



ST. THOMAS MORE COLLEGIATE
HOME OF THE KNIGHTS SINCE 1960

Course Programming Guide

For Senior Students and their Parents

February 2021

INTRODUCTION

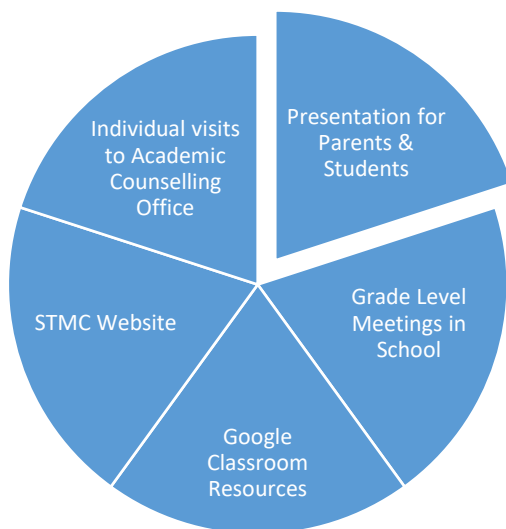
This Course Selection Handbook is intended for our senior students and their parents. When choosing courses, there are four factors which must be considered and are included in this handbook. They are as follows:

1. The **requirements for graduation** as outlined by the Ministry of Education.
2. **STMC's own graduation requirements** and course offerings
3. The **admission requirements** for some local schools such as SFU and UBC.
4. The realities of the **student's academic strengths and abilities**. (I.e. their report card)

IT IS IMPORTANT FOR STUDENTS TO REALIZE THAT THIS HANDBOOK IS ONLY A GUIDE. STUDENTS NEED TO DO THEIR OWN RESEARCH!

COURSE SELECTION: THE PROCESS AT STMC

There are many supports in place to aid students and parents in the Course selection process at STMC. However, it is the student's responsibility to do their own research for their specific post-secondary plans. No single book, resource or counsellor can cover all the possible options.



**Select Courses on
Power School: Deadline
is March 5**

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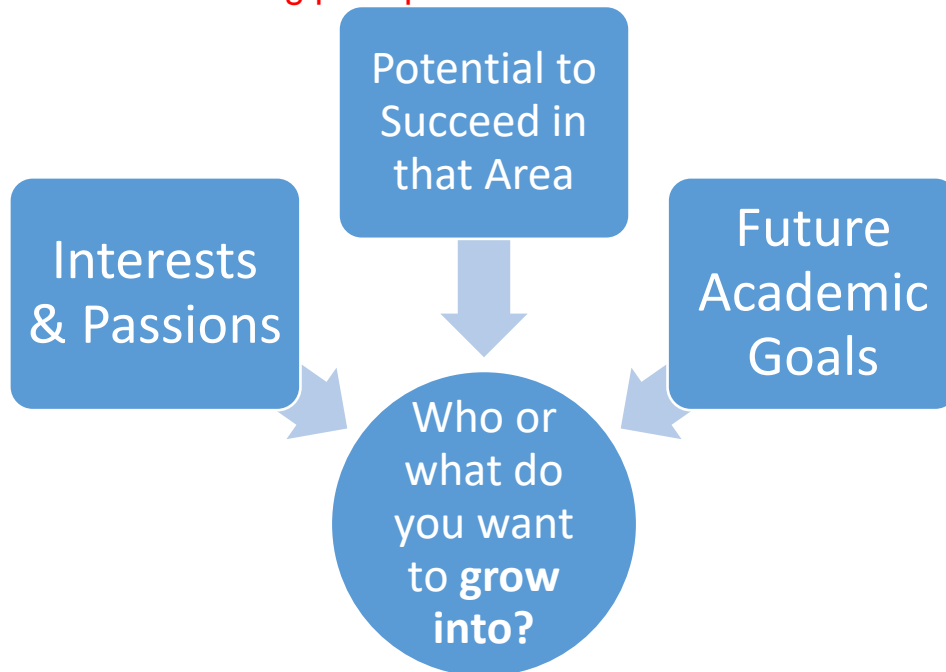
CONTACT INFORMATION for the Academic Counsellors

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PLEASE NOTE:

This Handbook contains only **brief course descriptions**.
Detailed descriptions for all courses offered can be found on the **STMC Website under Programs**.
<https://stthomasmorecollegiate.ca/programs/2020-2021-course-selection/>

Guiding principles in course selection



Where to begin????

1. Most students are not sure about what they want to do in the future. The path a student takes to their final educational and career destination is seldom a straight one. **Don't focus on the end goal; instead, focus on the little steps along the way.**
2. Course selection is a matter of keeping **realistic** options open. One of the best indicators of academic strengths and weaknesses is the student's **Report Card**. A good work ethic can overcome a lot of academic deficiencies, but students must remember that academic demands increase dramatically as they progress through the grades and into university or college. If in doubt, students should **consult their teachers** as they know the student's strengths and weaknesses and know the expectations at the post-secondary level.

Many courses have **prerequisites**. If a student does not have the prerequisite mark or course and still selects the corresponding course, they will be counselled against taking the course unless they have a specific **need** for that course and are prepared to do the **extra work**.

3. Where do their passions lie? Arts or Sciences! Students *should not* choose a heavy load in the sciences because **THEY think that is where the jobs are**. That is a myth that simply is not true. There are just as many jobs available in the Arts. Students should choose courses based on their strengths and passions. If a student can determine whether or not they favor Arts or Sciences, course selection becomes a little easier.

4. Factors to keep in mind during the course selection process. FINDING THE RIGHT FIT

a. Graduation: We require our students to do more than the minimum required for graduation; therefore, **virtually all our students graduate**. This means full course loads in grades 10, 11 and 12. (*Grade 12 students may apply for a study block.*)

b) Planning to attend a local College? Most STMC graduates can virtually guarantee themselves entry into a university transfer program at a local college. The more specific the program is at the college level, the more they must make sure they hit the high school pre-requisites.

The **college route** is a preferred route for many students. Entry requirements are less stringent, classes are smaller and institutions are often closer and cheaper. Credits are fully transferable if the student selects courses wisely. In addition, many BC Colleges offer full degree programs and several have taken on a University designation. (I.e. Kwantlen Polytechnic University, Capilano University and University of the Fraser Valley)

c) Planning to attend a Technical School? Schools like BCIT or Kwantlen Polytechnic have their own specific requirements. Students interested in the trades will be well prepared with their STMC education. Students must do their research.

d) Planning to attend a BC University? A snap shot view of the requirements for UBC and SFU is included in this handbook.

e) Planning to attend Canadian Universities (Outside of BC)? The admission requirements for universities across Canada are too varied to list in any one handbook. For a brief summary of many Canadian institutions, go to the Post-Secondary link in Google Classroom and look for the Canadian University Resource. To be honest, if you meet the requirements for UBC or SFU, there is a very good chance you can get into many schools across the country. <https://cuebc.org/for-students/>

f) Planning to attend an American University or an International School? Students must be proactive here as each school is different. In addition to courses, students will be expected to write a Scholastic Aptitude Test (SAT) or ACT test. For info see your Academic Counsellors or visit the [College Board](#) link. Students should be aware of the high cost associated with going to school in the US.

ALL GRADE 12'S WILL BE ADVISED TO HAVE MORE THAN ONE POST-SECONDARY OPTION AVAILABLE TO THEM AT THE END OF THEIR SENIOR YEAR. THE PROVINCE HAS SO MANY WONDERFUL OPTIONS FOR OUR STUDENTS TO INVESTIGATE!

IT IS ALL ABOUT FINDING THE RIGHT FIT.

Graduation Program Requirements for the BC Ministry and STMC

To graduate from the province of BC, every student in the Graduation Program has to pass certain basic courses in their grade 10, 11 and 12 years. Students must also successfully complete Religion 10, 11 and 12 to graduate from STMC.

SUBJECT AREA	Credits
Career Life Education (Replaces Planning 10)	4
Career Life Connections (Replaces Grad Transitions)	4
English 10	4
English 11	4
English 12	4
a Mathematics 10	4
a Mathematics 11	4
an Arts Education and/or Applied Design, Skills, & Technology 10, 11 or 12	4
Social Studies 10	4
a Social Studies 11 or 12 (See below)	4
Science 10	4
a Science 11 or 12 (See Below)	4
Physical & Health Education 10	4
Total Required Course Credits	52 credits
ELECTIVE CREDITS	
Students must earn at least 28 elective credits from Grade 10-12	
THESE REQUIRED STMC COURSES ALL COUNT as ELECTIVES	
Religion 10	4
Religion 11	4
Religion 12	4
ADDITIONAL ELECTIVES At least 4 courses must be numbered 12. (English 12, Religion 12 plus two more)	16
Total Required Elective Credits	28 credits
OVERALL TOTAL:	80 credits

Students on the current Graduation Program must also successfully complete three **Graduation Assessments**. At this point the Ministry is indicating that these will be written in grade 10 and 12.

- Numeracy Assessment 10** (*Assessing* the ability, willingness, and perseverance to interpret and apply mathematical understanding to solve problems in situations, and to analyze these solutions)
- Literacy Assessment 10 and 12** (*Analyzing and Making Meaning* from Texts, Communication and Understanding of Texts/Making Personal Connections)

Career Education Grad Requirements: At STMC the requirements for these credits will be met through work/assignments done in CLE/CLC blocks and Academic Assemblies.

Socials 11/12 Credit: Students going into grade 11 need to complete a Social Studies credit in either grade 11 or 12 to graduate. The courses listed below will meet that requirement.

- 20th Century World History 12
- Physical Geography 12
- Law Studies 12
- Social Justice/Genocide Studies 12 (Accelerated)
- Economics 12/Economics Theory 12 (Accelerated)

Science 11/12 Credit: The STMC courses listed below meet this requirement.

- Physics 11 or 12
- Chemistry 11 or 12
- Life Science (Bio) 11
- Specialized Science 12 (Astronomy)
- Anatomy/Physiology(Bio) 12

External Learning Credits Students can earn further credits for activities undertaken outside of STMC. For example, students who are involved at a very high level in athletics or the arts or have completed certain courses outside of school may also qualify.

Some examples include, but are not limited to:

Athletic Credits:

- BC Summer or Winter Games (gr. 10 credit)
- Provincial or National Teams
- Coach Credit (such as Run, Jump, Throw Certification)
- Officiating (such as Small Sided Referee in Soccer)
- Bronze Cross Lifesaving Course

Music Credits:

- BC Conservatory of Music

Military Credits:

- Canadian Pacific Region Cadets

Other Credits:

- Driver Education Course (registered through BC, such as ICBC Course)

Grade 10 Course Selection

As the chart on the previous page indicates grade 10's must take the following 8 courses:

English 10	Socials 10	Science 10	PE 10
Religion 10	French 10 (See Below)	Math 10 (See Below)	An elective numbered 10/11/12

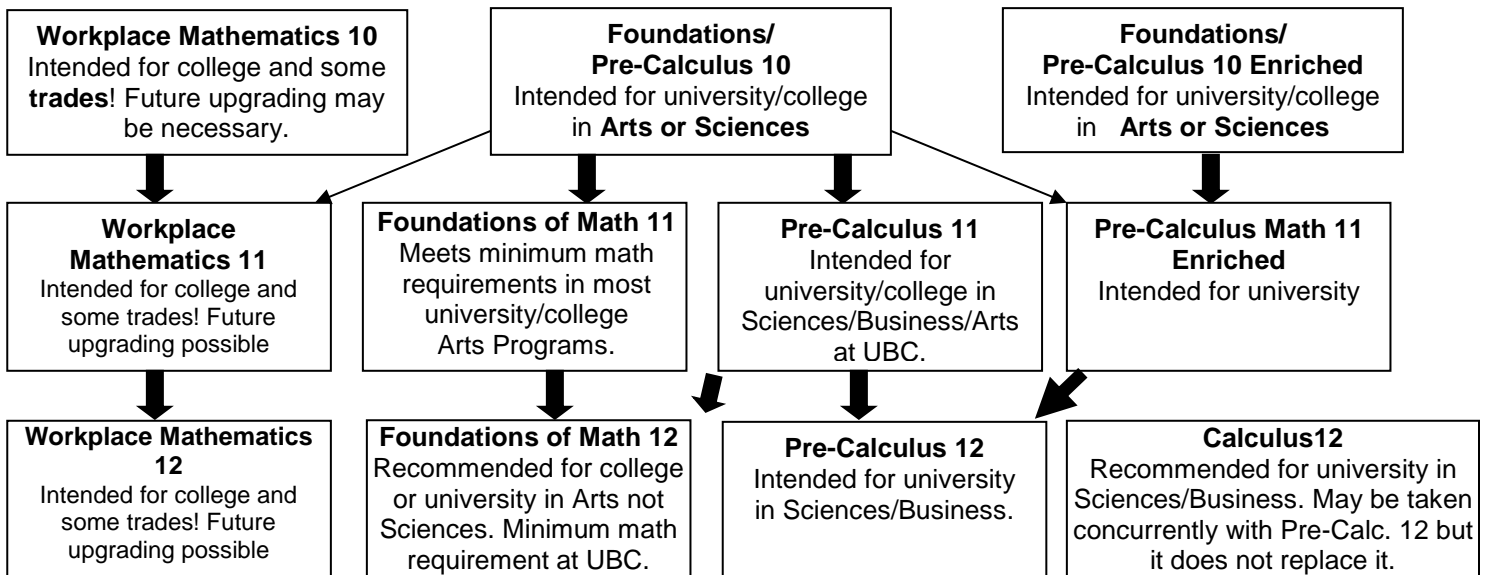
Some Grade 10 students may be in a position to take a higher level course if pre-requisites have been met.

French 10: The majority of students are encouraged to take this course. You can go into virtually any college without this course; however, it should be noted that **French 11 is a basic entry requirement** for many universities in BC including SFU and UBC.

Career Life Education 10 This 4 credit course is a graduation requirement. The course content will be covered within PE, Religion and CLE classes.

The Mathematics 10 Pathways: Students must choose one option

- A. Workplace Mathematics 10:**
 This course meets the Math 10 Graduation requirement and is intended for students heading to one of the local colleges, trade schools, or directly into the workforce. If your mark in Math 9 is in the low 60% range and below, students should talk to their parents, teachers and academic counselors to determine if this is their best option. This course may limit a student’s options at the post-secondary level.
- B. Foundations/Pre-Calculus 10:**
 This course fulfills the Math 10 graduation requirement and keeps options open for post-secondary. If your mark in Math 9 is in the low 60% range and below, students should talk to their parents, teachers and academic counselors to determine if this is their best option.
- C. Foundations/Pre-Calculus 10 Enriched:**
 This course fulfills the Math 10 graduation requirement. Typically students in the Math 9 Enriched pathway will continue in Foundations/Pre-Calculus 10 Enriched. High achieving Math 9 students may be invited by their teachers to consider the Math 10 Enriched course.



Arts Education and/or Applied Design, Skills and Technology Graduation Requirement

The following elective courses fulfill this Graduation Requirement *(To be completed in grades 10, 11, or 12)*

Architectural Design 10	Art Studio 10 (Visual Art)	Choir 10	Band 10
Drama 10	Design, Build, Create 11	Graphic Design 11	Graphic Production 10 (Yearbook)
Guitar Building 11	Robotics 10	Strength & Conditioning 11 (Fitness)	

Outside of Timetable Performing Arts Electives – these courses run before school or after school and also qualify to fulfill Arts Education Graduation Requirement.

Admission to the following courses is by audition. Please see Mr. Shoemaker or Mr. Lui for details.

Chamber Choir 10	Jazz Choir 10	Jazz Band 10
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Grade 11 Course Selection Information

BASIC REQUIREMENTS: In order to meet the graduation requirements of STMC and the Ministry of Education, all students must take the three courses listed below. (4 credits each/12 credits total)

Religion 11

English 11

Career Life Connections 11/12

MATH REQUIREMENTS: Students must pass one Math 11 course to graduate!

- For those who took **Workplace Mathematics 10**: they **must** take **Workplace Mathematics 11**. *This course is intended for students heading into college, the trades, or directly to the workforce. They may face upgrading at the post-secondary level.*
- For those who took **Foundations/Pre-Calculus 10**: must now make a decision to either follow the Foundations or Pre-Calculus pathway.

The Mathematics 11 Pathways: Students must choose one option

- **A. Workplace Mathematics 11:**
This option is designed to provide students with the mathematical understanding and critical-thinking skills identified for entry into the majority of trades and college. At the end of this course, students are prepared for Workplace Mathematics 12 (Offered only online). **Depending on future goals, mathematics upgrading may be necessary. This course does meet university admissions requirements.**
- **B. Foundations 11:**
This course is for students who intend to pursue **arts** in university or college. *(For students heading into sciences or business, this course will not suffice)* At the end of this course, students are prepared for Foundations of Mathematics 12 and will not be permitted to switch into the Pre-Calculus 12 pathway. (Currently **all major post-secondary institutions except UBC**, will admit students into Arts who have achieved a minimum of 60% in Foundations of Mathematics 11.) If students are in the Foundations pathway and want to get a university degree, it is recommended that they take Foundations of Mathematics 12 as well. UBC will only accept students to their Arts program if they have **both** Foundations 11 and Foundations 12.
- **C. Pre-Calculus 11:** *(Foundations/Pre-Calculus 10 with a 73% or better is recommended).*
This course is for students heading to **university/college**. At the end of this course, students are prepared for Pre-Calculus 12 and/or Foundations of Mathematics 12. Some students may choose to take Calculus 12 concurrently with Pre-Calculus 12. All major post-secondary institutions will admit students into Arts who have achieved a minimum of 60% in Pre-Calculus 11.
- **D. Pre-Calculus 11 Enriched:** *(Teacher Recommendation Required).*
This course is primarily intended for students heading to either business or sciences in **university/college**. At the end of this course, students are prepared for Pre-Calculus 12 and/or Foundations of Mathematics 12. Some students may choose to take Calculus 12 concurrently with Pre-Calculus 12. All major post-secondary institutions will admit students into Arts who have achieved a minimum of 60% in Pre-Calculus 11.

More Notes Regarding Mathematics!

Students must choose their mathematics 11 course based on their academic goals. The Foundations pathway is designed for **Arts** bound students and in our experience, many college/university arts-bound students have been happy and less stressed taking the Foundations pathway. **Most** schools will accept Foundations 11 for entrance into Arts programs, though UBC Arts requires the combination of Foundations 11 **and** 12. In the case of UBC, Foundations 12 is considered part of the grade 11 requirements. Pre-Calculus 11 is designed for students who intend to take Pre-Calculus 12. Pre-Calculus 11 only keeps post-secondary options open if students are able to achieve a minimum grade of 60%.

LANGUAGE REQUIREMENT: You **do not** need a Second Language to **graduate** or to attend most programs in our local **colleges**. A Second Language 11 is required for entry into SFU, UBC or Kwantlen Arts. (**UVIC no longer requires French 11**). (*This requirement can be avoided by attending a college for 2 years and then transferring*) To get an Arts degree from UBC; however, you must have French 12 or its university equivalent.

- **French 11 (Elective) (4 Credits) Prerequisite: French 10 – a 67% standing or better is recommended.** This course fulfills the entrance requirements for UBC and SFU. (UVIC no longer requires this) (*Note: Other languages may fulfill this requirement, see Academic Counselling for details*)

SCIENCE REQUIREMENTS: Students must complete at least one of the Science 11 courses listed below for graduation and to meet the basic entry requirements for university. A serious science student might benefit from taking all three of the major science 11 courses (Chemistry, Physics and Biology). This is **only** suggested for the students who **excel** in the sciences (B+ or A in Science/Math10) and are interested in all three. While the most common combination is Chemistry 11 and Physics 11, it must be remembered that **each science program at the post-secondary level has different requirements**. Students should consult the UBC and SFU Program Specific Requirement Charts included in this handout. **We advise students, in light of the fact that SFU and UBC are now looking at grade 11 marks, to be very wary of taking more than one science 11 if they earned a C+ or less in Science 10 and are just aiming to keep options open.** It is better to choose courses more suited to their strengths and passions.

SCIENCE OPTIONS (All Courses listed below are 4 credits.)

- **A. Life Sciences 11**

Prerequisite: Science 10-a 73% standing or better is recommended. Life Sciences 11 has three main areas of focus: Characteristics of living things, Evolution and Taxonomy. This is a good choice for students considering a post-secondary career in science or a health-science related field. Students planning to take Anatomy & Physiology 12 should talk to their teacher for advice.

- **B. Chemistry 11**

Prerequisite: Science 10 +Foundations Pre-calculus 10 with a 73% standing or better is recommended. Highly recommended for students who are definitely considering a post-secondary career in science or a science related field.

- **C. Physics 11**

Prerequisite: Science 10 + Foundations Pre-Calculus 10 – a 73% standing or better is recommended. Highly recommended for students considering a post- secondary career in science or a science related field or even certain trades.

- **D. Specialized Science 12 (Astronomy)**

Prerequisite: Science 10 or with permission. Fulfills the basic science 11 requirement for graduation but is **not** an Admissions' GPA course for those aiming to pursue a career in the sciences at the post-secondary level. The course will involve the study of the solar system and will have an earth science component.

SOCIAL STUDIES REQUIREMENTS:

The following courses all numbered 12 meet the Social Studies' graduation requirement and may be taken in grade 11 or 12. Many of these courses can also be used in the GPA calculation for admission into university. Students, in particular those heading to the **Arts**, are encouraged to take more than one of these options.

- **A. 20th Century World History 12**

This course covers world history from the Russian Revolution to current Third World issues. Arts students would benefit from taking this course. **Accepted at UBC, SFU and UVIC.**

- **B. Law Studies 12**

This is a survey course intended to introduce students to the fundamentals of Canadian law procedure, civil law and family law and is a good option for those heading into the Arts. **Accepted at UBC, UVIC and SFU**

- **C. Physical Geography 12**

This course is the study of our global environment. **Accepted at SFU, UVIC and UBC**

- **D. Social Justice 12 /Genocide 12 (Accelerated)**

This accelerated 8 credit course covers the learning outcomes of both Social Justice and Genocide. *Social Justice 12* is a course which examines the causes, history and solutions of various issues such as poverty, famine, hunger, war, AIDS and homelessness in light of Catholic Social teaching. In *Genocide 12* the backgrounds, political motivations, methods and international responses to genocides will be investigated throughout the course. **Accepted by SFU, UVIC and UBC**

- **E. Economics 12/ Economic Theory 12 (Accelerated)**

This 8 credit course studies the economics of the modern world (stock markets, advertising, marketing, national and international business). **Accepted at UBC, UVIC and SFU** (Fulfills **both** the Social Studies requirement and the Applied Skills requirement for graduation)

Note: AP Psychology 12 (*Can be taken by Grade 11's with permission.* The course is **not** required to study Psychology at the post-secondary level and is accepted at universities as an Advanced Placement course **BUT IT DOES NOT MEET THE SOCIAL STUDIES GRADUATION REQUIREMENT.** Additionally, if a student opts to write the final AP exam and scores well, they can earn university credits.

ARTS EDUCATION and/or an APPLIED DESIGN, SKILLS AND TECHNOLOGY REQUIREMENT:

In order to graduate from BC, students **must have four credits** in an Applied Skill or Fine Arts course in grade 10, 11 or 12. Students can select more than one if they want.

- **Architectural Design 11:**
Architectural Design students will explore Industrial, Interior, Landscape and Architectural Design.
- **Art Studio 11** (Can be used for admissions at SFU or UBC Arts)
- **Band 11** (On Schedule) (Band 12 can also be used for admissions at SFU or UBC Arts)
- **Concert Choir 11** (On schedule) (Choir 12 can be used for admissions at SFU or UBC Arts)
- **Design, Build, Create 11** This course is for students who are looking for a hands-on course that incorporates the Design Cycle, drafting, 2D and 3D modeling, 3D printing, Laser cutting and use of the wood shop. Students who are interested in solving real world problems and challenges are encouraged to take this course. There will be a lot of learning from our failures as we take an iterative approach to problem solving.
- **Introduction to Strength and Conditioning 11** (*this applied skills course was previously called "Fitness 11"*) (Off Schedule: offered in the morning) **Prerequisite for Advanced Strength and Conditioning 12**
- **Advanced Strength and Conditioning 12** (*this applied skills course was previously called "Fitness 12"*) (On Schedule) **Prerequisite: Introduction to Strength and Conditioning 11 or Instructor's Permission**
- **Graphic Arts 11** (Can be used for admissions at SFU or UBC Arts)
- **Graphic Production 11** (*previously called "Yearbook"*) Students learn all the skills required to create the STMC yearbook.

- **Media Arts 11 or 12** this course will introduce the role graphic and digital design play in everyday life and business. The primary focus will be developing students' skills using Adobe InDesign, Photoshop, and Premiere while also exploring digital photography and videography.
- **Robotics 11** Teams of students are tasked with prototyping, designing, building, and programming a robot to play against other teams in a game-based engineering challenge of VEX EDR. Science, Technology, Engineering, and Math concepts are put to the test as students learn lifelong skills in teamwork, leadership, and communications. No previous coding experience required.
- **Recording and Sound 11** (Students learn basic recording techniques)
- **Theater (Drama) 11** (Theater 12 can be used for admissions at SFU or UBC Arts)
- **Woodworking 11** (*previously: Guitar Building*) this course will focus on the design cycle, woodworking skills, equipment, tools and technologies.

Grade 12 Course Selection

MANDATORY REQUIREMENTS: To graduate from STMC and to fulfill the BC requirements, all students must complete the three courses listed. (Each is worth 4 credits for a total of 12)

- **Religion 12** (This course is needed for graduation at STMC and will be listed as **Philosophy and Religion 12A** on the student's transcript).
- **English Studies 12** (prerequisite English 11)
- **Career Life Explorations 11/12** To fulfill this course's requirements at STMC, students must complete:
 - 30 hours of work experience, community service or mentorship in **both** grades 11 & 12
 - a Capstone Project
 - an Exit Interview Presentation in which students reflect on their time at STMC, look ahead to their career goals, and create a transitional plan on how to attain those goals.

Additional Notes:

Grade 12 students must select:

- **A minimum of 4 Grade 12 courses to graduate.** (English, Religion plus 2 more)
- **8 on-schedule courses** if they are NOT applying for a Study Block or a minimum of **7 on-schedule courses** if they are applying for a Study Block.
 - If applying for a Study Block, students will be directed to complete a **Study Application Form** through the PowerSchool Course Selection site. Students must indicate an additional course should they not be granted a study.

University-bound students need English 12 and at least 5 or more Approved Academic courses. The following **asterisked** courses can be used to calculate GPA for admissions into SFU, UBC. However, each university faculty looks for specific courses when calculating entry GPAs. Because this booklet only deals with UBC and SFU, **it is a student's responsibility to do their own research** as every school across the country may have different requirements.

- ***Anatomy & Physiology 12 Prerequisite: Life Science 11 - a 73% or higher standing is recommended (4 Credits)**
Students who have a high mark in Chemistry 11 can bypass Life Sciences 11 with department-head permission. The main focus of this course is human biology.

- ***Chemistry 12 Prerequisite: Chemistry 11 - a 73% or higher standing is recommended**
This course is intended for students who seriously wish to pursue a science career in a post-secondary institution.
- ***French 12 Prerequisite: French 11- a 67% standing or better is recommended.**
Students explore French literature, poetry and contemporary sources. Students who go into the Arts Faculty at UBC must have this course or take its equivalent in order to graduate from the Arts Program.
- ***Physical Geography 12 Prerequisite: Socials 10 - a 67% standing or better is recommended.**
Geography is the study of our global environment. Arts students might benefit from this course.
- ***20th Century World History 12 Prerequisite: Socials 10 - a 67% standing or better is recommended.**
History 12 covers world history from the Russian Revolution to current Third World issues. Arts students would benefit from taking this course.
- ***Physics 12 Prerequisite: Physics 11 – a 73% standing or better is recommended**
Physics 12 is a key course for those anticipating going into Sciences at the post-secondary level.
- ***Pre-Calculus Math 12 Prerequisite: Pre-Calculus Math 11- a 73% standing or better is strongly recommended.** This course is designed for students who have career aspirations in the fields of engineering, mathematics, the sciences, economics and all university business programs.
- ***Calculus 12 Prerequisite: Pre-Calculus Math 11 – an 80% standing or better is recommended.** Calculus is strongly recommended for studies in science, engineering or business. Students can take Pre-Calculus Math 12 concurrently. **Accepted by UBC, UVIC and SFU.** This is now a requirement for engineering and Mechatronics at SFU and at many out-of-province schools.
- ***Economics 12/ Economic Theory 12 (Accelerated: 8 credits in one block).** This course studies the economics of the modern world (stock markets, advertising, marketing, national and international business). **Accepted at UBC, UVIC and SFU** (Fulfills both the Social Studies' requirement and the Applied Skills requirement for graduation).
- ***Law 12** This is a survey course intended to introduce students to the fundamentals of Canadian law procedure, civil law and family law. **Accepted at UBC, UVIC and SFU**
- ***AP Psychology 12** (Can be taken by Grade 11's with permission.) If a student opts to write the final AP exam and scores well, they can earn university credits. The course is not required to study Psychology at the post-secondary level and is accepted at universities as an Advanced Placement course **BUT IT DOES NOT MEET THE SOCIAL STUDIES' GRADUATION REQUIREMENT.**
- ***Foundations Math 12 Prerequisite: 67% or better in Foundations Math 11 or permission of Department Head if moving from Math Pre-Calc. 11.** This course is for university/college students heading to the arts **not** the sciences or business. If students are in the Foundations stream and plan to go to university as Arts students it is strongly **recommended** that they take Foundations of Math 12. In fact, UBC Arts **requires** Foundations of Math 12 (Foundations of Math 11 is not enough.) **The Foundations Math 12 mark might be able to be used to calculate entry GPAs at UBC but not in for faculties requiring Pre-Calculus 12. Accepted at SFU, UBC and UVIC.**
- ***Social Justice/Genocide 12 (Accelerated: 8 Credits in one block)** The backgrounds, political motivations, methods and international responses to genocides will be integrated and investigated throughout the course. This course will be an excellent opportunity for students interested in pursuing the Arts to receive additional Arts credits and allow them to take more courses in grade 11 and 12. **Accepted at UBC, SFU and UVIC.**

ARTS EDUCATION and/or an APPLIED DESIGN, SKILLS AND TECHNOLOGY GRAD REQUIREMENT:

Students must have completed one Fine Arts/Applied Skills in grades 10, 11 or 12. ***The following (4 credit) courses can ALL be used to meet this requirement.*** In many cases some of these courses can also be used for admission requirements at UBC and SFU.

- **Architectural Design 12** Architectural Design students will explore Industrial, Interior, Landscape and Architectural Design.
- **Art 12** (*Can also be used for admissions at SFU or UBC Arts*)
- **Band 12** (On Schedule) (*Can also be used for admissions at SFU or UBC Arts*)
- **Concert Choir 12** (On schedule) (*Can also be used for admissions at SFU or UBC Arts*)
- **Design, Build, Create 11** This Applied Skills course is for students who are looking for a hands-on course that incorporates the Design Cycle, drafting, 2D and 3D modeling, 3D printing, Laser cutting and the use of the wood shop. Students who are interested in solving real world problems and hands-on challenges are encouraged to take this course. There will be a lot of learning from our failures as we take an iterative approach to problem solving.
- **Introduction to Strength and Conditioning 11** (*this applied skills was previously called "Fitness 11"*) (Off Schedule: offered in the morning) **Prerequisite for Advanced Strength and Conditioning 12**
- **Advanced Strength and Conditioning 12** (*this applied skills course was previously called "Fitness 12"*) (On Schedule) **Prerequisite: Introduction to Strength and Conditioning 11 or with Instructor's permission**
- **Graphic Arts 12** In this course students will explore 2D and 3D design and will use Adobe Photoshop, Adobe Illustrator, Adobe InDesign and 3D design software. **Prerequisite: Graphic Arts 11.** (Can be used for admissions at SFU or UBC Arts)
- **Graphic Production 11 or 12** (*previously called "Yearbook"*) Students learn all the skills required to create the STMC yearbook.
- **Media Arts 11 or 12** Media Arts (*Digital Media and Design*) will introduce the role graphic and digital design play in everyday life and business. The primary focus will be developing students' skills using Adobe InDesign, Photoshop, and Premiere while also exploring digital photography and videography. This is not strictly a software class: students will learn to use cameras, lighting, and models/actors along with cinema techniques to capture creative vignettes and moving narratives.
- **Robotics 11** Teams of students are tasked with prototyping, designing, building, and programming a robot to play against other teams in a game-based engineering challenge of VEX EDR. Science, Technology, Engineering, and Math concepts are put to the test as students learn lifelong skills in teamwork, leadership, and communications. No previous coding experience required.
- **Robotics 12** This course builds on the skills developed in Robotics 11.
- **Recording and Sound 12** Students learn basic recording techniques.
- **Theater (Drama) 12** (*Can be used for SFU or UBC Arts*)
- **Woodworking 11 or 12** (*previously: Guitar Building*) this course will focus on the design cycle, woodworking skills, equipment, tools and technologies.

Additional Electives

These courses do add to a student's Breadth and look good on a resume or Personal Profile.

Leadership 12 Counts for 4 credits toward graduation, but the grade will not be used by post-secondary institutions and it is not an Applied Skill. Students will be involved in leadership positions in the school and they will be given course work designed to enhance their leadership skills.

Teacher Assistant This is something that students can apply for during the year and it looks good on a resume! They must find a teacher looking for an aide. *Students cannot select this option on Power School.*

NEW Courses and Re-Named Courses

Intro to Strength and Conditioning 10/11: Formerly called Fitness 11

An introductory approach to strength and conditioning, as well as nutrition. Students will experience a variety of training modalities to improve their general fitness levels. With exposure to a variety of equipment and types of training, students will discover how to move safely and effectively in a variety of realms of fitness.

Advanced Strength and Conditioning 11/12: Formerly called Fitness 12

Combining their knowledge from "Intro to Strength and Conditioning" with a more in-depth approach to training principles and dietary habits, students will work towards becoming adept at designing personalized weight training programs based on individual needs and goals.

Human Kinetics 11: Formerly called Sports Therapy 11:

This course is designed to teach students how to identify, assess and manage common and life threatening athletic injuries. Students will learn about the basics of human anatomy and physiology in order to apply concepts to athletic injuries and training practices. Further, students will be able to analyze a proactive management approach to ensure the prevention, management and general treatment of athletic injuries. Upon successful completion of the course, students will be certified in CPR level C First Aid and AED training and have a strong understanding of athletic taping techniques.

Media Arts 11 or 12: Media Arts (Digital Media and Design) will introduce the role graphic and digital design play in everyday life and business. The primary focus will be developing students' skills using Adobe InDesign, Photoshop, and Premiere while also exploring digital photography and videography. This is not strictly a software class: students will learn to use cameras, lighting, and models/actors along with cinema techniques to capture creative vignettes and moving narratives. Students will strengthen their ability to invent, develop, and execute creative solutions within the restrictions of real-world scenarios.

Design, Build, Create 11: This Applied Skill course is for students who are looking for a hands-on course that incorporates the Design Cycle, drafting, 2D and 3D modeling, 3D printing, Laser cutting and use of the wood shop. Students who are interested in solving real world problems and hands-on challenges are encouraged to take this course. There will be a lot of learning from our failures as we take an interactive approach to problem solving.

AP Computer Science 11, Computer Science 12, AP Computer Science 12

The course (Math Credit not an Applied Skill) will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts.

All these course options will be available in one block. The student, in consultation with the instructor will be given 4 credits for **one** of the listed course options. Students who are new to Computer Science will be put in the grade 11 stream. Students who are more capable in Computer Science will earn credit for Computer Science 12. Students who write the AP exam could earn Advanced Credits for post-secondary purposes.

SFU Admissions Policies:

SFU comprehensively evaluates your high school transcript by including all approved grade 11 **and** grade 12 courses in the evaluation. Greater emphasis will be placed on the List A courses, but, like UBC, SFU will evaluate all Grade 11 and 12 courses taken from their approved list.

IT IS MANDATORY THAT ANY SFU BOUND STUDENTS VIST THE SITE THEMSELVES.

To be considered for admission to SFU, you must meet the general requirements, including the Basic English Language Requirement, the Quantitative and Analytical Skills Requirement and the Program-specific requirements.

- Courses not included: applied design, skills, and technologies; career education; physical and health education; faith-based.
- Minimum of 70% in Grade 11 or Grade 12 English
 - Students with grades below the minimum final grade of **70%** in English 12 will not be admitted.
 - Students with an English 12 grade of 75% or higher are admissible and eligible to register directly into **writing-intensive (W)** courses
 - Students with grades between 70%-74% in English 12 must either register directly into Foundations of Academic Literacy Course (FAL X99) or write the [Language Proficiency Index Test \(LPI\)](#).

(Students who anticipate getting a mark below 75% in English 12 may opt to write the LPI test in the spring of their grade 12 year if they intend to attend SFU)

- Second Language 11 (*You can apply for a waiver with approved documentation. See Academic Counselling*)
- Science 11
- Social Studies 11 or 12
- Quantitative (Math) Requirements
 - If you score **less than 60%** in Pre-Calculus Math 11 or Foundation 11, you will not be considered by SFU.
 - If an Arts student scores between 60% and 69% in Pre-Calculus 11, Pre-Calculus 12 or Foundations 12, they must register directly in **Foundations of Analytical and Quantitative Reasoning (FAN X99)**, **OR** complete the SFU **Quantitative Placement Test** (recommended to be taken in first term at SFU).
 - If the Arts student has scored over 70% in Pre-Calculus 11, Pre-Calculus 12 or Math Foundations 12 they have met the basic Quantitative Requirement.

Please note: The Math requirement is higher for some faculties like Sciences.

Check the [SFU Admissions website](#).

- SFU will remove **one grade 12** course from the evaluation if you present **six or more approved courses** as follows:
 - If you present six or more approved List A courses, SFU will remove the lowest, non-required List A course.
 - If you present five or fewer List A courses, your lowest List B course will be removed.
- AP courses may be in used in place of an approved Grade 12 course to fulfill the admission requirements of List A and/or List B courses. [admission-requirements/advanced-placement](#)
- If you're taking distributed learning courses to meet your degree requirements, they must be complete by **June 30**.

NOTE: if you are planning to attend Douglas College or Langara College and then transfer to SFU, consider applying for their dual partnership program as long as you meet the entrance requirements for both schools. You become a student of both institutions and can move freely and easily between both schools to complete your courses. [Admission requirements for partnership program](#)

NOTE: Here are some oddities to be aware of

1. Faculty of Applied Science –Engineering and Mechatronics requires these List A courses
English 12 (75%) Chemistry 12 (75%) Physics 12 (75%) Pre-Calculus 12 (75%) **Calculus 12 (70%)**

CALCULUS IS A NEW REQUIREMENT FOR SFU. Eastern schools have often had Calculus identified as a requirement for Engineering (and Business actually). UBC highly recommends it.

2. Faculty of Arts requires one of the following courses as a List A (Core) Course:

Anatomy & Physiology 12 (Bio 12)	Foundations of Mathematics 12
Calculus 12	Physical Geography 12
Chemistry 12	Physics 12
Computer Science 12	Pre-Calculus 12

UBC Admissions Policies:

- Minimum of 70% in Grade 11 or Grade 12 English and graduation from high school with a minimum GPA of 70%
- Core Courses:
 - Second Language (grade 11 or above): We teach French at STMC, but other languages apply but it cannot be at the beginner level. A waiver can be given if, for example, the student has taken an LA Block in lieu of a language but official documentation must be provided.
 - Math Credit: Pre-Calculus 11, Foundations 12 or any higher level Math
 - Science Credit: Chemistry 11/12, Life Sciences 11, Anatomy and Physiology 12, Physics 11/12 or Specialized Science (Astronomy) 12
 -
- At least six academic/non-academic Grade 12 courses (Recommended, but not required)
- If you're taking distributed learning courses to meet your degree requirements, they must be complete by **June 30**.
- You must list all the high schools that you have attended; this includes any **online or distance learning** courses.
- Your personal profile is a crucial part of your UBC application.

In September 2019, UBC introduced a new, **holistic approach to their admissions process**. A big component of the process continues to be academics. UBC looks at those in 3 ways.

1. Admission requirements

While there is not a strict minimum number of courses, UBC recommends that if you're graduating from a Canadian secondary school, you should plan to present **six Grade 12 (senior level) academic or non-academic courses** (including Grade 12 courses taken in your Grade 11 or junior year). If you have fewer than the recommended number of senior-level courses, UBC will consider this on a case-by-case basis.

2. Overall academic assessment (all degrees)

No matter what degree you are applying to, UBC will broadly evaluate your academic history by looking at your grades in all academic Grade 11 (junior level) and Grade 12 (senior level) courses. **This does not include applied design, skills, and technologies courses; career education courses; physical and health education courses; or faith-based courses.** These courses, like Religion, count toward your Breadth but they will not look at your mark.

UBC will exclude the course that has your lowest grade – as long as the course is not a degree-specific requirement or relevant to your intended area of study at UBC.

3. Core academic assessment (degree-specific)

The Faculty that you apply to will determine which courses UBC evaluates. UBC will look at your grades from all academic Grade 11 (junior level) and Grade 12 (senior level) courses that fall under **subject categories** related to the degree you applied to at UBC. If you present both Grade 11 (junior level) and Grade 12 (senior level) courses, UBC will focus on the higher level only.

4. Personal Profile *Admission is Based on More than Academics*

Students need to focus on their achievements beyond academics. The Personal Profile is a very important part of UBC's online application. It helps UBC assess whether you are prepared for university as the profile

allows students to highlight your leadership qualities, community involvement, and what you've learned from your academic and extracurricular achievements.

For more information of how UBC evaluates your application, go to [UBC ADMISSION EVALUATION](#)

UBC Admissions and STMC Courses

The following pages and charts represent a **snap shot of UBC's admissions policy from an academic perspective**. This snap shot has been adjusted to reflect STMC's course offerings.

To get detailed info, students should always **visit the specific post-secondary sites**. In UBC's case, students should visit . . . [UBC Vancouver General and Degree Specific Requirements](#)

The following link is also a valuable resource. It contains an informative video and a list of Faculties showing core subject areas. [How UBC Evaluates Your Application](#)

Core Courses at STMC

On the Charts which follow, you will see a sample of what core courses offered by STMC are required for specific programs/faculties. Other courses not listed as **core** will be looked at as BREADTH course. The marks will not be used in any admissions calculations. **Students must read this in detail and always verify by visiting the links above! Please note, this is not a complete list of all programs available and students must research the specific requirements.**

Language Arts Category: English

Mathematics and Computation category

Pre-Calculus; Calculus; Math Foundations 12, Computer Science

Notes: Foundations of Math 12 is not included in the assessment for any UBC program that has Pre-Calculus 12 as a prerequisite for admission. While secondary school Calculus is not required for admission, the course is recognized to be rigorous and is recommended for students entering programs at UBC that require first year Math.

Visual and Performing Arts Category: Drama, Art Foundations, Choir, Band

Sciences Category: Biology (Life Science 11 and Anatomy and Physiology 12), Chemistry, Specialized Science 12 (*Not used in GPA Calculations*), Physics

Second Languages Category: French

Social Studies Category: Economics/Economic Theory (accelerated), Social Justice/Genocide12 (accelerated), Physical Geography, World History, Law, (AP Psychology 12 at press time this was a socials at UBC)

THE BREADTH ONLY COURSES

These courses add to your **overall picture** as a student and add to the total of six or more that UBC is looking for, but your mark in these courses will not be used in the admissions' calculations. However, that should not deter you from taking the course if it interests you. You can comment in your **Personal Profile** as to why you took the course. It adds to your **richness as a student**.

- Religion is a pure BREADTH Course. It can count as one on six Grade 12 courses that UBC likes to see, but they will not look at the mark. This will appear as “Philosophy and Religion” on your transcript.
- Leadership 12 is a pure BREADTH course.
- Applied skills courses such as Robotics, Intro/Advanced Strength and Conditioning, Graphic Arts, Graphic Production, Media Arts, Recording and Sound, Woodworking will add to your **breadth** but your mark will not be added to your admissions’ calculation.

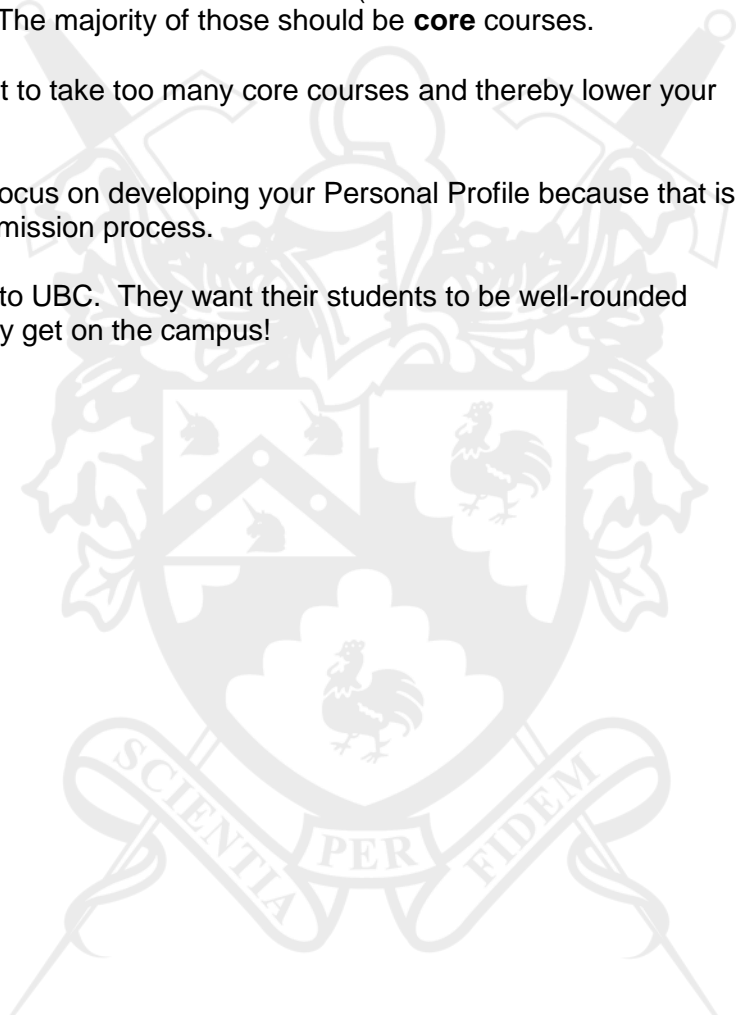
NOTE: Here are some oddities to be aware of

1. **ARTS** Faculty views ALL Science courses like BREADTH courses. They will help you, but they will not be added to your admissions’ calculations. To make your application stronger, be sure to focus and highlight your Arts-related courses.
2. **ENGINEERING and SCIENCE** Faculties view Social Studies courses like BREADTH courses. They want students focused on the Sciences.

UBC Degree-specific Requirements (Vancouver Campus)

Please note:

- The minimum column truly is the minimum. It allows students to be considered but they will not be competitive when stacked up against all of UBC’s applicants.
- Remember UBC would like to see a minimum of 6 classes numbered 12 (academic and non-academic) in order to make you competitive. The majority of those should be **core** courses.
- It is a delicate balancing act. You do not want to take too many core courses and thereby lower your competitive average.
- You want to make sure you also continue to focus on developing your Personal Profile because that is a very important component of the holistic admission process.
- It is no longer possible to find an easy path into UBC. They want their students to be well-rounded and well-prepared to enjoy success when they get on the campus!



UBC Degree-Specific Requirements

Program	Minimum Grade 11 and 12 requirements	Subject Core Course Categories
Applied Biology	English 12, Pre-Calculus 12 One of Biology 12, Chemistry 12, or Physics 12 English 11 and A second language 11 or waiver* Chemistry 11, Physics 11 and Pre-Calculus 11 or Foundations of Mathematics 12	Language Arts Mathematics and Computation Sciences Social Studies
Applied Science (Engineering)	English 12 Pre-Calculus 12 & Chemistry 12 & Physics 12 English 11 and A second language 11 or waiver* Pre-Calculus 11 or Foundations of Mathematics 12 Chem. 11 and Physics 11	Language Arts Mathematics and Computation Sciences
Arts	English 11, English 12 A second language 11 or waiver* Pre-Calculus 11 or Foundations of Mathematics 12 A Science 11** (See notes)	Language Arts Mathematics and Computation Second Languages and Social Studies Visual and Performing Arts
Bachelor + Master of Management	You must apply and meet the degree-specific requirements for one of UBC Bachelor degrees Additional application required to the UBC Sauder School of Business	Check UBC Website for details.
Commerce (UBC Sauder School of Business)	English 11, English 12, Pre-Calc. 12 A second language 11 or waiver* Pre-Calculus 11 or Foundations of Mathematics 12 A Science 11** (See notes)	Language Arts Mathematics and Computation (will consider Chem. and Phys. in this category) Social Studies (only Economics, Geography, Law, Psychology)
Dental Hygiene	English 12 Anatomy and Physiology 12, Chemistry 12 Supplemental Interview process English 11 and a second language 11 or waiver* Life Sciences 11, Chemistry 11 Pre-Calculus 11 or Foundations of Mathematics 12	Language Arts Sciences
Fine Arts (direct-entry specializations only; excludes Creative Writing)	English 12 Audition or portfolio English 11 and a second language 11 or waiver* Pre-Calculus 11 or Foundations of Mathematics 12 A Science 11** (See notes)	Language Arts Social Studies Visual and Performing Arts
Food, Nutrition, and Health	English 12 Pre-Calculus 12 One of Anatomy and Physiology 12, Chemistry 12, or Physics 12 English 11 and a second language 11 or waiver* Chemistry 11, Physics 11 Pre-Calculus 11 or Foundations of Mathematics 12	Language Arts Mathematics and Computation Sciences Social Studies

Forestry; Forest Sciences; Natural Resources Conservation; Urban Forestry	English 12 Pre-Calculus 12 One of Biology 12, Chemistry 12, or Physics 12 English 11 and a second language 11 or waiver* Chemistry 11, Life Sciences 11 (strongly recommended) Pre-Calculus 11 or Foundations of Math 12	Language Arts Mathematics and Computation Sciences
Indigenous Teacher Education Program (NITEP)	English 12 English 11 A second language 11 or waiver* Pre-Calculus 11 or Foundations of Math 12 A Science 11** (See notes)	Check the UBC Website for details!
International Economics	English 12 Pre-Calculus 12 English 11 A second language 11 or waiver* Pre-Calculus 11 or Foundations of Math 12 A Science 11** (See notes)	Language Arts Mathematics and Computation (will consider Chemistry and Physics in this category) Social Studies (only Economics, Geography, Law, Psychology)
Kinesiology	English 11, English 12 One of Pre-Calc. 12, Anatomy and Physiology 12, Chemistry 12, Physics 12 A second language 11 or waiver* Pre-Calculus 11 or Foundations of Math 12 A Science 11** (See notes)	Language Arts Mathematics and Computation Sciences Social Studies
Media Studies	English 12 One of Geography 12, History 12, or English Lit 12 Portfolio submission English 11, A second language 11 or waiver* Pre-Calculus 11 or Foundations of Math 12 A Science 11** (See notes)	Language Arts Mathematics and Computation Social Studies Visual and Performing Arts
Music	English 12 Audition, portfolio (students in composition), and letters of reference English 11 and A second language 11 or waiver* Pre-Calculus 11 or Foundations of Mathematics 12 A Science 11** (See notes)	Language Arts Second Languages Visual and Performing Arts
Science	English 12 Pre-Calculus 12 (minimum 67%) One of Anatomy and Physiology 12, Chemistry 12, or Physics 12 English 11 and A second language 11 or waiver* Chemistry 11, Physics 11 and Pre-Calculus 11	Language Arts Mathematics and Computation Sciences
Wood Products Processing	English 12 Pre-Calculus 12 One of Anatomy and Physiology 12, Chemistry 12, or Physics 12 English 11 and A second language 11 or waiver* Chemistry 11, Physics 11 (strongly recommended) Pre-Calculus 11	

Frequently Asked Questions: Other things to consider and common questions

The Facts about French 11:

- You do not need French 11 to graduate.
- You need French 11 to enter UBC or SFU directly from high school; UVIC no longer has the French 11 requirement.
- You can by-pass the French 11 university requirement by attending college first for 2 years
- To graduate from UBC Arts, you need French 12 or its university equivalent. This requirement is unique to UBC.

Do I have to take Life Sciences 11 (Bio 11) to take Anatomy & Physiology 12 (Bio 12)?

The STMC Science Department wants all students to take Bio 11 if they plan to take Bio 12 because it will benefit the student at the post-secondary level. **Exceptions can be made in consultation with the Department Head!**

Taking Chemistry 11 and Physics 11? A quick look at the program requirement charts shows that Chemistry 11 and Physics 11 are the courses typically required for most post-secondary science programs. However, these are tough courses. **A student should not choose those courses unless they have a specific program in mind. If you earn a low mark in those courses, having them on your transcript will not help you.**

Do students have to take all three Science 12's to get into science?

No! Serious science students, however, should try to exposure to all 3 science. Physics 11 and Chemistry 11 are typically required for most science programs. That being said, if a student loves science, they can take all 3 if they want.

Do students need Calculus 12?

Calculus 12 is required by several science/university programs back east and some BC programs such as SFU Engineering. As academic counsellors, we highly recommend Calculus for students entering sciences or business programs as this will help you succeed in your first-year mathematics courses. The failure rate for first-year Calculus courses is very high; you will benefit from an exposure in grade 12. Alumni who are in sciences or business are thrilled that they took Calculus in high school.

Summer School or No Summer School: that is the question!

Some students will opt to take a course during the summer. While taking a summer course may be beneficial in certain situations, there are issues which students must consider.

- The courses are hard work and students give up a good portion of their summer. Students attend classes for 4 hours a day for 6 weeks (*in addition, they can count on several hours of daily homework*).
- Students learn more over a school year than over the summer. Students who have taken a summer course that is pre-requisite for another senior course, often seem unprepared. As a result, their marks suffer accordingly.
- The summer represents an excellent time to recharge batteries and enhance your resume and Personal Profile by developing new skills, working in the greater community or volunteering. Post-secondary institutions (i.e. UBC) and scholarship committees are looking at those experiences when making their admission and scholarship decisions.
- **STUDENTS CAN FOLLOW A VERY COMPETITIVE, RIGOROUS SCHEDULE WITHOUT TAKING SUMMER COURSES.**

On-Line or No On-Line!!! That is another question.

- On-line courses do help create some scheduling flexibility; however, grade 12's are still expected to take 7 STMC courses in grade 12.
- On-line course marks are typically artificially high; however, when on-line students are tracked after year one at University, they do not do as well as the students who take the more traditional route.
- If a student does choose to take a course on-line, they should try to avoid courses that are directly connected to their anticipated post-secondary major. (I.e. Do not take Physics 12 if you intend to be a Physics major because you will pay the price at university.)

- Universities are becoming more concerned about the accuracy of summer school and/or distance courses and some institutions (such as UBC) require students to report which courses were taken outside of their day-school.

VERY IMPORTANT!

STUDENTS WHO TAKE SUMMER OR ONLINE COURSES SHOULD TELL US IN ADVANCE AND MUST BRING IN PROOF THAT THEY HAVE COMPLETED THE COURSE (FINAL MARK) SO IT CAN BE RECORDED ON THEIR OFFICIAL TRANSCRIPT.

Is college or trade school an appropriate option?

ABSLOUTELY! Considering the fact that entry GPA's at UBC and SFU are getting freakishly high, students should have back up post-secondary options. Our local colleges and technical schools are a legitimate option. (Langara, Douglas College, BCIT, VCC or the Art Institute plus more) Many of these schools offer university transfer programs, diploma programs and a limited number of Bachelor degree options. Again these schools have lower admission averages, smaller class sizes, lower drop-out rates of first year students and lower tuition costs.

NOTE: Recent studies at UBC and SFU have shown that college-transfer students perform well when they do transfer after first or second year. The entry GPA to get into university from college is lower than the high school average but it is based on the results earned only in post-secondary classes so while the GPA required is lower, it will be calculated on the higher level college courses. Even with that in mind, college transfer is a very real option for many of our students.

