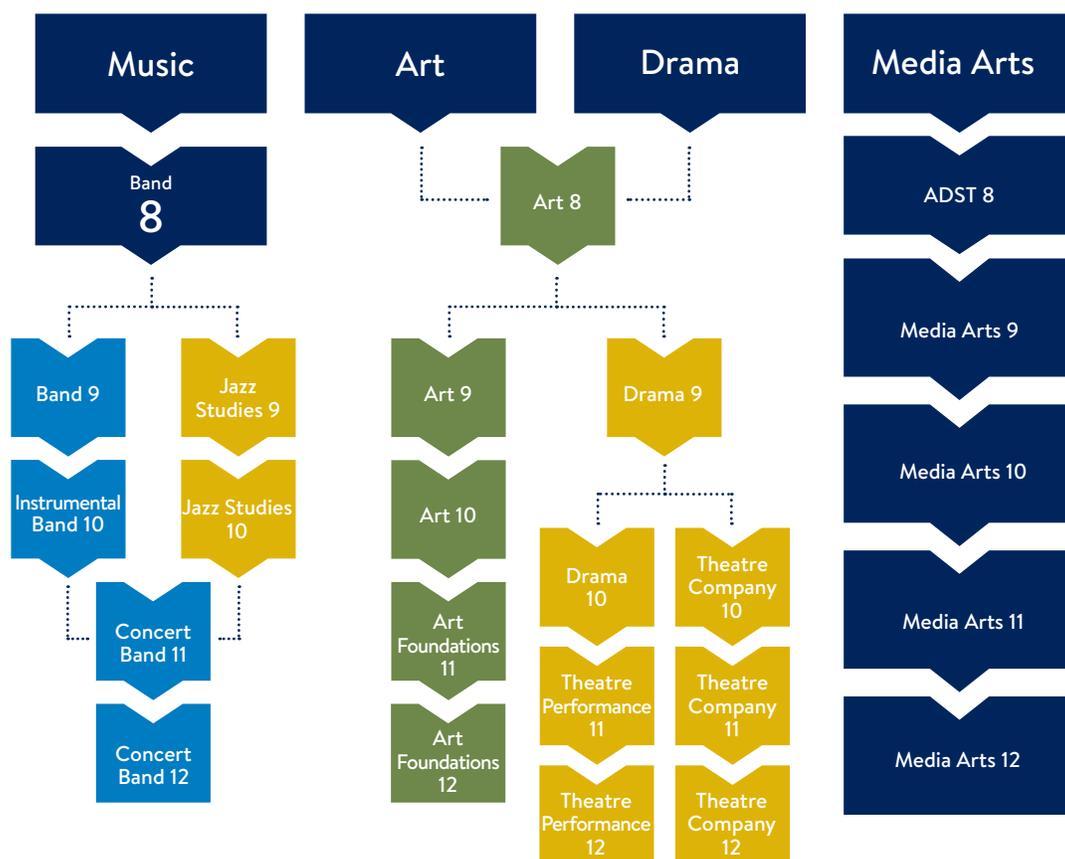
Students who have completed Spanish 10 successfully can continue learning the language in an accelerated Spanish 11/12 which covers both curriculums. The option to only complete Spanish 11 in that year is also available.

Arts

The Arts faculty has designed programs and experiences to encourage participation by all students. Exploring and creating, reasoning and reflecting, communicating and documenting and connecting and expanding are the curricular competencies used as a foundation of study in the Arts. Those who possess a unique visual, musical or dramatic talent are given careful direction and exciting production and performance opportunities. All students are taught skills and approaches that assist them to overcome their uncertainties and boost their confidence and ability in the arts.

There are many opportunities for students to display their creative work, both within the school and in the local community. Visual Arts students enjoy an open studio concept in which they are invited to work on assignments and individual creative pursuits in and outside of class time. Artist grade mediums are available in the senior years. Artists regularly display their pieces around the Senior School and prepare for other student exhibits in the lower mainland. Because service is a large component of the program, students create art with, and for, Semiahmoo House Society and other community organizations. In Media, students focus on photography, filmmaking, and animation, entering ZoomFest and a variety of provincial competitions each year, as well as presenting work at the Film Nights Exhibition. Many

of our student films have earned awards in recent years. Media students also have the opportunity to create a service film for leadership week. For Drama enthusiasts, in the Theatre Company Class, much of the rehearsal time in both the Black Box Theatre and the Alan Brown Great Hall is spent preparing for a major play, usually presented over several nights in February. Additionally, in the spring, smaller casts present one act plays, both at the school and at local one act play festivals. For those students who enjoy theatre performance but who cannot manage the major production, are presented opportunities in the way of improvisation, scene studies, world theatre, monologues and more. Local and international arts field trips and tours occur on a cyclical basis to further enrich the visual art, media and drama curriculums. The musicians take part in two major concerts each year, in December and May, and also perform at all major school events, such as Remembrance Day and Commencement. As opportunities arise, smaller ensembles often travel to local venues, such as seniors' homes, Peace Arch Hospital or Semiahmoo House to perform and visit. Our jazz ensembles and concert bands also travel to festivals in the winter term and the students in Grade 10, 11 and 12 have the option to join tours to Cuba or Italy on a three-year cyclical basis.

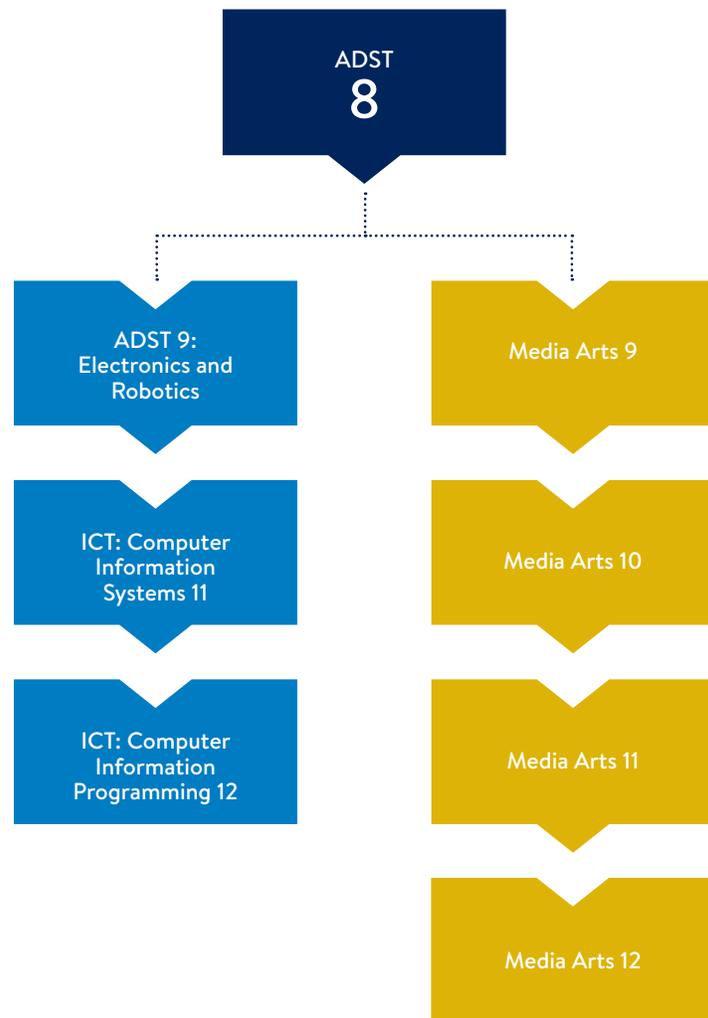


Applied Design Skills and Technology

The study of digital design, digital creation, video editing, programming, web creation and robotics are important in an increasingly digital world. It is essential that students are provided with the opportunity to interact with and create using technology in a variety of capacities. In addition, today's young innovators require an understanding of computational thinking and the design cycle as a framework for the process of innovation, creation, and problem-solving within the digital context. By developing these conceptual skills, students become primed for the requirements of contemporary and future workplaces.

ADST 8 is offered to all students in grade 8 to introduce students to Media Arts and ensures a smooth transition into the Senior School laptop program with a focus on BC's Digital Literacy Framework and an introduction to programming. ADST 9* is integrated into the Mathematics 9 program and focuses on programming with robotics. Additional IT Skills are integrated into the course curriculum throughout Grades 8-10.

Students in Grades 10 or 11 may take ICTS 11, which focuses on information technology literacy, media development, internet security, and introductory programming. Students in Grades 11 or 12 may take ICTP 12, which primarily focuses on learning computer programming. In the ICTS 11 course, literacy in the area of information and communications technology is defined as the ability to obtain and share knowledge through investigation, study, instruction, and transmission of information by means of digital media technology. Since technology is undergoing constant and rapid change, the ICT-literate person possesses the skills and abilities to learn and operate current technology, and adapts to new technologies developed to electronically gather, process, evaluate, synthesize, and share data with others. The benefits of learning how to program a computer involve learning about processes; about how one is doing what one is doing. In programming, the process of creating a product is often as important as the finished product. A byproduct of learning to program is the development of creative problem solving, troubleshooting, and analytical thinking skills. These are skills in high demand in many areas of academics and research, as well as in industry.



Physical and Health Education

In an effort to promote a healthy lifestyle, the senior P.E. program combines progressive skill development with personal fitness enhancement and evaluation. Throughout Grades 8-10, the students focus on skill building in a variety of individual and team sports, primarily those sports which are a part of the school's competitive athletic program. There is considerable emphasis placed on developing and maintaining each individual's level of physical fitness. The learning of health and wellness portion of this course will continue to be taught throughout the year. As students reach the senior grades there is an increased focus on such topics as nutritional programs and training principles. These students are also exposed to a variety of lifetime sports and leisure activities.

BOYS		
Fall Season	Winter Season	Summer Season
Soccer	Basketball	Rugby
Swimming	Recreational Sports	Golf
Cross Country		Tennis
Recreational Sports		Recreational Sports
GIRLS		
Fall Season	Winter Season	Summer Season
Field Hockey	Basketball	Tennis
Volleyball	Recreational Sports	Soccer
Cross Country		Golf
Swimming		Recreational Sports
Recreational Sports		
RECREATIONAL SPORTS*		
Spinning	Badminton	Floor Hockey
Weightlifting	Running	

*The Recreational Sports option is available to all students who are not on competitive teams.

Career Education

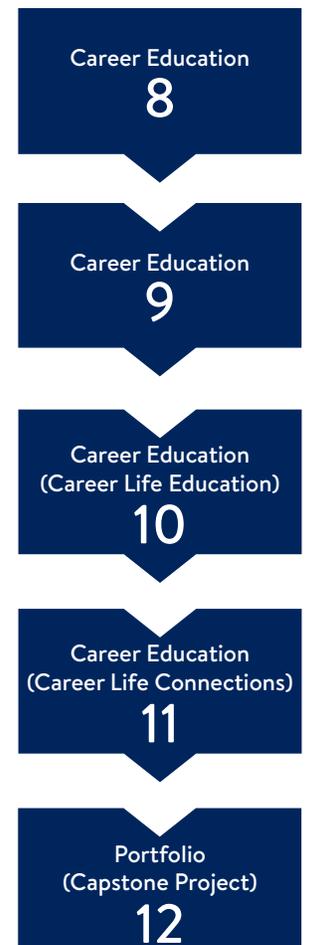
Career Education (CE) is offered once per 8 day cycle from Grades 8 through to 12. The aim of CE is to provide students with knowledge, skills and attitudes that will assist them in making informed decisions in relation to their education and their future careers. CE 8 and 9 builds on the CE K-7 curriculum by helping students understand their preferences, the value of work in their lives, in their communities and in society as a whole. Also, they will become aware of career pathways that are defined by personal, community and educational choices and why these pathways will require flexibility to adapt to economic and labour market influences.

THE PROVINCIALLY PRESCRIBED COMPETENCIES ARE GROUPED UNDER THREE BROAD CATEGORIES:

Personal Development
Connections to Community
Life and Career Plan

In Grades 10 and 11, CE will focus on course choice planning, financial literacy, university research and related topics as well as career exploration and experience. In Grade 12, students focus on decision making, applying to university programs, scholarship opportunities and preparing to transition to life after high school. Grade 12s will also be required to present a capstone project that celebrates achievement and accomplishment and allows them to discuss their life, education and career goals in the format of a graduation interview.

Overall, the goal of the high school career education program is to create individuals who have the self-knowledge, confidence, attitudes and skills to succeed at their desired post-secondary institutions and beyond.



Advanced Placement

For students seeking an enriching and challenging academic experience, the Advanced Placement (AP) program is an excellent choice. AP offers motivated students an exciting opportunity to pursue university-level studies in the high school setting. Through AP, students gain knowledge, academic skills and personal confidence. AP is intellectually demanding, but well within the capacity of Southridge students. Success in the AP program may lead to advanced standing, course credit, or both, on entry to university. The Advanced Placement program is fully recognized by the Ministry of Education of British Columbia and is an integral part of the BC graduation program. Our current AP courses are as follows: AP Calculus (AB & BC), AP Chemistry, AP Microeconomics, AP English Literature and Composition, AP European History, AP French Language, AP Human Geography, AP Physics 1, AP Physics 2, AP Biology, AP English Language and Composition.

Course descriptions are included within the Curriculum Guide.

Student Services Learning Strategies

Southridge Senior School provides academic support and testing accommodations for students in Grades 8 through 12. The Learning Strategies teacher evaluates, develops, and implements learning supports for individual students to decrease the barriers to education that student with a learning difference might experience.

Furthermore, the Learning Strategies teacher provides academic testing accommodations for students who have a Psycho-Educational Assessment. Through the development of an Individualized Education Plan, a student may be eligible for accommodations such as:

- Scribe | Reader | Extended time
- Adaptive technologies | Room with reduced distraction
- Calculator and/or formula sheet

Outdoor Education

Outdoor Education is an important part of a Southridge student's experience. While participating in the Outdoor Education (OE) program in the Senior School, students strengthen their appreciation for and understanding of the natural environment of British Columbia. Students also develop the skills and attitudes that support good character development. Leadership, teamwork and interpersonal skills are developed during OE trips as students are challenged, comfort levels are extended and confidence is built.

Many different opportunities await Southridge students. All Grade 8 and 9 students travel to Strathcona Park Lodge Outdoor Education Centre on Vancouver Island for four nights each fall. In addition, the OE program runs different trips throughout the year that challenge students at different levels and allows students to develop their skills throughout their time at Southridge. Most recently, these trips have included hiking, canoeing, snowshoeing, ocean-kayaking and cycling, ranging in length from a one-day experience to a four-day expedition. It has also facilitated some environmental stewardship opportunities such as microchip tagging surgeon and releasing salmon smolt.

**EXPERIENCES IN
OUTDOOR EDUCATION
ARE AN INTEGRAL PART
OF OUR BALANCED
PROGRAM.**



The Southridge Service Program

GUIDING PRINCIPLES

At Southridge, service means:

- Actively interacting with our local community through initiatives that engage all of our students in hands-on service activities
- Providing students with opportunities to act globally, as well as locally, to become responsible global citizens
- Developing long-term, rich relationships with local, national and international service organizations
- Empowering students to develop leadership skills by facilitating student-generated and organized activities
- Integrating service initiatives into the curriculum, when it is appropriate to do so
- Recognizing that providing service for others often changes the way that we think about ourselves and the world in which we live, students will be provided with opportunities for meaningful reflection as well as opportunities to share their experiences with others.

SERVICE OPPORTUNITIES

More specifically, all Southridge students are involved in service work and service-learning through advisor group activities (such as soup kitchen visits, Christmas hampers for Guildford teen moms, Hoops for Heart, Terry Fox Run), school-related activities (such as TREK, Gala, Country Fair), or integration in the curriculum. Part of this integration is the Grade 10 service week, where students participate in workshops and local service work to learn more about global and local service issues. In addition, students can take their own initiative through out-of-school activities (with Semiahmoo House or Peace Arch Hospital, for example) on their own or in small groups. The student-run Service Club meets regularly to plan and carry out diverse service activities and opportunities. Finally, we have a growing international service program that gives students the opportunity to connect with developing world communities such as Guatemala. Service involvement is one of the strongest defining characteristics of the Southridge student.

Leadership Experience Week

Each October, all Senior School students are immersed in the real world so that they come to a better understanding of who they are and what their contribution to the world can be. It is expected that all students attend and fully participate in this week as an integral part of our educational program here at Southridge. Specifically, each grade explores a different theme in a different format:

GRADE 8

Identity: through challenging themselves at Strathcona Park Lodge, students further enhance their personal character, focus on self-leadership and develop their grade identity.

GRADE 9

Cooperation: by focusing on specific small group challenges at Strathcona Park Lodge, students build peer leadership skills, teamwork, and further develop grade cohesion.

GRADE 10

Service: students learn the leadership skills that enable them to move beyond themselves to helping others in their local community. The skills are actively taught at the school, and then students volunteer with an organization of their choosing.

GRADE 11

Leadership I: Exploration - students explore future options at a Career Day and visit a real world work place on Career Experience Day. They also develop valuable lifelong skills, to prepare them for making a contribution after secondary school.

GRADE 12

Leadership II: Legacy – students reflect on contributions made during their school years, look forward to university life, and prepare to assume leadership in our school community in the present. This is achieved through a Career Day, and an off-campus Grad Retreat.

Overview

Grades 8 to 10

In Grades 8 through 10, students are required to take a range of mandatory academic classes. The use of technology is fully integrated into our curriculum and all students at Southridge Senior School are equipped with their own personal laptop computer. This tool is used to facilitate and expand opportunities for collaboration, exploration and inquiry; authentic assessment and evaluation, and to facilitate our ability to meet the diverse learning needs of our students. Students also use this technology as a means of organization and communication beyond the classroom.

Throughout these years the approach to learning is one of critical thinking and inquiry. We seek to develop students who question assumptions, offer creative solutions, advocate respectfully for themselves, and who are able to collaborate and communicate well with others.

We also take care to support students in these grades in acquiring the awareness and knowledge to understand where their own particular passions and interests lie – and to make informed decisions about pursuing them. The wide-ranging curriculum in Grades 8 through 10 prepares the students to choose those subjects which are of greatest interest to them in their Grade 11 and 12 years and beyond. In Grades 9 and 10 the choice of electives is limited to two. In Grades 8, 9, and 10, science, math, English, French and/or Spanish, social studies, physical education & health and career education are mandatory.

Physical & health education provides students with the knowledge, skills and attitudes that will assist them in making informed decisions in relation to their physical health and fitness; their emotional and mental well-being. Career education will assist them in making informed decisions in relation to their educational choices and future career aspirations. Electives are offered in the fine arts and performing, including band, art, jazz studies, media arts and drama. Our students will also be exposed to aboriginal history, perspectives, and knowledge as part of the wider integration of their culture and world view into the curriculum.

Overview

Grades 11 and 12

Southridge's enriched, rigorous, university oriented academic curriculum fully prepares students for a diverse range of post secondary opportunities and entrance to prestigious universities in Canada, US and around the world. A full range of academic electives is introduced in Grade 11. English 12 is a mandatory graduation requirement and all students must write the Provincial examination, which is worth 40% of their final mark. A numeracy graduation assessment is also a current ministry requirement. Our students will be exposed to aboriginal history, perspectives, and knowledge as part of the wider integration of their culture and world view into the curriculum.

University Planning, which occurs once per cycle, is also a mandatory requirement of the Grade 12 program and is instrumental in helping students select and narrow their focus to the university programs that best fit their academic interests and personal preferences. Students select their course of studies with the guidance of our University Counsellor. The strength of our university-planning program is evidenced by our students' high success rates in gaining admittance to the institutions and programs of their choice.

For students seeking an enriching and challenging academic experience, Advanced Placement (AP) courses can be an excellent choice. AP offers motivated students the opportunity to pursue university-level studies in the high school setting. Through AP, students gain knowledge, academic skills and personal confidence. AP is intellectually demanding and success in the AP program can lead to advanced standing, course credit or better preparation for university courses on entry to university.

WE CURRENTLY OFFER THE FOLLOWING ADVANCED PLACEMENT COURSES:

- AP Calculus (BC) | AP Calculus (AB)
- AP Chemistry | AP Microeconomics
- AP English Language and Composition
- AP English Literature and Composition
- AP European History
- AP French Language and Culture
- AP Human Geography
- AP Biology | AP Physics (1) | AP Physics (2)



Grade
8

PROGRAM OVERVIEW

Grade 8

Program Overview

ENGLISH 8

The study of literature is central to our English program at Southridge. It is presented as a source of creativity and joy for our students in grade 8. We encourage students to use language purposefully, to be aware of multiple voices and perspectives, and to understand that different audiences require different approaches. In a collaborative, inquiry-based, student-centred environment, students develop competency in a variety of writing styles: narration, description, exposition, and persuasion. All Southridge students learn the protocol and format of cross-examination debate and practice these skills during in-class debates. Grade 8 students also learn to craft and present individual persuasive speeches during our annual Southridge School Speech Day. Students use a variety of oral, written, visual, and digital texts to develop curricular and core competencies outlined by the BC Ministry of Education. Typically, these texts include a minimum of two novels, one Shakespearean play (Romeo and Juliet), and a selection of poetry, non-fiction texts, and short stories. Students also participate in the Accelerated Reader program.

SOCIAL STUDIES 8

The primary objective of Social Studies 8 is the development of the skills needed to advance the core competencies of social studies: communication, thinking, and socialization. This objective is met through a critical examination of civilization between the 7th and 16th centuries, including indigenous civilizations. Topics examined include: how contact and conflicts between peoples have stimulated change, how human and environmental factors have shaped changes in populations, how exploration and expansion has led to varying consequences for different groups, and how changing ideas about the world have created tension. Along with the focus on the core competences, Social Studies 8 is used as an introductory course to the Harkness discussion philosophy. The discussion skills learned here will help students throughout their career at Southridge.

MATHEMATICS 8

The focus of Mathematics 8 is on the development of basic skills needed for the advanced study of mathematics in Grades 10-12 and the core competencies in this discipline (communication, collaboration, problem solving). Topics in this course include perfect squares and cubes, square roots, the Pythagorean Theorem, operations with fractions, rate, ratio, percent, patterns, relations, graphing, basic algebra, equation solving, construction, views and nets of 3D objects, surface area and volume of prisms and cylinders, geometry, probability, logic and pattern games and puzzles and financial literacy. Problem solving is a major focus of the course and is integrated throughout the curriculum. All students in Mathematics 8 write the Canadian Mathematics “Gauss” Contest in May.

BIOLOGY 8

In Biology 8, students explore the big idea that cells are a basic unit of life. They develop inquiry-based labs to test predictions about living substances. Microscope studies allow students to investigate cell organization and make observations to formulate their own understanding. Students will apply an understanding of micro-organisms and the immune system to evaluate the use of vaccines and antibiotics.

CHEMISTRY 8

In Chemistry 8, students perform and design their own experiments using the scientific method and use models to explain the structure of an atom. Students learn about kinetic molecular theory and atomic theory. This course involves significant discussion and collaboration; students are encouraged to use scientific language and make connections between chemistry concepts and across other areas of the curriculum.

EARTH SCIENCE 8

In Earth Science 8, students learn about plate tectonic movement including plate boundaries, how earthquakes and volcanoes form, and how earth movements are measured. Furthermore, they will study the layers of the earth and aboriginal knowledge of local geological formations resulting from tectonic processes. They will do this by formulating physical and mental models to describe a phenomenon, by analyzing cause-and-effect relationships, and by collaboratively and individually planning investigative methods in order to collect reliable data as they conduct the investigation.

PHYSICS 8

One of the big ideas of physics is that energy can be transferred by particles or by waves. Physics 8 focuses on the transfer of energy by waves, specifically, electromagnetic waves. Through hands-on activities, relevant videos, and classroom discussion, students learn about the behaviours and properties of visible light, as well as the other types of electromagnetic radiation represented in the electromagnetic spectrum. The course concentrates on a conceptual understanding of physics, with limited mathematical involvement.

FRENCH 8

In French 8 students will learn basic oral and written communication skills. They will learn how to make themselves understood, to retell stories and to appreciate and be aware of cultural differences. To accomplish these goals, the course begins with a thorough review of the basic language skills such as present tense verb conjugations, adjectives, time telling, numbers, question making and common vocabulary. They will build on these structures throughout the course. Using these acquired language structures, students will discuss themes relevant to their experiences such as family, friendships, francophone cuisine and celebrations as well as traveling. Collaboratively, they will read short magazine articles, put together presentations, create brochures and conduct interviews. They will watch, listen to and respond to recordings, movie clips and other audiovisual material in order to derive meaning. Finally, they will be regularly assessed and given feedback on the four language learning skills: writing, reading, listening and speaking.

MUSIC 8

All students in Grade 8 play in the concert band. Among other things, the major focus of each term is a public performance. In Term One, students prepare for An Evening in December (two nights the first week of December); during Term Two, we woodshed three selections to play at BandFest, at UVic (overnight to Victoria in early March); Term Three culminates in Café Concerto (May). Attendance at each of these events is expected.

Because students enter the Senior School with differing levels of skills on the band instruments, they are placed in a group appropriate to their level of experience: beginning players, who are just starting their journey; experienced players, usually with one year under their belt; and more experienced players, who can read music and have some facility on their instrument. In each group, the focus is on developing skills on one of the brass, woodwind or percussion instruments, gaining understanding of various musical forms and genres, appreciating one's role within a musical ensemble, and performing with stylistic accuracy and musicality. Students in the experienced group spend additional time on the fundamentals, learning the concert repertoire, and test preparation. Those in the more experienced group receive additional, more challenging repertoire and also play in the "All Comers Jazz Ensemble". As such, the latter are welcome to join the other school jazz bands and vocal ensembles at the Jazz Retreat, an amazing three-day event in late October.

CAREER EDUCATION 8

Career Education meets once per cycle and is divided into three broad categories and covers several sub-categories within each major category. The main categories are:

Learning: Learning about learning; personal learning style; study strategies

Safety and Injury Prevention: Safe Teen program; internet safety; sports injury prevention; workplace safety

Career Education: Interest and possible career paths

EXPLORATIONS IN ARTS EDUCATION AND APPLIED DESIGN, SKILLS AND TECHNOLOGIES 8

Exploring and creating, reasoning and reflecting, communicating and documenting, connecting and expanding, the Arts and Applied Design, Skills and Technology (ADST) program for Grade 8 students consists of one rotation in each of the following: visual art, drama, media arts and information technology. Students are given an overview of the respective disciplines in order to help them have a platform by which they can choose from the more in-depth artistic, creative, and design-based experiences offered in higher level courses. In their arts experience, the visual art and drama programs allow students to explore the individual and collective experiences of artistic voice while exploring new perspectives and creative processes.

In their ADST experience, the Media Arts program is a unique cross-disciplinary mix where students embark upon new creative processes and use technology to create art, tell their stories, and share their unique voices. The Information Technology program allows students to design and create in digital environments, use computational thinking through coding and robotics and ensure a smooth transition into the senior school laptop program.

PHYSICAL AND HEALTH EDUCATION 8

Physical and Health Education 8 involves a variety of movement activities in individual, paired and group settings. The focus is on developing a functional level of fitness, and encouraging lifelong participation in physical fitness as part of a healthy lifestyle which incorporates physical, emotional and mental well-being. The value of social responsibility, and of making connections to the school and wider community, is emphasized and physical literacy is encouraged through skill development. The development of skills in the major Southridge interscholastic sports is emphasized; these include basketball, volleyball, soccer, rugby, and field hockey. There is also an emphasis on cooperative minor games. The learning standards for the more specific health and wellness portion of this course will continued to be taught throughout the year.



Grade 9

PROGRAM OVERVIEW

Grade 9 Program Overview

ENGLISH 9

The study of literature and the purposeful use and understanding of language continue to be core elements in our English 9 program. Students continue to work in a collaborative, inquiry-based, student-centred environment to further develop their writing, speaking, listening, and reading skills. There is a strong emphasis on the process of writing, and Grade 9 students develop the planning, editing, and revision of their written samples. Students develop their oral communication skills by writing and presenting cross-examination debates in class, and by individual public speaking contributions to the annual Southridge School Speech Day. Students use a variety of oral, written, visual, and digital texts to develop curricular and core competencies outlined by the BC Ministry of Education. Typically, these texts include a minimum of two novels, one Shakespearean play (*Midsummer Night's Dream* or *Julius Caesar*), and a selection of poetry, non-fiction texts, and short stories. Students also continue to participate in the Accelerated Reader program.

SOCIAL STUDIES 9

Grade 9 Social Studies focuses on Canadian and European history during the time periods 1750-1914. The course examines emerging ideas and ideologies that profoundly influence societies and events, as well as disparities in power that alter the balance of relationships between individuals and between societies as demonstrated through political, social, economic, and technological revolutions. Canadian content focuses on the continuing effects of imperialism and colonialism on indigenous peoples, as well as the physiographic features of Canada and geological processes. The final section of the course looks at Canada's collective identity and how it was constructed and changed over time through its global affairs, immigration, and French/English relations.

MATHEMATICS 9 AND ADST 9

Mathematics 9 continues the development of basic skills needed for the advanced study of mathematics in Grades 10-12 and the core competencies in this discipline (communication, collaboration, problem solving). Topics in this course include coding, numerical and spatial reasoning, logic and patterns to solve puzzles and games, operations with polynomials and rational numbers, types of income, two variable linear relations, solving multi-step, one variable, linear equations, spatial proportional reasoning, probability, statistics and financial literacy. Problem solving is a major focus of the course and is integrated throughout the curriculum. All students in Mathematics 9 also write the Canadian Mathematics "Pascal" Contest in February.

Applied Design, Skills and Technology will develop programming skills with the use of robotics. Students will engage in computational thinking and utilizing the design process while building on mathematical content from the Mathematics 9 curriculum.

BIOLOGY 9

Understanding reproduction is the key focus of the Biology 9 program. Students discover DNA, mitosis, and meiosis through visuals, models, lab activities and simulations. Students develop communication skills as they debate and discuss topics on bioethics and reproductive technology using evidence based arguments and scientific language. These topics challenge students to evaluate the dilemmas of modern biology and society.

CHEMISTRY 9

In Chemistry 9, students learn that the electron arrangement of atoms impacts their chemical nature. Students will design procedures and perform many experiments that will allow them to discover that element properties are organized in the periodic table. By analyzing experimental data and information, students will determine that an element's properties are related to the arrangement and energy of its electrons and to its atomic size.

EARTH SCIENCE 9

In Earth Science 9, students explore the effects of solar radiation on the cycling of matter and energy. They also unpack the different matter cycles within the biotic and abiotic components of ecosystems. Furthermore, the importance of sustainability and the interconnectedness of systems and First Peoples' principles will be emphasized. They will do this by analyzing the cause-and-effect relationships between and within systems and by using knowledge of scientific concepts to draw conclusions that are consistent with evidence.

PHYSICS 9

The focus of Physics 9 is the study of electricity. After a brief introduction to electrostatics, students learn about electric current and circuits, understanding that it consists of the flow of electrons around a complete path. Through hands-on activities, relevant videos, and classroom discussion, they learn about the relationships among voltage, current, and resistance in series and parallel as well as combination circuits. These relationships are investigated at both a conceptual level and through mathematical calculations. Discussions of our use of electricity and the effect on society are included.

FRENCH 9

Students in French 9, will further develop their speaking, listening, reading and writing skills as they learn how to express themselves in the present, past and future tenses. Reflexive verbs, comparisons, all personal pronouns and, time permitting, the imperfect are added to their repertoire of language structures. They will be exposed to a variety of audio and audiovisual material which will strengthen their understanding and acquisition of the French language. They will read short authentic and sometimes simplified fiction and magazine articles practicing their reading comprehension as well as developing their cultural awareness. They will be asked to express their opinions and feelings regarding these texts. In order to hone their speaking skills, students will engage in spontaneous discussions daily. Themes in this course are of interest and relevant to students' lives. They include a selection of the following: travel, art, food and health, adolescent life, Canada and volunteer work.

SPANISH 9

This is an introductory Spanish course which focuses on the four fundamental skills of second language learning – listening, speaking, reading and writing. The beginning of the course introduces students to basic greetings, time telling, colours, family, shopping and description of friends. Throughout the course, students are expected to express their likes, dislikes and preferences orally as well as in writing. Basic grammatical structures like the present tense and adjectives are taught through themes such as “School”, “Pastimes” and “Family”.



MEDIA ARTS 9

The Media Arts 9 course continues to build on knowledge already acquired from the Grade 8 year. Students develop foundational visual narrative skills using a wide variety of new techniques, technologies, and approaches in the context of exploring their own identity and the world around them both locally and globally. An emphasis is placed on image design and development, as well as structure and meaning as students create works in film, photography, and animation. Students work with professional equipment, learn to operate cameras manually, and manipulate their work using post-production software. Students will frequently collaborate, present their work, and communicate their ideas as part of a creative community.

DRAMA 9

In an environment that encourages the individual to take risks, students in Drama 9 explore a variety of theatrical styles using themes of Identity and Community. Physical character development is a major focus of the course, and through Harkness discussions, individual and group presentations, students will work towards a final play performance at the end of the year for an invited audience. Units of study may include movement, voice work, First Nations stories, comedy, scene study and play building. By the end of the course, students should expect to not only increase their understanding of theatre, but to develop their confidence, build strong interpersonal and collaborative skills, and be prepared for more advanced drama and theatrical study.

ART 9

Exploring and creating, reasoning and reflecting, communicating and documenting, connecting and expanding, building on knowledge, skills and attitudes of the Grade 8 year, Grade 9 students continue to explore their own identity and personal knowledge and a variety of aspects of the historical and contemporary global community contexts. Students are asked to pay attention to the development of sound studio practices and the refinement of skills, while continuing to practice using the language of design and image development strategies in their frequent communication of ideas. Individual goal setting and intrinsic motivation to artistically develop is emphasized and recognized at this level; the visual journal is a large component of this course.

MUSIC 9

Two courses are available for students in music at the Grade 9 level: Concert Band 9 and Jazz Studies 9. In Band 9, students will also perform in either the Grade 9 Jazz Band or small ensembles for part of the time. The Choir is a co-curricular option, at lunchtime.

BAND 9

The Concert Band continues to be the principal means by which students are challenged to improve their technical and musical skills. As the difficulty of music increases, students are required to be more independent players. In addition, they are expected to be able to perform in a greater variety of genres with idiosyncratic stylistic appropriateness. Increased musical literacy, the development of a more mature tone and improvement in overall musicianship are the primary focus. Each April, the Grade 9 Concert Band attends a British Columbia Music Festival, where they perform and attend clinics, performances and workshops. Attendance at the following performances is mandatory: *An Evening in December* (December) and *Café Concerto* (May).

JAZZ STUDIES 9

This course is for students who desire to improvise. In it, students study the giants of jazz, listen to the finest recordings and live concerts available, and begin to unravel the complexities of the harmonies that underlie the music. The lion's portion of the course, however, is devoted to actually improvising, that is, composing and performing a melody at the same time! Students begin by utilizing scale tones and chord tones over Major 7 and Minor 7 chords, and progress to playing the 12-bar blues and some of the more basic 32-bar AABA song forms. N. B. This course must be taken concurrently with Band 9. Except with permission, it may not be taken in isolation.

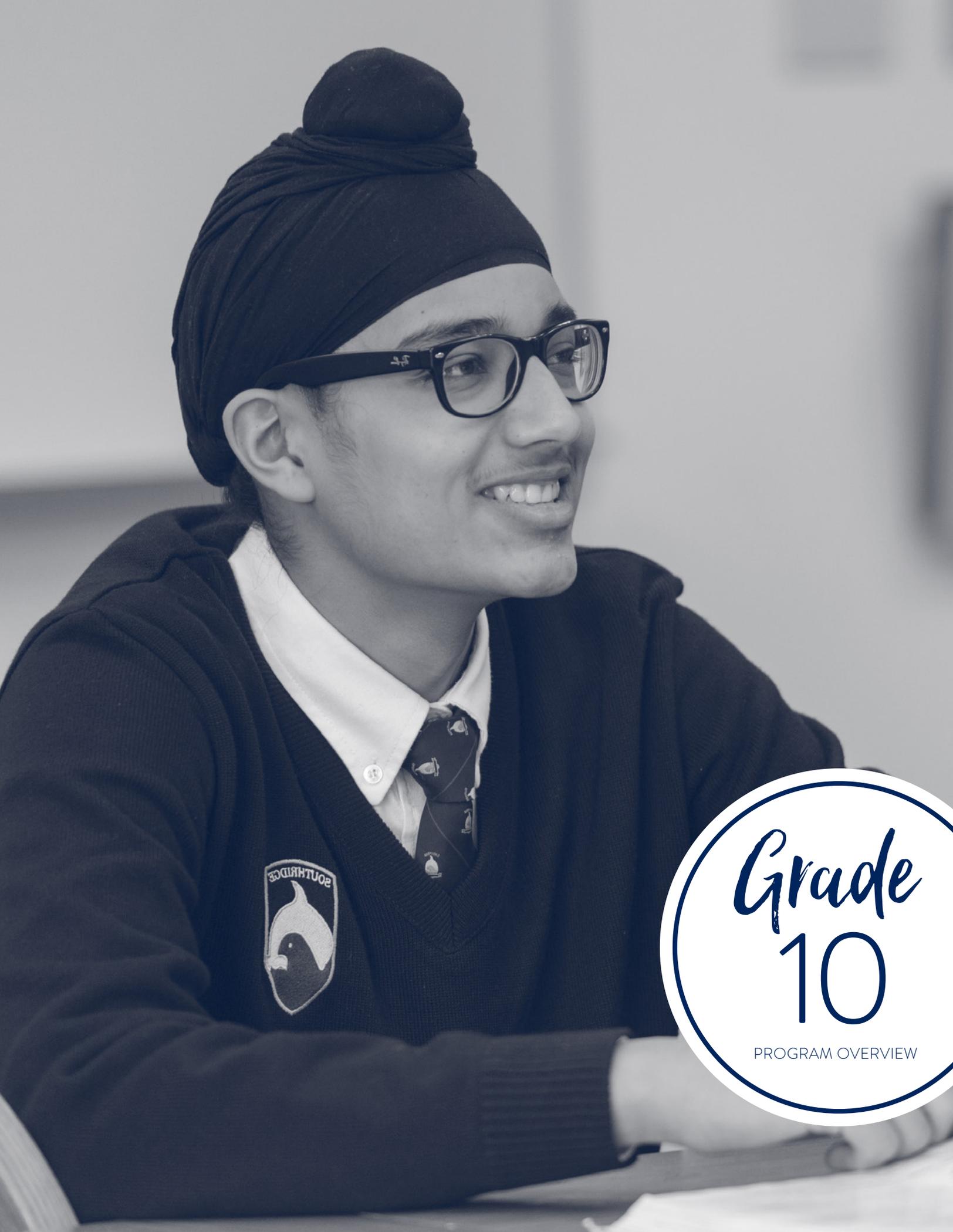
PHYSICAL AND HEALTH EDUCATION 9

Physical and Health Education 9 further refines and develops the skills in Physical and Health Education 8. This program integrates the units to develop the knowledge, skills and attitudes that allow students to incorporate physical activity into a regular routine. Additional units of study to the main school sports include cross-country running and softball. There is also an emphasis on cooperative minor games. The learning standards for the more specific health and wellness portion of this course will continue to be taught by health and planning specialists during a designated block once a cycle.

CAREER EDUCATION 9

Students continue to explore a deeper understanding of their learning styles and techniques for building presentation skills. They begin a project that allows them to build awareness of community connections and social responsibility. This project will require them to research a local service provider and present the information to their classmates. The course delves further into workplace presence and safety training and provides opportunity to begin building a network of resources to pursue career and education research. Students will be assisted in discovering possible vocational opportunities.





Grade 10

PROGRAM OVERVIEW

Grade 10 Program Overview

ENGLISH 10

Working in a collaborative, inquiry-based, student-centred environment, students continue to develop their writing, speaking, listening, and reading skills. In following with the development of the new BC Ministry of Education English Language Arts curriculum, students in Grade 10 will fulfill the curricular and core competencies as outlined in the courses Composition 10 and Literary Studies 10. Composition 10 is designed to support students in their development of written communication through a critical process of questioning, exploring, and sampling.

Literary Studies 10 allows students to delve deeply into literature in general. Overall, students will develop their analytical and critical thinking skills and be able to communicate those through class discussions and written samples. Students use a variety of oral, written, visual, and digital texts throughout the course, which serve as a basis for synthetic analysis writing. Typically, these texts include a minimum of two novels, one Shakespearean play (*Macbeth*), and a selection of poetry, non-fiction texts, and short stories. Students refine their oral communication skills by participating in cross-examination debates in class, and by creating and presenting individual pieces for the Southridge School Speech Day. Students also continue to participate in the Accelerated Reader program by reading at least three independent titles, or by continuing in the points program.

SOCIAL STUDIES 10

Social Studies 10 is a focus on Canada and the world from 1914 to the present. The course looks at the big ideas that transformed this era: regional and global conflict; the fight for rights and autonomy; and the development of our political institutions. The Canadian system of government and the electoral system are studied and is complimented with a visit to the provincial legislature in Victoria. The theme of Canada's emergence as a country is examined through its participation in the world wars and in the post-war era. Additional issues of Canadian identity including, French-English relations, the emergence of aboriginal and women's rights, and the Charter

of Rights and Freedoms are also examined. Students will continue to enrich their skills in many areas, including writing, examining and analyzing documents, and discussing the issues within the Harkness philosophy.

FOUNDATIONS AND PRE-CALCULUS MATHEMATICS 10

The focus of this course will be on developing the following curricula competencies: reasoning, and analyzing, understanding and solving, communicating and representing, and connecting and reflecting. This will be achieved by studying surface area, volume, trigonometry, exponents, irrational numbers, polynomials, factoring, relations, experimental probability, financial literacy and linear functions and systems. Problem solving is a major focus of the course and is integrated throughout the curriculum.

BIOLOGY 10

Biology 10 offers students an opportunity to discover and explore the fundamental basis of the diversity of all living things. Topics include the structure and function of DNA, patterns of inheritance, natural versus artificial selection and numerous applications of genetics. While learning this, students will evaluate the various points of view that exist surrounding current advances in biotechnology. Understanding how genes are the foundation for the diversity of living things offers a great platform for discussions on ethical and controversial issues, and a reflection on how societies around the world approach scientific research.

CHEMISTRY 10

In Chemistry 10, students will learn about chemical processes and their uses. In particular, they will study the rearrangements of atoms in chemical reactions, the law of conservation of mass, and the energy change during chemical reactions, and acids and bases. Students will be planning and conducting experiments and participating in discussions on data analysis and evaluating their investigation methods.

EARTH SCIENCE 10

How did the universe form? What are the components of the solar system we are a part of? What are stars and how do we classify them? These questions, and others, are what Earth Science 10 students try and seek answers to through a variety of assessments and activities. Outer space is a topic that includes intriguing entities and fascinating theories that foster rich discussion. The highlight of this unit is a visit from the Planetarium's Starlab which allows students to experience outer space while inside a transportable bubble.

PHYSICS 10

The big idea of physics in Grade 10 is the impact of energy conservation. This is explored through a variety of activities such as the transfer of mechanical energy on a roller coaster track and determining how much energy it takes to heat up various materials. There is also a focus on nuclear energy, both fission and fusion, and how atoms decay releasing energy. Students will engage in discussions regarding energy conservation and efficiency and the impact on the future of society. Students will also put their design skills to the test to build a car that uses an alternative power source.

FRENCH 10

Students continue to communicate in the present, past and future tenses. In order to describe events in the past, the imparfait is added to their repertoire. They also learn how to avoid repetitions by using object pronouns and they are exposed to a few conditional forms. They continue to hone their speaking skills in daily class discussions as they share stories, negotiate meaning, and engage in spontaneous conversations. Students read and watch a variety of creative works and explore cultural differences. The themes discussed in this course include interior decorating, Canadian facts and trivia, employment as well as film-making and movies.

ACCELERATED FRENCH 10

Students interact in French to situations drawn from real life. They learn how to express themselves using a variety of vocabulary, expressions, phrases and verb tenses. The future tense, the conditional, the plus-que-parfait and some subjunctive are added to their repertoire. There is a strong emphasis on reading and listening to a variety of creative works, particularly short fiction and magazine articles. In Voyages 1, the themes which students discuss are ethnic foods, childhood, memories, stress and cultural festivals.

SPANISH 10

This course is the continuation of Spanish 9. Structures and skills previously introduced are reinforced and expanded upon. Students learn the past and the future tense as well as some object pronouns. They are expected to study more advanced reading materials including some Latin American and Spanish legends and authentic documents from magazines and from the Internet. More emphasis is placed on learning how to write short paragraphs expressing opinions and preferences and relating personal events in the present, past and future. They are also expected to further develop their oral skills.

ART STUDIO 10

Exploring and creating, reasoning and reflecting, communicating and documenting, connecting and expanding, students build on learning from Art 9. At this level, students are challenged to create in a range of visual styles including realistic representations, innovative and stylized works and abstract art. As students become more independent and comfortable with materials, they are expected to complete and present finished works of original art. Personal motivation to extend and refine skills is not only the focus at this level but also a requirement for continued studies in the senior years. Students are encouraged and directed to see the studio as a place to work outside of scheduled classroom lessons and work independently in their visual journal.

DRAMA 10

Drama 10 allows students to further explore their knowledge of theatre history and improve their performance skills in a creative and interactive program. Units of study may include improvisation, physical theatre, world theatre, acting for the camera, storytelling, monologue studies and One Act plays for performance in an adjudicated festival. The emphasis is on enhancing performance skills, including public speaking. Harkness focussed reflections and analyses, formulate the theory portion of this course. Participation in the major school production is not expected. This course will be offered in conjunction with Theatre Performance 11 and 12.

THEATRE COMPANY 10

This introductory performance course requires a high level of motivation, enthusiasm, and interest in the dramatic arts. Participation in the major school production of the year is expected. Students enrolling in this course should not apply for a student exchange in the second term as this will conflict with performance dates. This course allows students to begin to explore a variety of dramatic forms and theatre styles to expand and further their learning as they specialize in areas of interest (performance and production). Units of study will correlate with the major production and will include: improvisation, physical theatre, voice production, musical theatre, mask studies, monologue study and one act plays in performance. The emphasis is on improving performance skills; however, character analysis and reflection, play analysis and Harkness style reviews, comprise the theory portion of this course.

INSTRUMENTAL MUSIC 10

Grade 10 students form the first of three grades that comprise the most significant performing ensemble at Southridge School, the Senior Concert Band. In addition to each of the Music Department concerts, this group performs at all major school events, such as the Remembrance Day service and Graduation. A high level of musical literacy is expected, as is a strong grounding in the technical aspects of playing

a woodwind, brass or percussion instrument. For those interested in playing in a jazz band, two of five classes each cycle are devoted to rehearsing the Grade 10 Jazz Ensemble.

During spring break, two international tours are offered on a three-year rotation. The Senior Concert Band travels to Italy, starting in Venice and wrapping up in Rome, performing at schools and ancient churches en route. The Senior Jazz Band and Vocal Ensemble spend a glorious week in sunny Cuba, absorbing the warmth of the Cuban culture, people and sunshine, and enjoying making music where listeners love to dance along! Because both the co-curricular senior jazz groups and the senior band are made up of students in Grades 10, 11, & 12, this means that all students, should they desire, have an opportunity to attend both tours. Off-timetable, students may challenge themselves vocally or instrumentally in the choir, the senior vocal ensemble (auditioned) and the Brass Choir.

INSTRUMENTAL JAZZ 10

This course follows Jazz Studies 9. Students expand on their improvisation skills and implement them in performance as an ensemble. The course consists of listening (recordings brought to class by the teacher and the students), discussion, and, most importantly, performance in and outside of school. As an ensemble there are exciting opportunities for students to govern much of the course direction, including bringing in their own repertoire to perform as a group, presenting any recordings they may come across, and choosing the makeup of the ensemble. In their final term, students create their own compositions which are performed by the group. Students also participate in a studio recording session towards the end of the year. N.B. This course must be taken concurrently with Band 10. Except with permission, it may not be taken in isolation.



Citizens of Southridge

MA VOL



Foundations and Pre-calculus
Mathematics 10

SOUTHRIDGE
OMNIS ANIMA VOLET

Grade 10 continued...

MEDIA ARTS 10

Media Arts 10 is a cross-disciplinary arts course, touching upon elements of visual arts, drama, creative writing, and technology. Through the production process, students will further develop their understanding of narrative, design, techniques and technology, as well as communication, collaboration, and project-management. In film, topics such as cinematography and directing are examined in detail through the creation of short, high-quality projects. In animation, students will apply and develop their skills to create short animations. Throughout the course, students will examine influential works and are also encouraged to share their unique voices throughout the creative process. Additional topics include multimedia compositing and sound design.

PHYSICAL & HEALTH EDUCATION 10

The Grade 10 curriculum will continue to build on both physical literacy skills along with an emphasis on active living. The healthy living component will now be implemented into the PHE curriculum. This includes understanding the factors that influence our health and empowers us to take action to improve it. In addition, the curriculum explores how healthy choices influence, and are influenced by, our physical, emotional, and mental well-being.

CAREER EDUCATION 10: CAREER LIFE EDUCATION

The aim of this course is to enable students to develop the skills necessary to become self-directed individuals who set goals, make thoughtful decisions and take responsibility for pursuing their career and educational goals throughout life. Through assessment and evaluation, students will begin to use personal networking and marketing strategies to promote themselves. They will begin to identify and explore local-to-global career and labour market information to make potential career and life decisions. Guidance with Grade 11 & 12 course selections in preparation for post-secondary studies will be provided. At the conclusion of this course, students may apply, and have an opportunity to be considered for a 30 hour summer work experience placement program.





Grade
11
PROGRAM OVERVIEW

Grade 11 Program Overview

ENGLISH 11

Working in a collaborative, inquiry-based, student-centred environment, students continue to develop their writing, speaking, listening, and reading skills with a goal towards the academic writing practices and skills required in a post secondary setting. Students use a variety of oral, written, visual, and digital texts throughout the course, which serve as a basis for synthetic analysis writing. Typically, these texts include a minimum of two novels, one Shakespearean play (*Othello*), and a selection of poetry, non-fiction texts, and short stories. Students refine their oral communication skills by participating in cross-examination debates in class, and by creating and presenting individual pieces for the Southridge School Speech Day.

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

English 11 (AP): AP Language and Composition offers Grade 11 students an opportunity to explore the craft of writing by analyzing the use of rhetoric in a wide variety of literary and non-fiction texts. It is an academically rigorous course, which encourages students to consider language as a persuasive tool and to think deeply about the dynamic relationship that exists between writer, context, audience and argument. Students who register for this course will write the Advanced Placement English Language & Composition examination in May. In addition, this course covers all the learning outcomes for English 11. Students must consult with their English teacher and English Department Curriculum Leader before registering in this course.

FOUNDATIONS OF MATHEMATICS 11

The “Foundations of Mathematics” program is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. Topics include proportional reasoning, 2D and 3D objects, volume, surface area, trigonometry, reasoning, analysis of puzzles and games, statistics, normal distributions, confidence intervals, systems of linear inequalities in two variables and quadratic functions. Problem solving is a major focus of the course and is integrated throughout the curriculum.

PRE-CALCULUS 11

The “Pre-Calculus” program is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus. Topics include sequences and series, trigonometry, quadratic functions and equations, rational and radical expressions and equations, absolute value and reciprocal functions, systems of equations and inequalities, and linear and quadratic inequalities. Problem solving is a major focus of the course and is integrated throughout the curriculum.

Grade 11 continued...

LIFE SCIENCES 11 (BIOLOGY 11)

How do viruses affect living organisms? How did we evolve to our present form? How are organisms classified and what is the basis for it? How do cells become specialized? In Life Sciences 11, students will seek to answer these questions as they study various units related to characteristics of living things. Students will do a variety of activities in which they can learn the practical skills of observation, design, and analysis. The final assessment for this course is a practical lab exam, as opposed to a written test.

LIFE SCIENCES 11 HONOURS

This course is the first year of the two-year Biology AP program. The AP topics that are covered, diverge from the regular Life Sciences 11 curriculum, and are covered in much greater depth of understanding. This, coupled with the regular provincial Life Sciences 11 content, makes for a very fast paced and intensive course, and for that reason a minimum 86% in Science 10 is mandatory. The emphasis of this course is on enduring conceptual understandings; using inquiry based learning to support the concepts. Students develop scientific literacy through reading primary literature and analyzing case studies. There is a strong lab component with an emphasis on science practices such as lab design, collecting and analyzing data, making predictions, applying mathematical routines, and connecting concepts across domains. Topics covered include molecular biology, genetics, evolution and diversity.

CHEMISTRY 11

Chemistry 11 is challenging, enjoyable, and requires hard work. This course involves problem solving that requires a good set of math skills. Students learn to design procedures and conduct labs to solve problems. They also learn to develop theories by interpreting data. A highlight of the course is the participation in the National Crystal Growing Competition. Topics include measurement, atoms, molecules and ions, mole concept, stoichiometry, chemical reactions, atomic theory, solution chemistry and organic chemistry.

CHEMISTRY 11 HONOURS

This course is the first year of the two-year Chemistry AP program. It is geared for independent learners who thrive in a fast-paced environment. Students must have at least an 86% in Math 10 and in Science 10 to be eligible for this course. The course encompasses the entire provincial Chemistry 11 curriculum and additional topics. All topics are covered to the AP level of understanding. Students who do not wish to continue in the AP program will have met all the learning outcomes to take Chemistry 12 next year instead of Chemistry 12 AP.

PHYSICS 11

Physics 11 begins with kinematics, the study of motion, and dynamics, the study of force. They are examined with an emphasis on describing what goes on in the real world, both quantitatively and qualitatively. A similar approach is applied to the study of work, energy and power, as well as to electric circuits. All of these topics are viewed from a classical physics approach, although alternative, more modern models are briefly introduced where appropriate. During the latter part of the year, aspects of modern physics are investigated as students are introduced to Einstein's Theory of Special Relativity and quantum mechanics.

AP PHYSICS 1

The advanced placement physics program is a two-course, two-year program which begins in Grade 11. AP Physics 1 is the equivalent of a first-semester college course in algebra-based physics. The course covers one and two-dimensional Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound; and introduces electric circuits. AP Physics 2, taken in Grade 12, completes the equivalent of a first-year college course.

FRENCH 11

During daily discussions, students interact in French within situations drawn from real life. They continue to practice telling and responding to stories, to engage in spontaneous conversations and to negotiate meaning. They gain confidence explaining and justifying their opinions as well as exploring different points of view. They learn how to express themselves using a variety of vocabulary, expressions, phrases and verb tenses. The future tense and the conditional are added to their repertoire. There is a strong emphasis on reading and listening to a variety of creative works, particularly short fiction and magazine articles. Students are exposed to the themes of ethnic foods, childhood memories, advertising, stress and cultural festivals.

SPANISH 11/12

Students are challenged to learn various linguistic elements of the Spanish language through various themes and readings. In the first part of this course, emphasis is placed on review of the present and past tenses and the acquisition of the future and conditional tenses through a combination of readings and themes like outdoor activities and traveling. In the latter part of the course students read a variety of short stories, newspaper and magazine articles as well as literary excerpts. They discuss the readings both orally and in writing using varied vocabulary and sentence structures. They broaden their skills relating events, situations or experiences and exchanging opinions and preferences. They also fine tune their composition writing skills. Through legends and other cultural texts they gain knowledge of some of the customs and cultures of the Spanish speaking world. Students learn the present and past perfect tenses, as well as the subjunctive tense in the second half of the course.

ART FOUNDATIONS 11

Exploring and creating, reasoning and reflecting, communicating and documenting, connecting and expanding, students build on learning from Art 10. Applying and extending technical and aesthetic foundations learned in earlier grades, this level requires students to design and complete artwork that shows practised and confident use of materials and processes, as they work through more complex concepts in image development. A development of personal style or signature with respect to original and personally meaningful images is highly encouraged at this level. Many students going on to the next grade level are beginning to build portfolios that may be used for post-secondary admission. This course is the pre-requisite for Art Foundations 12.

MEDIA ARTS 11

Media Arts 11 is a cross-disciplinary arts course, touching upon elements of visual arts, drama, creative writing, and technology. The goal of Media Arts 11 is to ultimately create professional-grade products that have the potential to impact a wide audience and share the unique voices of the creators. In film, areas of study moving toward this goal include advanced skills in directing, cinematography, and production design. In animation, students will further develop their skills and understanding, introducing new techniques and processes to their toolkits. Students in this course have access and choice between an increasingly advanced selection of equipment. Influential works continue to be examined for their thematic and technical insight. Additional topics may include multiple medias and visual effects. At the end of the year, students are also given the option to create reels of their best work to aid with post-secondary admissions portfolios and other potential opportunities in the field. This course is a pre-requisite for Media Arts 12.

THEATRE COMPANY 11

Theatre Company 11 allows theatre enthusiasts to explore a variety of dramatic forms and theatre styles to expand and further their learning, as they specialize in areas of interest (performance and production). A high level of motivation, enthusiasm, skill and interest in the dramatic arts is required to achieve success in this course. Participation in the major school production of the year is expected. Units of study will correlate with the major production and may include: improvisation, physical theatre, voice production, musical theatre, mask studies, monologue study and one act plays for performance. The emphasis is on improving performance skills; however, character analysis and reflection, acting methodologies, Harkness style play analysis and play reviews comprise the theory portion of this course. Students enrolling in this course should not apply for a student exchange in the second term as this will conflict with performance dates.

THEATRE PERFORMANCE 11

Theatre Performance 11 allows students to further explore their knowledge of theatre drama and communication in a creative and interactive program. Units of study may include improvisation, physical theatre, scene study, acting for the camera, monologue studies and One Act plays for performance in an adjudicated festival. The emphasis is on enhancing performance skills, including public speaking. Harkness focused reflections, play and character analysis formulate the theory portion of this course. Participation in the major school production is not expected. This course will be offered in conjunction with Drama 10 and Theatre Performance 12.

CONCERT BAND 11

Grade 11 students form the second of three grades that comprise the most significant performing ensemble at Southridge School, the Senior Concert Band. In addition to each of the Music Department concerts, this group performs at all major school events, such as the Remembrance Day service and Graduation. A high level of musical literacy is expected, as is a strong grounding in the technical aspects of playing a woodwind, brass or percussion instrument. Grade 11 students are expected to play a leadership role in their various sections: flutes, clarinets, saxophones, etc. Off-timetable, students may challenge themselves vocally or instrumentally in the choir, the senior vocal ensemble (auditioned) and the Brass Choir or Senior Jazz Ensemble. The vocal groups meet at lunchtime, while the Brass Choir and Senior Jazz Ensemble meet after school, on Mondays and Wednesdays. During spring break, two international tours are offered on a three-year rotation. The Senior Concert Band travels to Italy, starting in Venice and wrapping up in Rome, performing at schools and ancient churches en route. The Senior Jazz Band and Vocal Ensemble spend a glorious week in sunny Cuba, absorbing the warmth of the Cuban culture, people and sunshine, and enjoying making music where listeners love to dance along! Because both the co-curricular senior jazz groups and the senior band are made up of students in Grades 10, 11, & 12, this means that all students, should they desire, have an opportunity to attend both tours.

ACTIVE LIVING 11

The focus of the Grade 11 PHE curriculum is about finding enjoyable activities that can motivate people to participate more regularly in physical activity. Other components that will be reinforced are that preparation and organization can help students to engage more regularly in physical activity. This course will ensure that students will learn to safely participate in activities to avoid injuries which will sustain lifelong physical activity.

FITNESS AND CONDITIONING 11

This course is designed to understand the principles of training by developing appropriate exercise techniques for a variety of fitness activities. It will help students create and implement a personalized fitness program, identify and describe how different types of fitness activities influence the muscular system and the cardiovascular system. This course will apply safety practices in different types of fitness activities, for self and others and how it effects of different types of fitness activities on the body. There will be a components of resistance training, cardiovascular endurance, and flexibility. Also discussed will be the influences of food choices and eating patterns on physical performance.

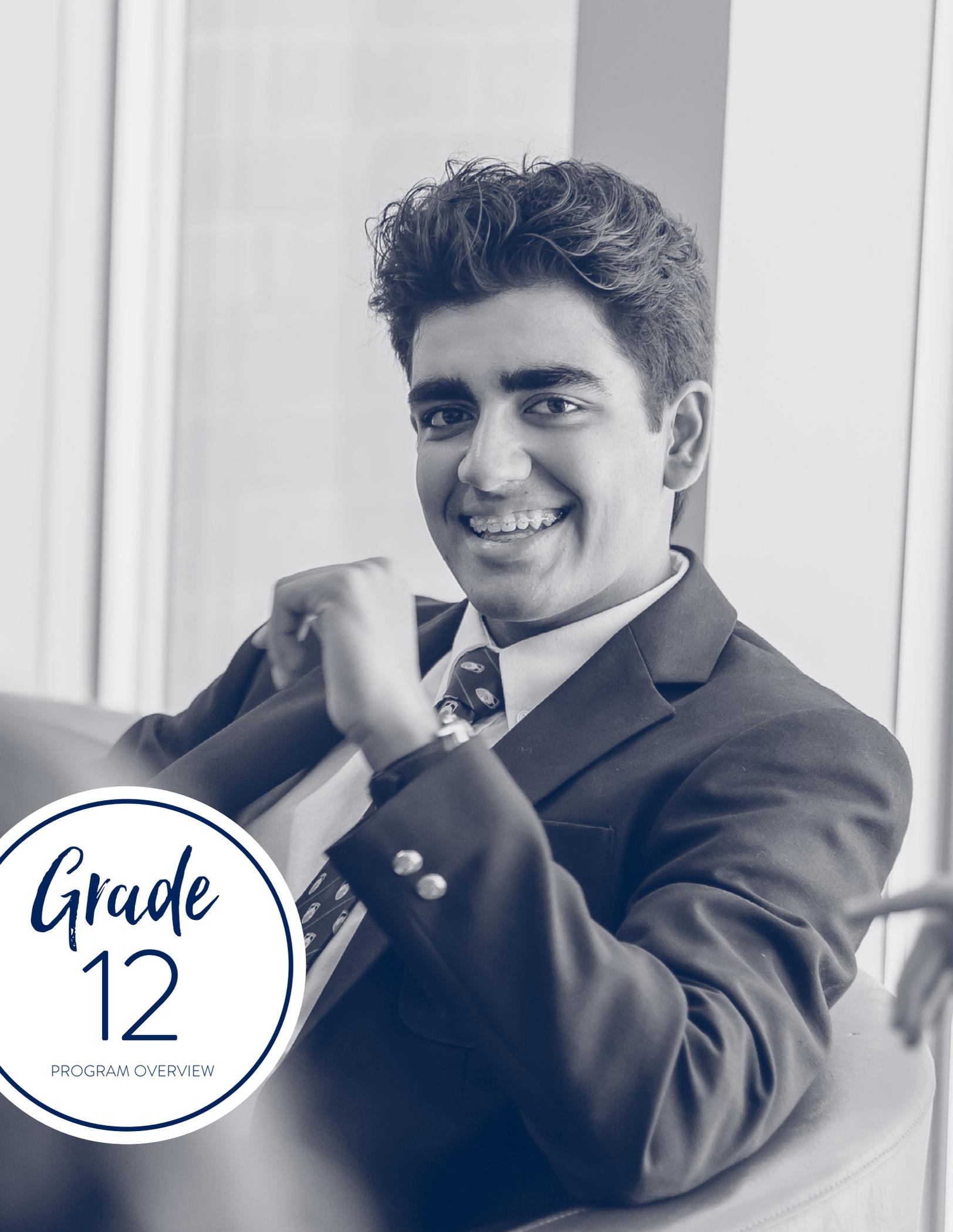
COMPUTER INFORMATION SYSTEMS 11

In this course, students use a variety of types of software to solve problems, write software code, edit digital images, and create new media and web content. Computer programming is introduced, and students write, test, and debug their own simple programs in the context of the design process. These programming concepts are built upon in Computer Programming 12, and are a major asset to those going on to pursue a career in computer-related fields. Students also learn how to use the internet as an effective research tool, and how to manage their online and network safety and security (viruses/malware, privacy and cryptography). Students also learn how to use Adobe Creative Suite® to a basic level of proficiency for designing and creating web pages, web media content, editing digital images, and creating Flash® animations.

CAREER EDUCATION 11: CAREER LIFE CONNECTIONS

This course builds on the career and education exploration completed in Grades 8, 9 & 10 and provides understanding that personal development awareness, self-assessment and preparation are needed to achieve post-secondary goals. This cultivation of interpersonal, intercultural, collaborative and social skills will assist in building a “vocational identity”. Students will have an opportunity to test-out a variety of career and/or volunteer opportunities. They will also be introduced to financial literacy and planning with an emphasis on how to form a budget that supports post-secondary goals.

At the conclusion of this course, students may apply and have an opportunity to be considered for a 30 hour summer work experience placement program.



Grade
12
PROGRAM OVERVIEW

Grade 12 Program Overview

ENGLISH 12

Working in a collaborative, inquiry-based, student-centred environment, students continue to develop their writing, speaking, listening, and reading skills with a goal towards the academic writing practices and skills required in a post secondary setting. Students explore a variety of oral, written, visual, and digital texts throughout the course, which serve as a basis for synthetic analysis writing and prepare students for the provincial examination administered in the spring. Typically, texts include a minimum of two novels, one Shakespearean play (Hamlet or King Lear), and a selection of poetry, non-fiction texts, and short stories. Students refine their oral communication skills by participating in cross-examination debates in class, and by creating and presenting individual pieces for the Southridge School Speech Day. Additional focus for English 12 is on development of the academic research and citation skills required in a postsecondary setting.

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

English 12 (AP): AP English Literature offers Grade 12 students an opportunity to delve deeply into the exploration of literature. It is an academically rigorous course, which engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. Course material draws largely from a survey of English Literature from the 16th to the 21st century, with a foundation of texts in the literary canon leading to an exploration of contemporary texts. Students who register for this course will write the Advanced Placement English Literature examination in May. This course covers all learning outcomes for English 12 and prepares them for the provincial examination in April. Students must consult with their English teacher and English Department Curriculum Leader before registering in this course.

ENGLISH 12: JOURNALISM

English 12: Journalism is an English course that will examine writing through the lens of mass media. In this course, students will be provided with the necessary tools and skills to look at the world with a journalistic lens, free from bias and with an added emphasis on clarity and precision. Students will enhance research skills as they learn to access and acquire information prior to writing, and they will develop oral communication skills specific to the field of journalism through field studies and interviews. Students will also develop and contribute to a sense of community as they report on local school events and provide consistent coverage of the events and topical issues that exemplify the identity of our school. To develop visual literacy and communication, students will explore aspects of layout and photojournalism. This course covers all learning outcomes for English 12 and prepares them for the provincial examination in April. Students must consult with their English teacher and English Department Curriculum Leader before registering in this course.

ENGLISH 12: WRITING

English 12: Writing is designed for students who are interested in creating a body of work reflective of a sophisticated breadth and depth of skill. The course provides students with opportunities to specialize and publish in real-world contexts. Students engage in the exploration of personal and cultural identities, memories, and stories, in a wide range of genres. Within a supportive community, students will collaborate and develop their skills through writing and design processes, celebrating successes. Students will refine their ability to write in complex, controlled styles with effectiveness and impact. This course covers all learning outcomes for English 12 and prepares them for the provincial examination in April. Students must consult with their English teacher and English Department Curriculum Leader before registering in this course.



HISTORY 12

Students in History 12 concentrate on global events that have occurred between 1919 and 1991. First, students investigate the results of World War I and the growing strength of communist ideology. Secondly, they learn about the prosperity of the 1920s, the hardships of the Great Depression and the rise of communism and fascism in Europe. Thirdly, students explore the seeds of World War II and the horror inflicted on humanity by men such as Mussolini and Hitler. In addition to learning the facts about the war, students discover various political systems and the effects of technology on warfare. The postwar era (1945-1963) is the focus of the fourth unit. The tensions between democratic and communist countries during this era in history will be studied in detail. The social changes of the '60s, conflicts in Asia and the Middle East and the implications of computer technology are topics that fill the final unit of the year. History 12 students, besides acquiring knowledge of past events, further develop research and historical writing skills that they have been learning throughout their years in Social Studies.

PHILOSOPHY 12

Philosophy is a discipline that examines the fundamental nature of knowledge, reality and existence. In this course, students will be provided with the necessary tools and skills to look at different ways of thought and understanding. By using the philosophical inquiry processes and reasoning skills to respond to arguments and questions related to major issues in philosophy, students will be better prepared to question their own assumptions and beliefs. As a result, students will be able to better understand other perspectives and ways of thinking. Theories of justice and freedom, morality and ethics, and other theories that may conflict or complement each other will be examined throughout the year.

ADVANCED PLACEMENT EUROPEAN HISTORY

AP European History is a survey course that examines modern European History from 1450 to the present. It is an exciting and challenging course for motivated students who want to

learn about the events and ideas that have contributed to the basis of western society. Events and movements are explored through three themes: intellectual and cultural history, political and diplomatic history, and social and economic history. In addition students develop their ability to express their historical understanding in writing. A firm grounding in the strengths and weaknesses of modern Europe prepares students to study history at the postsecondary level.

ADVANCED PLACEMENT HUMAN GEOGRAPHY

This is a full year AP Human Geography course designed to achieve a college introductory level human geography credit. The course follows the recommended units of study as outlined in the College Board AP Human Geography course description, to help students use spatial concepts and landscape analysis to examine the world in which we live. Topics such as population, migration, cities, religion, agricultures, politics and economic development are investigated.

ECONOMICS 12

Economics is the study of how households, individuals, firms, governments, and other types of human society choose to allocate and manage resources in a world of scarcity. The central focus of this introductory course is how and why markets (one important mechanism for allocating scarce resources) work, why they may fail to work, and the implications for social policy of both their successes and failures.

Students learn to think like an economist, which involves identifying and evaluating trade offs in the context of constraints, distinguishing positive from normative analysis, and tracing behavioural implications of change while abstracting from aspects of reality. They learn how to use data, graphs, and models to evaluate economic events, and how consumers and producers make choices. Finally, students learn how to examine many problems through a filter of efficiency vs. equality. Current events are sometimes analyzed in the course, where concepts and models students have learned are applied to real-world situations.

ADVANCED PLACEMENT MICROECONOMICS

The AP course in Microeconomics is for students interested in college or university-level work in microeconomics and/or gaining advanced postsecondary standing. Microeconomics is a branch of economics that studies the behaviour of how individual modern households and firms make decisions to allocate limited resources. In this course students examine how these decisions and behaviours affect the supply and demand for goods and services, which determines prices, and how prices, in turn, determine the production and availability of goods and services. Major topics include the nature of functions of product markets, factor markets and efficiency, equity, and the role of government.

LAW 12

In this course, students not only learn the basics of law in Canada, but also delve deeper into the legal system and truly understand the role of law in society and how it affects us on a daily basis. The study of law helps students understand their legal rights and responsibilities as Canadian citizens. In addition, the course helps foster critical thinking skills as students interpret many facets of the law, especially engaging in case studies based on actual cases and court trials. Through many discussions and presentations, students gain a tremendous grasp of the Canadian legal system.

FOUNDATIONS OF MATHEMATICS 12

The “Foundations of Mathematics” program is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. Topics include financial mathematics, logic, probability, permutations, combinations and polynomial, trigonometric, exponential and logarithmic functions. Problem solving is a major focus of the course and is integrated throughout the curriculum.

PRE-CALCULUS MATHEMATICS 12

The “Pre-Calculus Mathematics” program is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus. Topics include transformations, trigonometry, logarithms, polynomial, rational, radical, inverse and exponential functions, permutations, combinations and the binomial theorem. Problem solving is a major focus of the course and is integrated throughout the curriculum.

CALCULUS

Calculus is the study of change and embraces a truly fascinating set of topics ranging from rates of change and optimization to applications of mathematical modelling with physical, social and economic situations. Limits, derivatives, summation and integrals are examined closely and applied to the mathematical functions studied in Pre-Calculus 11 and 12. Students planning to study mathematics at university are strongly encouraged to study calculus while in high school. There are three options of calculus available for students to choose from.

CALCULUS 12

This course is a provincially based calculus course with outcomes prescribed by the Ministry of Education. Topics studied include advanced functions and number operations, limits, the derivative, differentiation techniques, logarithmic, exponential and inverse trigonometric functions, applications of the derivative, integration, area under a curve, solving first order differential equations, and the history of calculus. Students cover topics similar to those in AP Calculus AB (outlined below), but at a slower pace and in less depth. There is no provincial or other external examination for this course. Evaluation is based entirely on in-school assessments.

Prerequisite: “B” standing or better in Pre-Calculus 11

Co-Requisite: Pre-Calculus 12

ADVANCED PLACEMENT CALCULUS (AB)

AP Calculus 12 AB is a university level course. Topics studied include limits, continuity, the derivative, exponential, logarithmic and inverse trigonometric functions, integration, area between curves, differential equations, slope fields, and applications of differentiation and integration. This course has an external examination in May that is marked on a five point scale. Students scoring a “4” or “5” on this examination can usually obtain advanced placement in their mathematics studies at university.

Prerequisite: 80% or better in Pre-Calculus 11 or permission of Mathematics department.

Co-Requisite: Pre-Calculus 12

ADVANCED PLACEMENT CALCULUS (BC)

AP Calculus 12 BC is a rigorous university level course designed for the most capable mathematics students. AP Calculus BC contains all of the topics in AP Calculus AB, plus a third more content. These topics include series, tests for convergence, Maclaurin and Taylor polynomials and approximations, improper integrals, l'Hopital's rule, calculus of parametric, polar and vector functions, Euler's Method and advanced integration techniques. This course has an external examination in May that is marked on a five point scale. Students scoring a “4” or “5” on this examination can usually obtain advanced placement in their mathematics studies at university.

Prerequisite: Completion of Pre-Calculus 12 with an “A” standing is recommended. Strong, motivated students who have completed Pre-Calculus 11 only may also be considered, but require the permission of the mathematics curriculum leader.

ANATOMY & PHYSIOLOGY 12 (BIOLOGY 12)

In Anatomy & Physiology 12, students focus on human biology with an over-arching theme of maintenance homeostasis. Major topics of cell biology, biochemistry and body systems provide students with a solid understanding of human anatomy and physiology. Students can perform DNA electrophoresis, urine analysis, enzyme catalysis and dissect a cow's heart and foetal pig. These key lab experiences give students a practical understanding of the scientific process, and the human body. They also have opportunities to discuss and evaluate topics in Biology, such as the social and ethical implications of genetic disorders, or the critical analysis of the claims of energy drinks. If a student wants to take Anatomy and Physiology 12 in their Grade 11 year, they must have 86% or better in Science 10 to be prepared for the rigour of the course.

ADVANCED PLACEMENT BIOLOGY

This course is the second year of the two-year AP Biology program. The successful completion of Biology 11 Honours is mandatory to enrol in AP Biology. The emphasis of this course is on enduring conceptual understandings, using inquiry based learning to support the concepts. Students develop scientific literacy, reading primary literature and analyzing case studies. There is a strong lab component with an emphasis on scientific practices such as lab design, collecting and analyzing data, making predictions, applying mathematical routines, and connecting concepts across domains. Topics covered include cellular biochemistry, the form and function of plants and animals, and ecology. Students are prepared to write the AP Exam in May.

CHEMISTRY 12

Students who wish to pursue a career in science must be excellent researchers, problem solvers and communicators. The Chemistry 12 curriculum helps students fulfill all three of these requirements. Students will engage in writing research papers, collect data in the field, and use technology to analyze their data within their water project. Chemistry topics covered are kinetics, equilibrium, solubility, acids and bases, and electrochemistry. Students will design their own procedures, work collaboratively to build their understanding of topics, and do independent research to investigate a current issue in science. Chemistry 12 is a challenging course that requires good math skills and a desire to gain a deep understanding of science.

GEOLOGY 12

In Geology 12, students will become familiarized with the geologic world. They will study the structure and processes involved in changing the surface of the Earth, the changes that have occurred to the history of life on Earth, how minerals and rocks are resources that drive industry and global economies, and how the Earth's surface features can be represented by different types of maps and models. Students will be given the opportunity to interpret geological situations from both a global and local perspective by

applying their knowledge of geologic processes and considering advances in the technology used by geologists working in the field today. By working to develop their critical thinking and problem solving skills, students will explore such questions as how do scientists know what paleo-environments looked like and what evidence suggests that a supercontinent will form again. A goal of this course is for students to develop an appreciation of their roles as environmental stewards to our unique and fragile planet.

ADVANCED PLACEMENT CHEMISTRY

This course prepares students to write the College Board's AP Chemistry exam. Students who have successfully completed the Chemistry 11 Honours course are eligible to continue with AP Chemistry 12. The pace of this course is rigorous, as the AP exam is in May. The topics covered include: kinetics, equilibrium, solubility, acids and bases, electrochemistry and thermodynamics. Students also learn how to represent and interpret information in graphs. They design procedures and conduct experiments to solve problems and interpret data to make plausible theories.

Prerequisite: Chemistry 11 Honours.

PHYSICS 12

Physics 12 applies kinematics, dynamics, and energy concepts introduced in Grade 11 to two-dimensional motion, including circular motion, torque, and equilibrium. The approach is mathematically rigorous, involving two-dimensional vector analysis of situations. Conceptual understanding of situations and clear communications of physics thinking are also emphasized. The course concludes with a study of electromagnetic force and electromagnetic induction.

ADVANCED PLACEMENT PHYSICS 2

This is the second half of a two-course, two-year program which in total is the equivalent of a first year college course in algebra-based physics. Students must have completed AP Physics 1 in Grade 11 to enroll in this course. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics.

FRENCH 12

Students further develop and apply their full repertoire of language-learning strategies to assist in comprehension and expression. During their daily discussions, they are expected to engage in spontaneous conversations on topics of interest, to support and defend opinions as well as to express doubts, needs and emotions. They research, analyze and use relevant information from several sources on chosen topics to complete authentic tasks. A particular emphasis is placed on spoken and written communication skills. They view, listen to, read and fully understand a variety of creative works, including some short fiction and some French language films. As examples *Le petit Prince* by Saint-Exupéry or an abridged version of *Le tour du monde en 80 jours* may be read and discussed.

AP FRENCH LANGUAGE AND CULTURE

In this course students review and refine all previously learned grammatical structures while building up their vocabulary to communicate orally and in writing. A variety of themes such as family and community, science and technology, beauty and aesthetics and contemporary life will be discussed. Students read newspaper, magazine, and internet articles, as well as French fiction from around the francophone world. The reading component includes *The Miser* by Molière as well as a contemporary novel. Students listen to and watch French news, podcasts and movies and write personal and persuasive essays drawing information from two to three sources. They also practice composing a formal email response. Oral interpersonal and presentational communication and the study of francophone culture are other important components. This course is conducted entirely in French, and culminates with the French Language and Culture AP exam.



ART FOUNDATIONS 12

Exploring and creating, reasoning and reflecting, communicating and documenting, connecting and expanding, students build on learning from Art 11. Students at this level are directed to produce work that reflects personal goals and interests in image-making. Conceptual and thematic investigations and indepth studies are directed to meet individual student needs. The goal is for students to master various materials, processes and concepts that challenge and interests them. Students are expected to build a portfolio of work that is a reflection of a mature, motivated and skilled visual artist. It is an expectation in this course that students are intrinsically motivated to artistically develop and that they are able to approach this course in an advanced and sophisticated manner to produce work of the utmost quality. Art Foundations 11 is a pre-requisite for this course.

CONCERT BAND 12

Grade 12 students form the third of three grades that comprise the most significant performing ensemble at Southridge School, the Senior Concert Band. In addition to each of the Music Department concerts, this group performs at all major school events, such as the Remembrance Day service and full school assemblies. A high level of musical literacy is expected, as is a strong grounding in the technical aspects of playing a woodwind, brass or percussion instrument. Grade 12 students are expected to play a leadership role in their various sections and to exemplify model technique and expert musicianship. During spring break, two international tours are offered on a three-year rotation. The Senior Concert Band travels to Italy, starting in Venice and wrapping up in Rome, performing at schools and ancient churches en route. The Senior Jazz Band and Vocal Ensemble spend a glorious week in sunny Cuba, absorbing the warmth of the Cuban culture, people and sunshine, and enjoying making music where listeners love to dance along! Because both the co-curricular senior jazz groups and the senior band are made up of students in Grades 10, 11, & 12, this means that all students, should they desire, have an opportunity to attend both tours. Off-timetable, students may challenge themselves vocally or instrumentally

in the choir, the senior vocal ensemble (auditioned) and the Brass Choir or Senior Jazz Ensemble. The vocal groups meet at lunchtime, while the Brass Choir and Senior Jazz Ensemble meet after school, on Wednesdays and Mondays.

MEDIA ARTS 12

Media Arts 12 is an advanced, cross-disciplinary arts course. Drawing upon and developing their existing skill set, students will be given the opportunity, for a significant portion of the year, to work independently or as an independent production unit, and select between multiple types of projects and genres according to their interest. Media Arts 12 students are expected to work much more independently than in previous years, be intrinsically motivated, and also complete a solitary project as one of their undertakings. Students are also given opportunities to examine career paths in Media Arts. Students who wish to take the course who have not taken Media Arts 11 need to obtain permission from the instructor.

THEATRE COMPANY 12

Theatre Company 12 further allows students to explore a variety of dramatic forms and theatre styles and take a leadership roles, as they specialize in areas of interest (performance and production). A high level of motivation, enthusiasm, skill and interest in the dramatic arts is required to achieve success in this course. Participation in the major school production of the year is expected. Units of study will correlate with the major production and may include: improvisation, physical theatre, voice production, musical theatre, mask studies, monologue studies and One Act plays for performance at an adjudicated festival. The emphasis is on refining performance skills; however, character analysis and reflection, play analysis and play reviews, comprise the theory portion of this course. Students enrolling in this course should not apply for a student exchange in the second term as this will conflict with performance dates.

THEATRE PERFORMANCE 12

Theatre Performance 12 allows students to fine tune their skills in performance and knowledge of theatre, drama, and oral communication. Units of study may include improvisation, physical theatre, contemporary forms of theatre and various relevant acting styles. Students will have the opportunity to select and direct a One Act Play for an adjudicated festival. Students will be prepared for post secondary study in theatre and will be equipped with presentation and collaboration skills that are an asset in any post secondary environment. Leadership is a key component of this course, as it is offered in conjunction with Theatre Performance 11 and potentially Drama 10. Participation in the major school production is not expected.

ICT: COMPUTER PROGRAMMING 12

This course provides the foundations for students interested in entering computer science courses at post secondary institutions. As well, students interested in pursuing a career in math, engineering, physics and computers would be encouraged to take this course. Students learn to write code for all sorts of applications. The primary language covered is Java. This course is intended to allow students to become skilled problem solvers and critical thinkers. Students learn to apply the principles of effective programming to analyze and solve problems. They become critical and principled creators of solutions in information technology. Successful course participants become members of a collaborative culture. Course work requires them to become skilled readers and writers of documentation associated with programming, as well as to write compiler-ready procedures and methods and to debug programming errors including logic errors.

ACTIVE LIVING 12

The focus of the Grade 12 PHE curriculum is about finding enjoyable activities that can motivate people to participate more regularly in physical activity. Other components that will be reinforced are that preparation and organization can help students to engage more regularly in physical activity. This course will ensure that students will learn to safely participate in activities to avoid injuries which will sustain lifelong physical activity.

FITNESS AND CONDITIONING 12

This course is designed to understand the principles of training by developing appropriate exercise techniques for a variety of fitness activities. It will help students create and implement a personalized fitness program, identify and describe how different types of fitness activities influence the muscular system and the cardiovascular system. This course will apply safety practices in different types of fitness activities, for self and others and how it effects of different types of fitness activities on the body. There will be a components of resistance training, cardiovascular endurance, and flexibility. Also discussed will be the influences of food choices and eating patterns on physical performance.

PORTFOLIO 12 (CAPSTONE)

The primary aim of this course is to assist and support students in their quest to transition successfully to their post-secondary program of choice. The course will be delivered through small group classroom discussions, workshops (application essays & video support, resume and interview skills, budgeting) and a series of individual counselling appointments where progress is monitored, concerns are discussed and actions items are agreed upon. In May, students will be required to participate in a culminating project where they will present their personal learning and achievement, growth in vocational/career understanding and their plans for life after high school.



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