

COURSE HANDBOOK 26/27

HUSKIES  
LEAD THE PACK!

# Registration

COLLEGE STURGEON HEIGHTS COLLEGIATE



GO  
huskies

A Dynamic School  
**WITH AMAZING  
STUDENTS & STAFF**



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# WELCOME TO COLLÈGE STURGEON HEIGHTS COLLEGIATE

## MISSION STATEMENT

Collège Sturgeon Heights Collegiate is committed to developing global citizens with inquiring minds and compassionate hearts.

## VISION

Collège Sturgeon Heights Collegiate will provide diverse educational opportunities that prepare students to be responsible citizens of an ever-changing society.

## VALUES

At Collège Sturgeon Heights Collegiate, we value:

- Students equally
- A safe, caring, and respectful learning environment
- Diverse and relevant programming
- Positive connections between staff & students
- Education of the whole person
- The pursuit of personal excellence
- A strong work ethic
- Self-esteem, motivation, and independence
- Analytical and critical thinking
- Curiosity and creativity
- Essential communication skills
- Student support services
- Partnerships with parents and community
- Local and global responsibility

The Senior Years in the St. James-Assiniboia School Division provides a varied curriculum to meet the needs, interests, and abilities of students. The program provides a sound basis for further education or immediate employment.

This booklet has been designed to answer some of the questions that arise as students make the transition to the senior years of secondary education. The aspects of the senior years are as follows: Structure, Semester System, Credit System, Attendance Policy, Course Selection, and Graduation Certificates.

## STRUCTURE

The Manitoba Education high school structure includes Grades 9, 10, 11, and 12.

## SEMESTER SYSTEM

The majority of senior year's courses are taught on a semester system; that is, the course runs from September to the end of January or from February to the end of June. Some courses are taught from September to June and are referred to as non-semestered. Each student is timetabled individually depending on the courses selected.

## CREDIT SYSTEM

The credit system provides a framework enabling students to pursue programs best suited to their individual needs and aspirations. A student may earn one credit by successfully completing a course of study. Half credits may be earned in a similar manner.

## ATTENDANCE POLICY

Students are expected to be in their scheduled classes on time. Schools have an open campus for those students with unscheduled time. Students may choose to study/read in the library, to socialize in the cafeteria, or to leave the school grounds. The granting of course credits on a per subject basis is conditional on meeting school attendance requirement.

## STUDENT SERVICES

Student Services is comprised of counsellors and resource teachers whose primary goals are to assist students in overcoming academic, vocational, personal, or social emotional/mental health concerns which may interfere with the pursuit of their educational goals. Information is provided on post-secondary planning and career prospects. Parents/students should contact universities, colleges, and/or other institutions for specific entrance requirements. Institutions will usually mail their program requirements to you on request.

\*Please note: A social worker and a psychologist are available to students for special testing, counseling, and other referral services. Appointments can be made in the office.

## BELL SCHEDULE

Period	Regular School Day	First and Third Tuesday of Every Month	Second and Fourth Tuesday of Every Month
1	8:30 – 9:35	9:00 – 9:55	9:00 – 9:55
2	9:40 – 10:45	10:00 – 10:55	10:00 – 10:55
<b>MORNING BREAK (10 minutes)</b>			
3	10:55 – 12:00	11:05 – 12:00	11:05 – 12:00
4 Lunch	12:00 – 1:10	12:00 – 1:10	12:00 – 1:10
5	1:15 – 2:20	1:15 – 1:55	1:15 – 2:20
6	2:25 – 3:30	2:00 – 2:40	2:25 – 3:30

## CREDIT SYSTEM & CODES

A credit is earned by successfully completing 110 hours of instruction. A half-credit represents 55 hours of instruction. Students must earn a minimum of 30 credits to graduate from high school.

Each course is assigned an alpha-numeric code formed as follows:

### FIRST CHARACTER

- 1 – courses developed for Grade 9
- 2 – courses developed for Grade 10
- 3 – courses developed for Grade 11
- 4 – courses developed for Grade 12

### SECOND CHARACTER

- 0 – developed or approved by Manitoba Education for 1 credit
- 5 – developed or approved by Manitoba Education for ½ credit
- 1 – developed by school or division. These courses may be full or ½ credit courses.
- 2 – Advanced Placement (AP) courses

### THIRD CHARACTER

- F – Foundation: educational experiences, which are broadly based and compulsory for all students.
- G – General: general education experiences for all students.
- E – EAL: educational experiences designed to assist students for whom English is not a first language in making a transition into the English program.
- M – Modified: educational experiences intended for students with specific cognitive disabilities and where the provincial subject area curriculum outcomes have been modified to take into account the learning requirements of a student; an Individual Education Plan (IEP) is required for each student.
- S – Specialized: educational experiences in specialized areas leading to further studies beyond high school.
- H – Honours
- AP – Advanced Placement courses recognized for credit at most post-secondary institutions.
- X – French Immersion - Courses with French instruction and eligible for a French Immersion Diploma high school provincial academic graduation requirements

## ENGLISH PROGRAM

Grade 9	Grade 10	Grade 11	GRADE 12
Compulsory – 5 credits	Compulsory - 6 credits	Compulsory – 4 credits	Compulsory – 3 credits
English – 1 credit	English – 1 credit	English – 1 credit	English – 1 credit
Mathematics - 1 credit	Mathematics – 1 credit	Mathematics – 1 credit	Mathematics – 1 credit
Physical Education – 1 credit	Physical Education – 1 credit	Physical Education – 1 credit	Physical Education – 1 credit
Canada in the Contemporary World – 1 credit	Geography – 1 credit	History of Canada – 1 credit	Options – 2 credits
Science – 1 credit	Science – 1 credit	Options – 3 credits	
Options – 3 credits	Indigenous Studies – 1 credit		
	Options – 4 credits		
8 credits	10 credits	7 credits (or more)	5 credits (or more)

## FRENCH IMMERSION PROGRAM

Grade 9	Grade 10	Grade 11	GRADE 12
Compulsory – 6 credits	Compulsory - 7 credits	Compulsory – 5 credits	Compulsory – 4 credits
Français– 1 credit	Français – 1 credit	Français – 1 credit	Français – 1 credit
Français Oral – 1 credit	English – 1 credit	English – 1 credit	English – 1 credit
English – 1 credit	Mathématiques – 1 credit	Mathématiques – 1 credit	Mathématiques – 1 credit
Mathématiques – 1 credit	Physical Education – 1 credit	Physical Education – 1 credit	Physical Education – 1 credit
Physical Education – 1 credit	Géographie – 1 credit	Histoire du Canada – 1 credit	
Canada dans le monde contemporain – 1 credit	Sciences de la nature – 1 credit		
Sciences de la nature - 1 credit	Indigenous Studies – 1 credit	Options – 2 credits	Options – 1 credit
Options – 2 credits	Options – 3 credits		
9 credits	10 credits	6 credits (or more)	5 credits (or more)

## HONOURS & AWARDS OF RECOGNITION

### CERTIFICATES & DIPLOMAS

The Senior Years **SJASD French Immersion Diploma** is awarded to students who earn a minimum of 30 credits in grade 9 to grade 12 including a minimum of 15 credits earned in courses where the French is the language of instruction, and who complete all the other requirements for graduation. French Immersion students must complete the compulsory English Language Arts courses in grade 9 to grade 12. In grade 9, Français, mathématiques, sciences humaines, and sciences de la nature are required subjects. In grade 10, Français, mathématiques, sciences de la nature and géographie are required subjects. In grade 11, Français, mathématiques and at least one other French Immersion course is required. In grade 12, required subjects include Français and at least two other courses taken in French.

### SCHOLARSHIPS, BURSARIES & AWARDS

#### GOVERNOR GENERAL'S MEDAL

This **BRONZE** medal is a nationally recognized honour and therefore the most prestigious award a student can receive in SJASD. It is awarded to the student who achieves the highest average upon graduation from a secondary school. The average includes all grade 11 and 12 courses as listed on the student's official transcript of grades issued by the school. The average cannot be anticipated, it must be calculated based on final results after provincial/territorial examinations, where Manitoba Education requires final exams. Equitability of access for the entire student population is an important aspect of the Medal's value. Regardless of the stream or the subjects chosen, all students are eligible for consideration upon graduation. Courses taken after graduation to upgrade marks are not to be included.

#### AWARD OF EXCELLENCE

The St. James-Assiniboia Award of Excellence is presented to the Grade 12 graduate in each High School who attains the highest average in the following courses totaling six credits:

- one English 40S (which contains the Provincial exam),
- Math 40SA or SP,
- and any four Grade 12 Level 5 courses with a maximum of two courses from any department.

#### ACADEMIC SCHOOL BOARD CASH AWARDS

1. School Board cash awards allocated to Academic and Technology areas are awarded to students with the highest averages. To be eligible a student must:
  - be graduating in grade 12.
  - have at least a 70% average based on courses at the current grade level. (Note: courses at the current grade level, but taken in previous years may be used)
  - must have no failing subjects in the current school year.
2. Averages are to be based on:
  - the required courses as defined by the School Division.
  - a minimum of 7 credits at the grade 9 level, a minimum of 6 credits at the grade 10 level, a minimum of 6 credits at the grade 11 level, and a minimum of 6 at the grade 12 level, except for the technology award where 6 credits in grade 12 courses are required.
3. Students are only eligible for awards at their current grade level.
4. Winners of a School Board cash award for the Academic area must include:
  - Grade 9 – a minimum of 7 grade 9 credits
  - Grade 10 – a minimum of 8 credits of which at least 6 are in grade 10 subjects.
  - Grade 11 – a minimum of 6 credits in grade 11 subjects
  - Grade 12 – a minimum of 6 credits in grade 12 subjects for a grade 12 award with the exception of Technology Award where 6 credits in grade 12 subjects are required
5. All courses will be weighted according to their credit value in the calculation of an average.
6. All awards will be based on final marks.
7. Students who have previously graduated and have returned to take additional credits are not eligible for School Board cash awards.
8. Students transferring in from another St. James-Assiniboia school at the beginning of the second semester will be eligible for a School Board cash award.
9. Students transferring in from any school outside St. James-Assiniboia will only be eligible for School Board cash awards if the transfer occurs in the first semester and only if all criteria are met.
10. Exchange students and International Program students are not eligible for School Board cash awards.
11. Student marks received in an Independent Study Program, Continuing Education, evening school or INTERSESSION, AND ANY Summer School courses are not to be used towards a School Board cash award.

### ADVANCED PLACEMENT COURSE DESCRIPTIONS

Advanced Placement (AP) provides students with the opportunity to experience university-level work while in high school. Each highlighted course is a combination of Provincial and Advanced Placement curriculums which are taught simultaneously. Students take AP courses from **September to May** and earn **2 credits** for each successfully completed course. By registering for an Advanced Placement course from the list below, the student agrees to take the course from September to May. If a student chooses not to complete the entire course, no credits will be awarded.

### AP BIOLOGY – BI40SH & BI42SAP

AP Biology is an introductory college-level biology course. AP Biology introduces students to advanced biological principles, emphasizing real-world applications. This rigorous course covers topics such as cell structure, biochemistry, genetics, evolution, and ecology. Learning is based on conceptual understanding and AP Biology labs rather than rote memorization. Students must work independently and collaboratively, engage in extensive reading, and use the scientific method to conduct experiments. This course prepares students for careers in biological sciences, medical sciences or health sciences. **Note: It is strongly recommended that students complete BI30SH prior to attempting AP Biology.**

### AP CALCULUS AB – AM40S & MA42SAP

AP Calculus AB is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.

### AP CHEMISTRY – CH40SH & CH42SAP

AP Chemistry is an introductory college-level chemistry course. AP Chemistry introduces students to advanced chemistry principles. Students cultivate a strong understanding of chemistry through classroom study and laboratory work. The course covers the topics of atomic structure and properties; compound structure and properties; properties of substances and mixtures; chemical reactions; kinetics; thermochemistry; equilibrium; acids and bases; thermodynamics and electrochemistry. This course prepares students for a wide range of fields, including medicine, engineering, or environmental science. **Note: It is strongly recommended that students complete CH30SH prior to attempting AP Chemistry.**

### AP COMPUTER SCIENCE A – CS40SH & CS42SAP

AP Computer Science A is an introductory college-level Computer Science course with an emphasis on object-oriented programming and problem-solving using Java. Designed by the college board to mirror a first-semester college course in Computer Science, this class reviews key concepts such as variables, control structures, methods, arrays, inheritance, polymorphism, data structures, recursion, and software design principles. This course prepares students for the AP Computer Science A exam, where they will demonstrate their ability to analyze code, develop algorithms, and write efficient, maintainable software. Prerequisite knowledge learned in Computer Science 40S and 30S are required. AP Computer Science is recognized for post-secondary credit in Computer Science programs.

### AP ENGLISH LANGUAGE AND COMPOSITION – EN30SC/T/L & ENC42SAP

Using a variety of non-fiction texts, students will attain higher-level skills in argumentation and persuasion while weighing points of view in philosophy and politics. We will learn to properly detect logical fallacies and bias in argumentation along with how to coherently synthesize information. This course culminates in an AP level exam which gives the potential for university credit. This is an excellent starting point for those considering careers in business, law, academics and politics. It also provides a strong foundation for the AP Literature and Composition course.

### AP ENGLISH LITERATURE AND COMPOSITION – EN40SLH & EN42SAP

This is an introductory college-level literary analysis course. Students cultivate their understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style.

### AP PHYSICS 1: ALGEBRA-BASED – PH32AP/PH42AP

AP Physics 1 course is equivalent to a first-semester college-level algebra-based physics course. AP Physics introduces foundational physics principles, covering kinetics, dynamics, circular motion, gravity, energy, momentum, simple harmonic motion, torque, and rotational motion. The course emphasizes reasoning, inquiry-based learning, and problem-solving. Students progress from teacher-led instruction to self-directed exploration. This course benefits students preparing for university physics or careers in engineering, architecture, or health sciences.

### AP COMPARATIVE GOVERNMENT & POLITICS – GI40SH & CP42SAP

AP Comparative Government and Politics is an introductory college-level course in comparative government and politics. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students cultivate their understanding of comparative government and politics through analysis of data and text-based sources as they explore topics like power and authority, legitimacy and stability, democratization, internal and external forces, and methods of political analysis.

## CREATIVE ARTS COURSE DESCRIPTIONS

### BAND

By divisional policy, a standard fee of \$120.00 applies to both all school instrument rentals & every percussion student to offset the cost of repairs and maintenance. Payments can be made in full or installments. All payments must be done through School Cash Online.

Instruments available for rent through the Sturgeon Heights instrumental music program include oboe, bassoon, bass clarinet, contra-bass clarinet, baritone saxophone, French horn, valve trombone, bass trombone, euphonium, tuba & string bass.

#### CONCERT BAND - MB10SS

It is recommended that students entering Band 10S have prior experience playing a woodwind, brass, or percussion instrument. Although students are encouraged to have taken band classes in their middle school years, students are still able to join in grade 9 with no experience. Students registered for MB10SS are part of the grade 9 Concert Band and will attend both full band classes and smaller sectional classes. Students will demonstrate fundamentals in music, including tone development, rhythmic decoding, technique and fluency, and creative expression as well as reflect on how their musical experiences help them to know both themselves and others. Participation in all performance events such as concerts, festivals, workshops & School Division proceedings is a requirement of this course.

#### CONCERT BAND - MB20SS

Students registered for Band 20S are part of the grade 10 Concert Band and will attend both full band classes and smaller sectional classes. Emphasis will be placed on skill development and theoretical concepts to enrich these skills. Participation in all performance events such as concerts, festivals, workshops & School Division proceedings is a requirement of this course.

#### CONCERT BAND - MB30SS

Students in grade 11 who register for Band are part of the Symphonic Band and will attend both full band classes and smaller sectional classes as required by the director. Emphasis will be placed on skill development, and theoretical concepts to enrich these skills. Participation in all performance events such as concerts, festivals, workshops & School Division proceedings is a requirement of this course.

#### CONCERT BAND - MB40SS

Students in grade 12 who register for Band are part of the Symphonic Band and will attend both full-band classes and smaller sectional classes as required by the director. Emphasis will be placed on skill development, and theoretical concepts to enrich these skills. Participation in all performance events such as concerts, festivals, workshops & School Division proceedings is a requirement of this course.

#### JAZZ BAND – MJ10SS, MJ20SS, MJ30SS, MJ40SS

These courses are designed for interested students who would like to further their music education. The instruments in Jazz Band are: saxophone (alto, tenor, baritone), trumpet, trombone, bass, drums, piano, and jazz guitar. Students enrolled in this course will study various forms of jazz, swing, pop, Latin, and rock music. These courses will involve group practices and sectional rehearsals, with an increased emphasis on improvisation, jazz articulation, phrasing, and interpretation. Participation in all performance events such as concerts, festivals, workshops & School Division proceedings is a requirement of this course.

**NOTE: Jazz Band students must also be registered for Concert Band (MB10SS, MB20SS, MB30SS, MB40SS)**

### CHORAL

#### CHOIR – MC10SS, MC20SS, MC30SS, MC40SS

These courses are open to all students in Grades 9 - 12, regardless of prior singing / choral experience. Students in Concert Choir will sing a variety of high-quality choral compositions of various genres including folk, contemporary, musical theatre, classical, and pop. Students will learn about healthy vocal production (breath, vowels, tone, diction) and how to sing within a choral ensemble (balance, blend). Students will participate in sight singing and music theory to develop their skills as a musician and work toward independent music making. Several performance opportunities occur throughout the year including Choralfest, the Winnipeg Music Festival, and school concerts. Participation in concerts is a required part of this course.

#### VOCAL JAZZ - VJ20SS, VJ30SS, VJ40SS

These courses are designed for students who are interested in Vocal Jazz, who love to perform, and who have reached a proficient level of achievement in choral singing. An advanced level of intonation, breath support, tone quality, sight singing, and independent harmony singing is required upon entering this class. Students enrolled in this course will study various forms of jazz, including swing, pop, Latin, and blues. Vocal Jazz classes emphasize improvisation, jazz inflections, phrasing, and interpretation. Performance opportunities throughout the year may include Jazz Choralfest, the Brandon Jazz Festival, school concerts, and Singing Telegrams on Valentine's Day. Participation in concerts is a required part of this course.

**NOTE: Vocal Jazz Students must also be registered for Concert Choir (MC20SS, MC30SS, MC40SS)**

### ROCK BAND

#### ROCK BAND – MER10SS, MER20SS, MER30SS, MER40SS – *This course is auditioned*

This is a multi-grade auditioned class that focuses on all aspects of performance. Students in Rock Band will be part of a group or ensemble that will learn multiple student-selected songs. Discussions about topics relating to the music industry including concert promotion, artist development, songwriting, recording, and touring are a part of the course content. To be eligible for Rock Band, students must already possess musical skill on their chosen instrument through private study. Participation in Band and Choir is highly recommended.

## DANCE

### **DANCE (General) DA10SS, DA20SS, DA30SS, DA40SS**

Previous experience in dance is recommended but not required. The development of techniques, dance composition, and theory are introduced and studied. The course focuses on the development of dance skills and body awareness. Different styles of dance are introduced as units of study. **\*DA30SS & DA40SS are considered a PhysEd credit.**

### **DANCE (Advanced) DA10SSA, DA20SSA, DA30SSA, DA40SSA – This course is auditioned and runs every day all year.**

Previous dance experience is required. Dance Advanced program students focus on technique in various styles, theory including anatomical principles, composition through the learning and creation of choreography, and presentation in performances throughout the year. Students are encouraged to register for Dance General. **\*DA30SSA & DA40SSA are considered a PhysEd credit.**

## DRAMATIC ARTS

**DRAMA 10S** is a course designed for grade 9 students that introduces them to the world of theatre. This course combines solo and group activities to introduce improvisational skills and foundational performance techniques. Students will develop key skills in effective communication, collaboration and public speaking. Additionally, Drama 10S aims to boost self-esteem and confidence through engaging performance challenges. This course serves as a steppingstone for further studies in performance while nurturing essential life skills, making students more poised and articulate in both their artistic endeavors and everyday life.

**DRAMA 20S** is an immersive course that builds upon foundational knowledge while introducing advanced acting techniques, character development, and original performance creation. This course encompasses monologue and scene studies, devised theatre, and the art of developing unique characters. Throughout the semester, students will have the chance to perform, honing their skills through rehearsal and exploration. Drama 20S is an inclusive course with no prerequisites, welcoming students of all levels who share a passion for the performing arts and a desire to elevate their theatrical abilities for both future performances and everyday life.

**DRAMA 30S** invites students to explore advanced acting techniques, while simultaneously reinforcing the fundamental performance principles cultivated in prior dramatic arts courses, encompassing essential skills like improvisation and scene studies. Throughout the course, we may begin to delve into topics such as stage combat, the works of Shakespeare, and strategies for audition preparation, equipping students with a diverse set of theatrical skills. This course goes beyond performance, empowering students to craft original characters and scenes through the art of character creation and monologue composition. Expect to shine in the spotlight, as you'll be well-prepared for performances in front of both your peers and the broader school community. Notably, there are no prerequisites for enrollment in Drama 30S, making it an accessible and welcoming opportunity for all students eager to explore the world of drama.

**DRAMA 40S** stands as the pinnacle of our school's dramatic arts curriculum, synthesizing the full spectrum of skills, strategies, and techniques cultivated in preceding courses. This advanced level course empowers students to hone their individual performance style while remaining receptive to innovative approaches. With a focus on self-discovery and originality, students are tasked with crafting their unique signature performance style. While Drama 40S is an ideal choice for those aspiring to careers in the dramatic arts, it remains inclusive with no prerequisites, making it a remarkable opportunity for any student seeking enhanced communication and collaboration skills. In this course, all students will not only elevate their abilities but also foster newfound confidence in themselves.

### **MUSICAL THEATRE – MT15SS, MT25SS, MT35SS, MT45SS – This course is auditioned**

Musical Theatre encourages students to develop their acting, singing, and dancing skills as they work toward a full-length professional production presented to the public. Students will develop a repertoire of gestures, facial expressions, vocal techniques, and movements appropriate for their character. Through on-stage work and individual assignments, students will demonstrate an understanding and appreciation of the historical context of the production. The students will demonstrate the ability to work as a team player, assisting with any aspect of the musical as required, helping their fellow cast members, and showing respect for every member of the production team. Students are encouraged to take risks with the goal of building self-confidence through artistic expression. Students in the course must be able to commit to afterschool rehearsals and all performance dates.

### **THEATRE PRODUCTION – TP20SS**

Theatre Production offers students a captivating exploration of the intricate world of theatrical productions, focusing on design and technical aspects. This course serves as an entry point into the captivating realm of putting on a show. Students embark on a journey that encompasses the pivotal roles of directors, producers, and stage managers, gaining valuable insights into their responsibilities. Additionally, students delve into the creative and practical work of designers as they learn to craft sets, costumes, and props. Communication skills, an essential component of collaborative teamwork, will be emphasized, ensuring students are well-prepared to contribute effectively to a production crew. The course may also introduce the art of script development. With hands-on experiences and opportunities to participate in school productions, Theatre Production 20S offers a dynamic and immersive introduction to the world of theatre and stagecraft.

### **THEATRE PRODUCTION – TP30SS**

Theatre Production offers students the opportunity to further refine and expand their skills in the realm of stagecraft while actively participating in school productions. In this course, students will not merely explore design concepts but will also create their own design elements, which will be integrated into school productions, allowing them to see their creative visions come to life on stage. Students will also embark on practical training in theatre equipment operation, including lighting and sound, providing hands-on experience that fosters technical proficiency. Furthermore,

students will take on leadership roles behind the scenes of school productions, developing crucial organizational and management skills. With no prerequisites, Theatre Production 30S welcomes any student with an interest in the backstage aspects of theatre.

#### **THEATRE PRODUCTION – TP40SS**

Theatre Production serves as the culmination of the skills acquired in the preceding courses, providing students with the opportunity to apply their knowledge to school productions in a dynamic and hands-on manner. In this advanced course, students will ascend to leadership positions, taking charge of backstage management, executing lighting and sound cues, and crafting distinctive designs that will be showcased by the actors on stage. This course empowers students to exercise their creativity, technical proficiency, and organizational skills in the real-world context of school productions, allowing them to truly shape the theatrical experience. Theatre Production 40S is an inclusive course with no prerequisites, welcoming all students eager to explore and master the art of theatrical leadership and artistic expression.

### **VISUAL ART**

#### **VISUAL ART – VA10SS**

This course focuses on ideas/themes that relate to the students themselves, their community, and the world. Students will look at art, talk about it, and make it. Experience in making art is not necessary. Units/themes include mask making, ceramics, landscape, and the future.

#### **VISUAL ART – VA20SS**

Art 20SS is an option for grade 10, 11 and 12 students. Experience in making art is not necessary. All units begin with an idea or theme. Students learn basic skills in a variety of media, which enable them to express their ideas. Looking at and discussing the work of artists past and present help them to progress in their own work. Students develop basic skills in drawing, painting, sculpture, pottery making, jewelry making, etc.

#### **VISUAL ART – VA30SS**

This level of art course is intended for students who have taken art classes previously and/or for those who have demonstrated a high level of achievement and understanding in visual arts. Students taking S level courses will be working towards building a quality art portfolio. Art students now work more independently, choosing media and techniques best suited to the development of ideas/themes presented to them. Units include pottery, fashion, functional art, social commentary, and portraiture. In each unit, we look at design, art history, culture, and art appreciation.

#### **VISUAL ART – VA40SS**

This level of art course is intended for students who have taken art classes previously and/or for those who have demonstrated a high level of achievement and understanding in visual arts. Students taking S level courses will be working towards building a quality art portfolio. Students work independently on units of work based on ideas/themes that are of particular interest to them. Each unit includes a written component (biographies, history of art, critical analyses), experimentation in media and technique, and a final product or products. Students about to enter Fine Arts at the University level work on their portfolio.

### **COMPUTER SCIENCE COURSE DESCRIPTIONS**

#### **COMPUTER SCIENCE - CS20S**

This is an introductory Computer Science course with no prior knowledge needed. Designed for absolute beginners to introduce Computer Science at a grade 9 / 10 level to students. Students will learn what Computer Science is, problem solving, and programming are through introductory activities. Then formal content instruction will take place in the Visual Studio environment using the programming language C#. Students will learn core programming concepts such as variables, conditional statements, loops, methods, and data structures while developing computational thinking skills. Students will work on hands on examples, programming problems, games, and have interactive exercises. The course will end with students working on a major project of their own choosing (including video games). By the end of the course, students will have a strong foundation to pursue further studies in Computer Science including CS30S, CS40S and potentially Advanced Placement (A.P.) Computer Science in grades 10 – 12.

#### **COMPUTER SCIENCE - CS30S**

This is an intermediate Computer Science course which can be taken as a first Computer Science course or to build off the foundations established in CS20S. This course emphasizes problem-solving, efficiency, programming practices, and real-world applications of Computer Science. Instruction will take place in the Java programming language, but students can complete the course in other approved programming languages and development environments (IDE). The CS20S concepts (variables and control structures) will be retaught and then move on to methods, arrays, classes/objects, and GUIs/graphics. Students will work on hands on examples and programming problems, (with more student choice). The course will finish the year working on a new, more advanced final project of their own choosing (including video games). In addition to coding, the course explores algorithm analysis, software engineering principles, and the ethical considerations of computing. Applied or pre-calculus math skills are a recommendation for this course (though not a requirement). By the end of the course, students will have a strong foundation to pursue further studies in Computer Science including CS40S and potentially Advanced Placement (A.P.) Computer Science in grades 11 – 12.

## COMPUTER SCIENCE - CS40S

This is an advanced Computer Science course designed for students who have a strong foundation established in CS30S and are ready to explore more complex topics. Designed for students planning to take Computer Science in their post-secondary careers (or as a serious hobby), student feedback will drive a lot of content for the course to give students help with this goal. Instruction will take place in the Java programming language, but students can complete the course in other approved programming languages and development environments (IDE). After a brief review of CS30S topics (methods, arrays, classes) new topics will include recursion, inheritance, polymorphism, interfaces, generics, abstraction, and collections (linked lists). Through hands-on examples, students will develop large-scale applications, work with APIs, and gain experience in collaborative software development. Depending on student requests, the course may explore potential topics such as advanced data structures (trees, stacks, queues), searching and sorting algorithms, computer architecture, artificial intelligence, machine learning, and emerging trends in Computer Science. The course will finish the year working on a more advanced final project of their own choosing (including video games). Pre-calculus math skills are a recommendation for this course (though not a requirement). By the end of the course, students will have a strong foundation to pursue further studies in Computer Science including Advanced Placement (A.P.) Computer Science or post-secondary programs.

## INTRODUCTION TO ARTIFICIAL INTELLIGENCE – AI40G

This course offers a deep, accessible, and hands-on exploration of the rapidly evolving world of A.I. designed for students with curiosity about how intelligent technologies work and how they shape society. Through engaging activities such as using beginner-friendly coding environments and no-code A.I. tools, students learn how machines learn and gain practical experience with prompt engineering, generative A.I., computer vision, and natural language processing. Throughout the course, students critically examine the ethical, social, and economic implications of A.I., exploring issues such as privacy, accountability, fairness, and the future of work. By the end, students are equipped to be informed, capable, and responsible participants in an increasingly A.I. driven world, with foundational knowledge that supports future study or careers in technology, engineering, data science, and related fields.

## ENGLISH AS AN ADDITIONAL LANGUAGE COURSE DESCRIPTIONS

Students are placed in EAL Stage 1, Stage 2, or Stage 3 courses based on their language proficiency, as determined by the EAL Intake Process, rather than their age or grade level. The EAL Literacy Curriculum for each stage provides structured learning experiences and assessments to support students' development as English as an Additional Language (EAL) learners. Each stage corresponds to one of three high school credits: EAL Stage 1, EAL Stage 2, and EAL Stage 3.

For more information, please visit: <https://www.edu.gov.mb.ca/k12/cur/eal/eal-literacy/sy/index.html>

## ENGLISH FOR ACADEMIC SUCCESS - EN40SA

This Grade 12 40S English Language Arts course is designed for advanced-level English as an additional language (EAL) students who wish to further develop the academic English language skills required for success in Senior Years and post-secondary education. The course is a Grade 12 English Language Arts (not EAL) elective. Advanced EAL students (approaching or at Stage 5) will benefit from integrated ELA/EAL courses which reinforce and build proficiency in a range of language knowledge and skills required across the Senior Years curriculum and areas of post-secondary study. Through its five thematic modules that draw on current topics and scaffolded learning experiences, the course develops academic language skills and learning strategies needed for success across several subject areas, with emphasis on the sciences, mathematics, and social sciences.

**Note: The English Language Arts: English as an Additional Language for Academic Success - A Course for Senior 4 EAL Learners (40S) cannot be used as the English Language Arts 40S course required for graduation purposes. It is an optional credit course.**

## ENGLISH COURSE DESCRIPTIONS

### *What are aesthetic and pragmatic purposes?*

**Aesthetic** is defined as a principle of taste or style adopted by a particular person, group, or culture. Aesthetic works include poetry, plays, novels, and short stories. For example, a student will read and analyze works of literature in terms of literary elements such as symbols, metaphors, similes, or irony and explain how these are important in a literary piece.

**Pragmatic** is defined as of or relating to a practical point of view or practical considerations. Pragmatic writing includes resumes, letters, speeches, and research essays. For example, students will learn how to write a cover letter and a proper resume.

**Note: All three focuses satisfy university entrance requirement**

## GRADE 9 ENGLISH

### ENGLISH LANGUAGE ARTS – EN10F

In the 10F course, students express their ideas using the six English language arts of reading, writing, listening, speaking, viewing, and representing. Emphasis is placed on written communication, including exploration, examination, and analysis of the structure of sentences, paragraphs, essays, and longer fiction and non-fiction text.

## GRADE 10 ENGLISH

### ENGLISH LANGUAGE ARTS - EN20F

In the grade 10 course, students complete the literacy skills, knowledge, and learning strategies begun in English 10F. The course continues to emphasize reading comprehension, personal and critical response, and interpretation of various text forms; text forms include short prose, poetry, novels, and Shakespearean plays. Students continue learning to collect, organize and synthesize information through research and inquiry processes. Written communication skills continue to be a focus in EN20F. Students create various texts to demonstrate their ability to address a specific audience, for a specific context and purpose.

## GRADE 11 ENGLISH

### ENGLISH: TRANSACTIONAL – EN30ST

Students will focus on transactional or practical language and non-fiction texts, with 70% of course time and course content devoted to analysis and creation of biographies, articles, editorials, speeches, documentary films, and multimedia presentations. The remaining 30% is devoted to analysis and creation of literary forms such as short stories, drama, and lyrics or poetry. Students will read fiction or non-fiction texts daily.

### ENGLISH: COMPREHENSIVE - EN30SC

This course addresses the learning outcomes identified by the provincial curriculum for the grade 11 Comprehensive Focus. Students read and respond to a balance of pragmatic and aesthetic texts. For example, transactional or non-fiction texts are used for practical, every-day purposes, while literary texts are used for aesthetic, expressive, and creative purposes.

### ENGLISH: LITERARY – EN30SL

The Grade 11 Literary course provides students with the opportunity to explore novels, plays, short stories and poetry. The course examines how writers use techniques or devices in their works, and more importantly, the effects these techniques have on the reader.

**NOTE: This course is intended for students who wish to pursue AP English in Grade 12.**

## GRADE 12 ENGLISH

### ENGLISH: TRANSACTIONAL – EN40ST

Students will focus on transactional or practical language and non-fiction texts, with 70% of both time and course content devoted to critical analysis of transactional forms. Students will explore forms required in post-secondary study such as research reports, essays, websites, and multimedia presentations. The remaining 30% of course time is devoted to analysis and creation of literary forms such as short stories, drama, and poetry.

### ENGLISH: COMPREHENSIVE - EN40SC

This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Comprehensive Focus. Students read and respond to a balance of pragmatic and aesthetic texts at a more advanced level than the grade 11 course.

### ENGLISH: LITERARY – EN40SL

This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Literary Focus. Students read and respond primarily to literary or aesthetic text forms - including poetry, short prose, Shakespearean plays, and novels - at a more complex and deeper level than at the grade 11 level.

**NOTE: Students may hold credits in all of ST, SC, & SL courses.**

## FAMILY STUDIES COURSE DESCRIPTIONS

### FAMILY STUDIES – FA10S

The Grade 9 Family Studies course is focused on self-management. The following aspects are studied in the course: family relationships, human needs, self-concept versus self-esteem, personal development, communication, conflict, friendships, relationships, and diversity in society.

### FAMILY STUDIES – FA20S

This course focuses on the fundamentals of human development, emphasizing on child development. Students will have the opportunity to use the baby simulator Baby Think It Over and gain skills in observing and working with children. Topics covered include pregnancy, birth, infant and child development to Age 3 to 11.

### FAMILY STUDIES – FA30S

This course expands upon the theoretical and practical information in the FA20S course. An emphasis on preschool and school age children is featured. Students will have the opportunity to gain practical experience working with children ages 5 to 10.

### ÉTUDES DE LA FAMILLE – FA30SX

Ce cours approfondit les informations théoriques et pratiques du cours FA20SX. Une attention particulière est accordée aux enfants d'âge préscolaire et scolaire. Les élèves auront l'occasion d'acquérir une expérience pratique en travaillant avec des enfants âgés de 5 à 10 ans.

### FAMILY STUDIES – FA40S

This course examines the individual in society and the building of relationships with an emphasis on preparing for one's future. Topics covered include personal life philosophy, personality, communication, living on one's own, relationships, marriage, and life challenges.

### ÉTUDES DE LA FAMILLE – FA40SX

Ce cours examine l'individu dans la société et la construction de relations en mettant l'accent sur la préparation de son avenir. Les sujets abordés incluent la philosophie de la vie personnelle, la personnalité, la communication, la vie autonome, les relations, le mariage et les défis de la vie.

## FRENCH: COMMUNICATION & CULTURE COURSE DESCRIPTIONS

### FRENCH: COMMUNICATION & CULTURE FR10F

This course provides opportunities for students to communicate and interact in French with increasing independence, with a focus on familiar topics related to their daily lives such as hobbies, friendships and French films. Students will develop their skills in listening, speaking, reading and writing in real life situations as much as possible such as visiting a French café in St Boniface and a variety of other field trips. Language learning strategies are used to help students increase their vocabulary daily and students will learn to apply creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities and develop skills necessary for lifelong language learning. Previous knowledge of French is an asset but not required to take this class.

### FRENCH: COMMUNICATION & CULTURE FR20F

This course follows the same objectives as 10F. Students will find that the course material is at a more challenging level. Topics studied include sports, careers and French films. Daily vocabulary learning and review will occur with emphasis on using French in real life situations such as field trips to the Festival du Voyageur, a walking tour of Saint-Boniface and a visit to a museum. Students will continue to learn about French culture in Canada and around the world. Some previous knowledge of French is required as the language of instruction is French.

### FRENCH: COMMUNICATION & CULTURE FR30F

This course is a continuation of French 20F with stronger emphasis on writing and grammar skills at a more in-depth level. Topics studied include travel, life in the future and French films. Students who select this course should already possess a good level of vocabulary and be willing to expand and review vocabulary daily using language strategies learned in previous courses. The language of instruction is French. Students will continue to explore French and Franco-Manitoban culture as well as “La Francophonie” around the world. Field trips may include the Festival du Voyageur, a visit to a French restaurant for a fine dining experience and to see a French play. Previous knowledge of French is required. Students who have not previously enrolled in French 20F may be interviewed by the teacher prior to course selection.

### FRENCH: COMMUNICATION & CULTURE FR40F

This course is a continuation of French 30S. Fluency and comprehension will be further developed as students become more independent in their language skills. Topics studied include the media and the world, health, cultural diversity and analysis of French films. Students enrolled in this course must have previous knowledge of French and be able to speak only in French during class with the teacher and each other. Upon completion of this course, students will receive a language certificate from Canadian Parents For French at graduation. Students who have not previously enrolled in French 30 must be interviewed by the teacher prior to course selection.

## FRANÇAIS COURSE DESCRIPTION

### FRANÇAIS – FR10FX

Students will be exposed to a variety of literature, which covers several genres. In addition, students will be required to pay attention to the mechanics of their language in a very detailed and active manner. Language mechanics will be explored through a n explicitly grammatical as well as contextually integrated manner.

Les élèves seront exposés à une variété de littérature, qui couvre plusieurs genres. De plus, les étudiants devront prêter attention à la mécanique de leur langage de manière très détaillée et active. Les mécanismes linguistiques seront explorés d'une manière explicitement intégrée sur le plan grammatical et contextuel.

### FRANÇAIS ORAL - FR11GX & FR21GX

This course (FR11GX & FR21GX), designed for grade 9 & 10 students, aims to strengthen their oral skills in French through authentic interactions in both school and community settings. Through various activities such as improvisation, discussions, presentations, theater, and analyses of films and songs, students develop communication skills that will be useful for their academic and professional future.

Ce cours (FR11GX & FR21GX) destiné aux élèves de 9<sup>e</sup> et 10<sup>e</sup> année vise à renforcer leurs compétences orales en français par des interactions authentiques en milieu scolaire et communautaire. Par diverses activités telles que de l'improvisation, des discussions, des présentations, du théâtre, des analyses de films et chansons, les élèves développent une aisance communicationnelle utile à leur avenir académique et professionnel.

### FRANÇAIS - FR20FX

Students will continue to be exposed to a variety of literature in various genres. Students will use a variety of materials to achieve success, including plays, novels, short stories, and magazine articles. Students will continue to deprogram themselves out of common errors while at the same time exploring how to answer analytical questions.

Les élèves continueront d'être exposés à une variété de littérature dans divers genres. Les élèves utiliseront une variété de matériaux pour réussir, notamment des pièces de théâtre, des romans, des nouvelles et des articles de magazines. Les étudiants continueront à se déprogrammer à partir d'erreurs courantes tout en explorant comment répondre à des questions analytiques.

### **FRANÇAIS - FR30SX**

This course continues to develop the skills studied in FR20FX. The literature and the works covered will be more developed than at previous levels. Students will be required to prepare oral presentations and written essays, which demonstrate a greater grasp of the language. Students will study a novel or a play. Students will continue to develop mastery of analytical questions, learn how to approach critical texts. Additionally, students will continue to develop their persuasive texts.

Ce cours continue de développer les compétences étudiées dans FR20FX. La littérature et les œuvres couvertes seront plus développées qu'aux niveaux précédents. Les étudiants devront préparer des présentations orales et des essais écrits, qui démontrent une meilleure compréhension de la langue. Les élèves étudieront un roman ou une pièce de théâtre. Les étudiants continueront à développer leur maîtrise des questions analytiques, à apprendre à aborder des textes critiques. De plus, les étudiants continueront à développer leurs textes persuasifs.

### **FRANÇAIS - FR40SX**

This course continues to hone students' French skills. Students will continue to do work from a variety of sources, only at a more demanding level. Students will continue responding to analytical and critical questions and will demonstrate mastery of these skills. Students will also demonstrate a strong competency of written skills in both persuasive and creative writing tasks.

Ce cours continue de perfectionner les compétences en français des étudiants. Les étudiants continueront à travailler à partir de diverses sources, mais à un niveau plus exigeant. Les étudiants continueront à répondre à des questions analytiques et critiques et démontreront leur maîtrise de ces compétences. Les étudiants démontreront également une solide compétence écrite dans les tâches d'écriture persuasive et créative.

## **HUMANITIES COURSE DESCRIPTIONS**

### **GRADE 9 COURSES**

#### **SOCIAL STUDIES CANADA IN THE CONTEMPORARY WORLD - SS10F / SCIENCES HUMAINES - SS10FX**

In this course we will learn about how our government works, how people immigrate to Canada and become citizens and what makes us unique as Canadians. In addition, we will examine some basic Canadian geography as well as global issues such as poverty, working conditions in the developing world, war, and environmental challenges. In our examination of each issue, we will discuss how we as Canadians can actively respond to these issues. This course is also offered in French where applicable.

L'élève explorera la vie au Canada à partir des thématiques de diversité et de pluralisme, la démocratie et le gouvernement canadien, le Canada dans le contexte mondial, et les possibilités et les défis de l'avenir canadien.

### **GRADE 10 COURSES**

#### **GEOGRAPHY - GE20F / GÉOGRAPHIE - GE20FX**

The focus of this course is the environmental and political issues in geography that impact our lives and those of future generations within the context of North America. Major topics of discussion will include: the impact of energy use on our planet; sustainable development; issues related to trade and industry; food production and related issues; population growth and city planning.

L'élève acquerra des connaissances, des habiletés et des valeurs requises pour mieux comprendre le Canada et le monde dans lequel il ou elle vit. L'élève explorera aussi diverses perspectives concernant les enjeux géographiques au Canada. Quelques thèmes que nous aborderons incluent: la géographie du Canada et du monde, l'agriculture, les ressources naturelles, l'urbanisation, et l'interaction entre les humains et l'environnement.

#### **PIMACHIWIN AKI IS21G / ÉTUDES AUTOCHTONES: PIMACHIWIN AKI – LA TERRE QUI DONNE LA VIE - IS21GX**

Pimachiowin Aki aims to connect our students to the land that we live, work, and play on, but also to strengthen the respect and connection within our community. The goal of this course is to help students develop their skills as citizens who are mindful of their place in society and who are willing to work together towards reconciliation and a sustainable future. The learning experiences in this course will include Indigenous Elders and Knowledge Keepers, field trips, videos, readings and various other resources.

Pimachiowin Aki – La terre qui donne la vie vise à rapprocher nos élèves de la terre sur laquelle nous vivons, travaillons et jouons, mais aussi à renforcer le respect et les liens au sein de notre communauté. L'objectif de ce cours est d'aider les étudiants à développer leurs compétences en tant que citoyens conscients de leur place dans la société et prêts à travailler ensemble à la réconciliation et à un avenir durable. Les expériences d'apprentissage de ce cours comprendront des aînés et des gardiens du savoir autochtones, des excursions sur le terrain, des vidéos, des lectures et diverses autres ressources.

#### **AMERICAN HISTORY - H120G**

The primary intent of the American History course is to create a greater understanding of significant historical events that shaped the United States. It emphasizes those historical developments that have influenced the world, especially Canada.

## GRADE 11 COURSES

### **HISTORY OF CANADA - HI30F / HISTOIRE – HI30FX**

This course engages students in historical inquiry and asking essential questions to focus on Canada from pre-contact times until the present. Canadian History emphasizes important skills and concepts in historical thinking and focuses on five major themes: First Nations, Métis and Inuit Peoples, French-English Duality, Identity, Diversity and Citizenship, Governance and Economics, and Canada and the World.

Nous verrons les événements principaux qui ont contribué à former notre grand pays et notre peuple. L'élève examinera les événements du passé de différentes perspectives afin d'acquérir une meilleure compréhension du Canada comme il était et comme il est aujourd'hui.

### **PHYSICAL GEOGRAPHY - GE30S**

Ever wonder what causes a tornado? How can we build cities to resist the massive force of an earthquake? Why is it so difficult to predict the weather? In this course students will find answers to these questions by exploring the systems of the Earth through documentaries, readings, and current world events. Topics of study include hurricanes, volcanoes, climate change, ecosystems, and weather, as well as several other natural disasters.

### **LIFE/WORK BUILDING – LW30S**

This course enhances students' knowledge and critical thinking skills in the design process, helping them create successful career and life plans. The course builds confidence in facing challenges and adapting to changes. Half of the course is focused on in-class theory and the other on out-of-school work experience.

## GRADE 12 COURSES

### **LAW - LW40S**

This course introduces students to all aspects of the Canadian justice system. Topics covered include a history of law, the rights and freedoms of Canadians, the impact of treaties and the Indian Act, in addition to Canadian criminal law, civil law, and family law. Students will also can study a topic of their choice. This course is taught using a variety of formats including case studies, a mock trial, and a field trip to the law courts. Law 40S is an excellent foundation for students interested in pursuing criminology courses at the college or university level.

### **GLOBAL ISSUES: CITIZENSHIP AND SUSTAINABILITY – GI40S / ENJEUX MONDIAUX: CITOYENNETÉ ET DURABILITÉ - GI40SX**

Students examine the social, political, environmental, and economic impact of a variety of current and emerging world issues such as media awareness, human trafficking, genocide, sustainability, and gender issues. Students will also consider how every individual is connected to global issues. Part of their study will focus on quality of life locally, nationally, and globally. Students will also choose a global issue and take action in their school or wider community.

Ce cours vise à développer chez les élèves une perspective globale au sujet des enjeux sociaux, politiques et économiques actuels, à améliorer leurs compétences en matière de recherche et communication écrite qui leur seront utiles dans le cadre de leurs études universitaires, et enfin à les encourager à participer activement aux enjeux auxquels font face leur communauté et le monde. Un projet communautaire représentera 20% de la note finale. Les élèves souhaitant suivre ce cours doivent manifester un fort intérêt pour les questions de société contemporaines.

### **FIRST NATIONS, INUIT, AND METIS STUDIES – FM40S / FM40SX**

This course will focus on the issues that are affecting Aboriginal communities today. Topics covered include: The Red Power movement and political re-birth, struggles for the land (e.g. Oka, Ipperwash), health, justice, and other pathways to renewal. Students will participate in field trips, hear speakers, and attend workshops to better understand the contributions of Aboriginal peoples to Canadian society.

Ce cours portera sur les enjeux qui touchent les communautés autochtones aujourd'hui. Les sujets abordés comprennent : le mouvement Red Power et la renaissance politique, les luttes pour les terres (par exemple Oka, Ipperwash), la santé, la justice et d'autres voies de renouveau. Les élèves participeront à des excursions, entendront des conférenciers et prendront part à des ateliers afin de mieux comprendre les contributions des peuples autochtones à la société canadienne.

### **WORLD HUMAN GEOGRAPHY - GE40S**

Human geography looks at the links between people and our environment by studying current world issues from a geographical perspective. Topics covered in this course include the global food crisis and reasons for hunger, migration and population changes, industrialization, challenges facing people in cities, and unsustainable resource use. We examine issues in both the developed and developing world and seek to understand how our choices affect those throughout the world as well as future generations.

### **A WORLD OF RELIGIONS: A CANADIAN PERSPECTIVE – WR40S**

This course will explore the dynamics of religious diversity. It is not meant to confront or change a student's own beliefs, but rather to provide students with an objective appreciation for the religions studied. This will be achieved through a comparative study of the beliefs and practices of major world religions and their contributions to each other.

## **PSYCHOLOGY - PY40S / PSYCHOLOGIE – PY40SX**

Psychology is the scientific study of behaviour and mental processes. It uses the scientific method to discover ways of understanding human thought, behaviour, and the differences among us. This course will expose students to the major themes of psychology such as the study of the brain, consciousness, and psychological disorders. In addition, we will look at motivation, how we learn, and how and why our personalities differ. Documentaries, projects, and class discussions will be central to this course.

L'élève recevra une initiation aux divers facteurs qui influencent nos émotions, nos pensées et nos actions. Les thèmes explorés incluent les recherches, le fonctionnement du cerveau, la personnalité, l'apprentissage, la mémoire, les niveaux de la conscience et les troubles psychologiques. L'élève apprendra à mieux se connaître ainsi qu'à mieux comprendre les autres.

## **CINÉMA COMME TÉMOIN DE L'HISTOIRE MODERNE – CW40SX**

Dans ce cours, les élèves apprendront l'histoire du XXe siècle à l'aide de films. Les sujets principaux à l'étude seront la lutte des classes qui découle de l'industrialisation, les régimes totalitaires en Europe, les guerres mondiales, ainsi que la compétition entre les États-Unis et l'Union soviétique durant la Guerre Froide. Ces thèmes seront abordés via des films tantôt sérieux, tantôt drôles, tantôt récents, tantôt anciens, qui proviennent de plusieurs origines culturelles. Nous analyserons ce que ces films nous permettent d'apprendre sur la réalité historique des événements étudiés, ainsi que leurs limites, et comment le cinéma peut être un outil de propagande.

In this course, students will learn about 20th-century history through films. The main topics of study will include class struggles resulting from industrialization, totalitarian regimes in Europe, the world wars, and the competition between the United States and the Soviet Union during the Cold War. These themes will be explored through films that vary in tone—some serious, some humorous—as well as in age and cultural origin. We will analyze what these films teach us about the historical reality of the events studied, their limitations, and how cinema can be used as a tool for propaganda.

## **LIFE/WORK BUILDING – LW40S**

This course enhances students' knowledge and critical thinking skills in the design process, helping them create successful career and life plans. It builds confidence in facing challenges and adapting to changes, with more time and focus on work experience in the 40S course.

## **MATHEMATICS / MATHÉMATIQUES**

Math is a required compulsory course from Grade 9 to Grade 12. All Math courses offered lead to access to post secondary education.

### **GRADE 9 MATHEMATICS**

#### **MATHEMATICS FOUNDATIONS - MA10F / MATHÉMATIQUES - MA10FX**

This course provides the foundation for the various mathematics courses at the grade 10 level. The course includes, but is not limited to, statistics, probability, measurement, algebra, geometry, and problem solving.

Les élèves prendront part à des activités et projets d'apprentissage en classe qui incorporeront la technologie, la résolution de problèmes, les mathématiques mentales et les mathématiques théoriques. Ce cours couvre une variété de sujets, fournissant aux élèves des compétences et des connaissances de base leur permettant de suivre n'importe quelle option en mathématiques au secondaire. Les élèves qui entrent en 9e année doivent s'inscrire aux cours de mathématiques de transition 10F et de mathématiques 10F.

#### **TRANSITIONAL MATH and GRADE 9 MATH Combination - MA10FT & MA10F**

These courses are designed for students who have struggled with Math in previous years and would benefit from additional time to first review previous content before learning the grade 9 content. Students will take math in both semesters and receive two credits. The additional practice helps students make the transition from Grade 8 mathematics to Grade 9 mathematics.

### **GRADE 10 MATHEMATICS**

#### **MATHEMATICS ESSENTIALS - MA20SS / MATHÉMATIQUES - QUOTIDIEN - MA20SX**

Grade 10 Mathematics Essential is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Mathematics Essential topics emphasize consumer applications, problem solving, decision-making, and spatial sense. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in everyday life in a technological society.

Ce cours met l'accent sur des applications de consommation, la résolution de problèmes, la prise de décision et le sens spatial. Les élèves devront travailler individuellement et en petits groupes sur des concepts et des habiletés mathématiques que l'on rencontre quotidiennement dans une société technologique.

#### **MATHEMATICS INTRODUCTION TO APPLIED AND PRE-CALCULUS - MA20SPA / INTRODUCTION AU MATHÉMATIQUES APPLIQUÉES ET PRÉ-CALCUL - MA20SPAX**

The grade 10 introduction to Applied and Pre-Calculus is intended for students considering post-secondary studies that require a math pre-requisite. The topics studied form the foundation for topics to be studied in both grade 11 Applied and Pre-Calculus Mathematics. Students will engage in experiments and activities that include the use of technology, problem solving, mental mathematics and theoretical mathematics to promote the development of mathematical skills.

Les composantes du cours sont non seulement contextuels, mais aussi algébriques. Les élèves devront faire des activités qui incluent l'utilisation de la technologie, la résolution de problèmes, le calcul mental et de la théorie.

## GRADE 11 MATHEMATICS

### **MATHEMATICS ESSENTIALS - MA30S / MATHÉMATIQUES - QUOTIDIEN - MA30SX**

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science related fields. This is a one credit course comprising two half credits, each emphasizing consumer applications, problem-solving and decision making, as well as number sense and spatial sense. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered and used in a technological society.

Ce cours met l'accent sur des applications de consommation, la résolution de problèmes, la prise de décision et le sens spatial. Les élèves devront suivre des activités qui incluent la technologie et la résolution de problèmes.

### **MATHEMATICS APPLIED - MA30SA / MATHÉMATIQUES - APPLIQUÉES - MA30SAX**

This course is one of two math programs available for students planning to pursue post-secondary studies in mathematics and science. It is intended for students whose post-secondary studies do not require the study of theoretical calculus. The math studied promotes the learning of problem-solving skills, number skills and geometry skills as they relate to the world around us.

Ce cours est l'un des deux programmes de mathématiques offerts aux élèves qui prévoient poursuivre des études postsecondaires en mathématiques et en sciences. Il s'adresse aux élèves dont les études postsecondaires ne nécessitent pas l'apprentissage du calcul théorique. Les notions étudiées favorisent le développement de compétences en résolution de problèmes, en numération et en géométrie, en lien avec le monde qui nous entoure.

### **MATHEMATICS PRE-CALCULUS - MA30SP / MATHÉMATIQUES - PRÉ-CALCUL - MA30SPX**

This course is designed for students who intend to study calculus and related mathematics as part of a post-secondary education. The course comprises, primarily, a high-level of theoretical mathematics with an emphasis on problem solving and mental mathematics, supported by cumulative exercises and testing. Students are required to learn mathematical concepts through practice and regular homework. Many of the questions and problems on exercises, tests and examinations can be expected to be different from those presented in class.

Le cours comprend un haut niveau d'études de mathématiques théoriques et met l'accent sur la résolution de problèmes et le calcul mental. Les sujets étudiés sont divisés en trois domaines: l'algèbre et le nombre, la trigonométrie et les relations et les fonctions.

## GRADE 12 MATHEMATICS

### **MATHEMATICS ESSENTIALS - MA40S / MATHÉMATIQUES - QUOTIDIEN - MA40SX**

This course is intended for student whose post-secondary planning does not include a focus on mathematics and science- related fields. Grade 12 essential Mathematics (40S) is a one-credit course consisting of two half-credits each emphasizing consumer applications, problem solving, decision-making, and spatial sense.

Le cours met l'accent sur des applications de consommation, la résolution de problèmes, la prise de décision et le sens spatial.

### **MATHEMATICS APPLIED - MA40SA / MATHÉMATIQUES - APPLIQUÉES – MA40SAX**

This course is intended for students considering post-secondary studies that do not require a study of theoretical calculus. It is context driven and promotes the learning of numerical and geometrical problem-solving techniques as they relate to the world around us.

Ce cours s'adresse aux élèves qui envisagent des études postsecondaires ne nécessitant pas l'apprentissage du calcul théorique. Il est axé sur des situations concrètes et favorise l'acquisition de techniques de résolution de problèmes numériques et géométriques en lien avec le monde qui nous entoure.

### **MATHEMATICS PRE-CALCULUS - MA40SP / MATHÉMATIQUES - PRÉ-CALCUL - MA40SPX**

This course is designed for students who intend to study calculus and related mathematics as part of postsecondary education. It builds on the topics studied in Grade 11 Pre-calculus Mathematics and provides background knowledge and skills for the study of calculus in post-secondary institutions.

Ce cours est conçu pour des élèves qui envisagent d'étudier le calcul et poursuivre des études postsecondaires qui nécessitent l'étude du calcul différentiel et intégral. Le cours comprend un haut niveau d'études de mathématiques théoriques et met l'accent sur la résolution de problèmes et le calcul mental.

**NOTE: This course is required to be completed in Grade 11 if wishing to pursue AP Math in Grade 12.**

## PHYSICAL EDUCATION COURSE DESCRIPTIONS

### GRADE 9 COURSES

#### PHYSICAL EDUCATION - PE10F

The intent of the 10F course is to help Senior Years students develop the necessary skills for lifelong physical activity participation and provide students with the necessary knowledge to assist them in making appropriate decisions regarding the health issues facing youth. The skills acquired in this course are based on the fourteen basic movement skills and the five personal and social management skills in a combined and integrated approach blending physical education and health education.

### GRADE 10 COURSES

#### PHYSICAL EDUCATION - PE20F

The intent of the 20F course is to help Senior Years students develop the necessary skills for lifelong physical activity participation and provide students with the necessary knowledge to assist them in making appropriate decisions regarding health issues facing youth. Topics such as fitness management, goal setting, cooperation, time management, and a myriad of physical and health related skills are taught under the five General Learning Outcomes of Movement, Fitness, Safety, Personal and Social Management and Healthy Lifestyle practices.

#### PHYSICAL EDUCATION (FOOTBALL) - PE20FFT

This course integrates Football Canada's LTAD model, developing technical, tactical, physical, and mental skills through on-field training, strength and conditioning, and classroom-based health education. Students will train in the weight room, on the football field, and at elite facilities (e.g., Sport Manitoba, turf complexes etc..) for combine testing and performance assessments. Provincial curriculum health units, as well as fundamental concepts of football, sport psychology, and sport nutrition will be covered through in-class instruction. This course provides a structured, football-specific experience while fulfilling provincial PE requirements

### GRADE 11 COURSES

#### PHYSICAL EDUCATION - PE30F

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them and engage in active lifestyles into their futures. Students will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport.

#### FEMALE FITNESS – PE30FIF

This full-credit course meets the requirements of the compulsory PE 30F and PE40F and is designed to help young women in grades 11 or 12 get a better understanding of how to work out on their own, eat a healthy diet, and stay active. Throughout the course the girls will be introduced to different types of work outs and different ways they can stay healthy. Students will also study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport.

#### ELITE TRAINING – PE30FT

This full credit course meets the requirements of the compulsory PE 30F and PE 40F and will further develop the student's athletic skills by improving their overall physical fitness. It is intended for the individual who wants to develop a deeper understanding of fitness, health, and motivation and for the enthusiast who wants to know why and how the body responds to exercise. Throughout the course the students will be introduced to different types of work outs and different ways they can stay healthy. Students will also study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport.

**NOTE: Students cannot hold more than one Phys. Ed credit at the grades 11 or 12 level (30F/40F)**

#### SUSTAINABLE WILDERNESS – PE31G

Environmental crisis and related issues continue to dominate both our present and future. At no time in history has the topic been more important than now. Our future and that of future generations will be impacted by the education, guidance, and experiences of our youth. By providing opportunities for education, guidance and self-reflection, the Sustainable Wilderness Education program is committed to developing passionate and skilled individuals who care about making a difference for sustainable outdoor environments. Through the development of a deep appreciation for the Earth and the importance of sustainability, students will attain the skills and attitudes needed to enrich both the lives of themselves and others. The aim of the Sustainable Wilderness Education course is to allow students to develop the skills and attitudes necessary to appreciate, enjoy, feel comfortable and if necessary, survive in the Canadian outdoors.

**NOTE: There is a course fee of \$175.00 for PE31G.**

#### PHYSICAL EDUCATION (FOOTBALL) - PE30FFT

This course integrates Football Canada's LTAD model, developing technical, tactical, physical, and mental skills through on-field training, strength and conditioning, and classroom-based health education. Students will train in the weight room, on the football field, and at elite facilities (e.g., Sport Manitoba, turf complexes etc..) to combine testing and performance assessments. Provincial curriculum health units, as well as fundamental concepts of football, sport psychology, and sport nutrition will be covered through in-class instruction. This course provides a structured, football-specific experience while fulfilling provincial PE requirements.

## GRADE 12 COURSES

### PHYSICAL EDUCATION - PE40F ONLINE / EDUCATION PHYSIQUE PE40FX

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them and engage in active lifestyles in the future. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development.

Ce cours obligatoire à plein crédit est conçu pour aider les jeunes à prendre une plus grande responsabilité envers leur propre condition physique, à les encourager à choisir des activités qui les intéressent et à adopter un mode de vie actif à l'avenir. Les élèves étudieront des sujets liés à la gestion de la condition physique, à la nutrition, à la santé sexuelle, à la santé sociale et émotionnelle, ainsi qu'au développement personnel.

### EXERCISE SCIENCE – EXERSCI40S

This course is designed to provide an in-depth study into the science of human performance. The human body's physiological systems are a complex interconnected framework between the brain and nervous system. The purpose of this course is to give students a clear picture of how those physiological systems work together to maximize human performance. Students will use their knowledge of various aspects of exercise science such as biomechanics, kinesiology, fitness testing, injury treatment and prevention, and nutrition to develop a greater understanding of how the interaction between brain and nervous system leads to mastery in high performance activities.

### FEMALE FITNESS - PE40FIF

This full-credit course meets the requirements of the compulsory PE 30F and PE40F and is designed to help young women in grades 11 or 12 get a better understanding of how to work out on their own, eat a healthy diet, and stay active. Throughout the course the girls will be introduced to different types of work outs and different ways they can stay healthy. Students will also study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport.

### ELITE TRAINING – PE40FT

This full credit course meets the requirements of the compulsory PE 30F and PE 40F and will further develop the student's athletic skills by improving their overall physical fitness. It is intended for the individual who wants to develop a deeper understanding of fitness, health and motivation and for the enthusiast who wants to know why and how the body responds to exercise. Throughout the course the students will be introduced to different types of work outs and different ways they can stay healthy. Students will also study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport.

### PHYSICAL EDUCATION (FOOTBALL) – PE40FFT

This course integrates Football Canada's LTAD model, developing technical, tactical, physical, and mental skills through on-field training, strength and conditioning, and classroom-based health education. Students will train in the weight room, on the football field, and at elite facilities (e.g., Sport Manitoba, turf complexes etc.) to combine testing and performance assessments. Provincial curriculum health units, as well as fundamental concepts of football, sport psychology, and sport nutrition will be covered through in-class instruction. This course provides a structured, football-specific experience while fulfilling provincial PE requirements.

### **Note: Students cannot hold more than one Phys. Ed credit at the grades 11 or 12 level (30F/40F). STUDENT LEADERSHIP – PE41G / LEADERSHIP ÉTUDIANT - PE41GX**

This course is designed to help students develop their individual and group management skills through a wide range of real-life situations and experiences using project-based learning. The goal is to become more confident in planning, organizing, and administering activities in their school and community. When students take ownership and assume the responsibilities of their own learning and organization, they develop the necessary leadership skills that will make them successful in future pursuits. Students will plan and oversee a variety of activities within our school and 18 community such as field trips, fundraisers, school events, tournaments etc... This course provides more students with an opportunity to develop the confidence and interest as future leaders to stay involved in their communities in a variety of contexts after leaving school.

Ce cours est conçu pour aider les élèves à développer leurs compétences en gestion individuelle et de groupe à travers une grande variété de situations et d'expériences réelles, en utilisant l'apprentissage par projet. L'objectif est de renforcer leur confiance dans la planification, l'organisation et la gestion d'activités au sein de leur école et de leur communauté. En s'appropriant leur apprentissage et en assumant leurs responsabilités organisationnelles, les élèves développent les compétences en leadership essentielles à leur réussite future. Les élèves planifieront et superviseront diverses activités au sein de l'école et de la communauté, telles que des sorties éducatives, des collectes de fonds, des événements scolaires, des tournois, etc. Ce cours offre à un plus grand nombre d'élèves l'occasion d'acquérir la confiance et l'intérêt nécessaires pour devenir de futurs leaders et pour rester impliqués dans leur communauté dans divers contextes après leur passage à l'école.

## SCIENCE GRADE 9 COURSES

### SCIENCE FOUNDATION - SC10F / SCIENCES FONDAMENTALES – SC10FX

Grade 9 Science is an introductory science course intended to enable students to explore the fields of biology, chemistry, and physics to strengthen their scientific literacy. Through classroom study and laboratory work, students develop their understanding of science as they explore: atoms, elements, and the periodic table; electricity; reproduction; genetics; and evolution.

Le cours de sciences de 9e année est un cours d'introduction permettant aux élèves d'explorer les domaines de la biologie, de la chimie et de la physique afin de renforcer leur culture scientifique. Grâce aux études en classe et aux travaux de laboratoire, les élèves approfondiront leur compréhension des sciences en explorant les sujets suivants : atomes, éléments et tableau périodique; électricité; reproduction; génétique; et évolution.

## GRADE 10 COURSES

### SCIENCE FOUNDATION – SC20F / SCIENCES FONDAMENTALES – SC20FX

Grade 10 Science is an introductory science course intended to enable students to explore the fields of biology, chemistry, and physics to strengthen their scientific literacy. Through classroom study and laboratory work, students will develop their understanding of science as they explore: chemical compounds; chemical reactions; motion and forces; the atmosphere and climate; cosmic evolution; ecology; and human impact on the environment.

Le cours de sciences de 10e année est un cours d'introduction permettant aux élèves d'explorer les domaines de la biologie, de la chimie et de la physique afin de renforcer leur culture scientifique. À travers des études en classe et des travaux de laboratoire, les élèves approfondiront leur compréhension des sciences en explorant les sujets suivants : composés chimiques; réactions chimiques; mouvement et forces; atmosphère et climat; évolution cosmique; écologie; et impact humain sur l'environnement

### SCIENCE FOUNDATION HONOURS 20FH / SCIENCES FONDAMENTALES – HONNEURS – SC20FHX

Honours Grade 10 Science is an introductory science course intended to prepare students for entry into the Grade 11 science courses, and specifically the AP program. Students will explore the same topics as the SC20F course, but greater emphasis is placed on scientific inquiry, critical thinking, mathematical problem solving and more advanced scientific skills. This course includes a term project, giving students the opportunity to independently pursue topics of personal interest.

Le cours de sciences de 10e année – Honneurs est un cours d'introduction conçu pour préparer les élèves aux cours de sciences de 11e année, et plus particulièrement au programme AP. Les élèves exploreront les mêmes sujets que dans le cours SC20F, mais avec une plus grande emphase sur la recherche scientifique, la pensée critique, la résolution de problèmes mathématiques et le développement de compétences

## GRADE 11 COURSES

### BIOLOGY - BI30S / BIOLOGIE - BI30SX

Students in BI30S will study the Human Body with respect to homeostasis, digestion and nutrition, the respiratory system, excretion, and waste management, concluding with the immune and nervous system. Students will also look at how technology has affected the wellnes s of the human body and resulting social issues.

Ce cours est une introduction aux notions fondamentales de l'homéostasie et du bien-être, suivie d'un aperçu de la biologie des systèmes humains. L'élève est invité à prendre conscience de son corps par une étude approfondie de l'anatomie et de la physiologie humaine.

### CHEMISTRY - CH30S / CHIMIE - CH30SX

Chemistry 30S students will use the kinetic molecular theory to look at physical properties of matter, study physical characteristics of gases, gas laws, chemical reactions, stoichiometry, solutions and organic chemistry. Throughout the program, students will gain an understanding of how chemistry affects our quality of life.

Dans le cours de Chimie 30S, les élèves utiliseront la théorie cinétique moléculaire pour explorer les propriétés physiques de la matière. Ils étudieront les caractéristiques des gaz, les lois des gaz, les réactions chimiques, la stœchiométrie, les solutions et la chimie organique. Tout au long du programme, les élèves comprendront comment la chimie influence la qualité de vie.

### PHYSICS - PH30S / PHYSIQUE – PH30SX

Physics 30S course covers four main areas: Waves, Nature of Light, Mechanics, and Fields. Students will explore wave properties, superposition, and interference. In Nature of Light, they will examine light's wave and particle characteristics. Building on SC20F, the Mechanics unit continues the study of kinematics. The Fields unit covers gravitational, magnetic, electric, and electromagnetic fields. Students will also analyze how physics, science, and technology impact and influence the quality of our daily life.

Le cours de Physique 30S couvre quatre domaines principaux : ondes, nature de la lumière, mécanique et champs. Les élèves exploreront les propriétés des ondes, la superposition et l'interférence. Ils examineront les caractéristiques ondulatoires et particulières de la lumière, poursuivront l'étude de la cinématique amorcée en SC20F et exploreront les champs gravitationnels, magnétiques, électriques et électromagnétiques.

### TOPICS IN SCIENCE - SC30S / SUJETS D'ACTUALITÉ EN SCIENCES – SC30SX

This is a general science course where students will study and discuss real-world problems, identifying root causes and solutions. It is a student-driven course that explores everyday science topics through practical, interdisciplinary learning. This course is ideal for students interested in science but prefer a non-traditional science classroom approach and would like to explore specific science topics outside of the core provincial curriculum.

Des sujets multidisciplinaires basés sur des enjeux actuels servent de thèmes organisateurs pour ce cours, où les connaissances scientifiques et leurs implications sont présentées de manière unifiée, intégrant les domaines de la biologie, de la chimie, de la physique, des géosciences et des sciences de l'espace. Ce cours met l'accent sur le développement de la pensée critique et des compétences en résolution de problèmes plutôt que sur l'apprentissage de concepts et de faits isolés. L'étude d'un sujet particulier permet aux élèves d'acquérir naturellement des concepts et des faits clés à partir du contexte étudié.

## GRADE 12 COURSES

### **BIOLOGY - BI40S / BIOLOGIE – BI40SX**

Biology 40S is an interesting and comprehensive course that provides students with the opportunity to acquire knowledge in Genetics, Mechanisms of Inheritance, Evolution, and Biodiversity. It will also develop laboratory, communication, critical thinking, problem-solving, and study skills.

Le cours de Biologie 40S est un programme captivant et complet offrant aux élèves l'opportunité d'acquérir des connaissances en génétique, mécanismes de l'hérédité, évolution et biodiversité. Il développe également des compétences en laboratoire, en communication, en pensée critique, en résolution de problèmes et en méthodologie d'étude.

### **CHEMISTRY - CH40S / CHIMIE – CH40SX**

Chemistry 40S students in this very comprehensive course will study Kinetics, Chemical Equilibrium, Acid-Base Equilibrium, Solubility Equilibrium and Oxidation-Reduction. Within these units, concepts such as factors affecting reaction rates, Le Chatelier's Principle, pH, buffers, and electrochemical cells will be addressed. Throughout the program, students will gain an understanding of observation and inference in this experimental science.

Le cours de Chimie 40S est un programme complet où les élèves étudieront la cinétique chimique, l'équilibre chimique, l'équilibre acido-basique, l'équilibre de solubilité et l'oxydoréduction. Parmi les concepts abordés figurent les facteurs influençant la vitesse des réactions, le principe de Le Chatelier, le pH, les solutions tampons et les cellules électrochimiques. Ce cours met l'accent sur l'observation et l'inférence dans les sciences expérimentales.

**NOTE: This course has a strong math component. It is recommended that students have completed Precalculus or Applied Math in grade 11. It is recommended that Chemistry 30S has been successfully completed prior to taking Chemistry 40S.**

### **PHYSICS - PH40S / PHYSIQUE – PH40SX**

Physics 40S is an in-depth course covering Mechanics, Fields, Electricity, and Medical Physics. Building on concepts from Physics 30S, students will explore projectile motion, circular motion, work and energy, low Earth orbits, electric circuits, and radiation. The course emphasizes the connections between science, technology, and the environment.

Le cours de Physique 40S approfondit les notions de mécanique, champs, électricité et physique médicale. Il aborde des concepts comme le mouvement projectile, le mouvement circulaire, l'énergie, les orbites basses, les circuits électriques et les rayonnements.

**NOTE: It is recommended that Physics 30S has been successfully completed before taking Physics 40S.**

### **TOPICS IN SCIENCE - SC40S / SUJETS INTERDISCIPLINAIRES EN SCIENCES – SC40SX**

This is a general science course where students will study and discuss real-world problems, identifying root causes and solutions. It is a student-driven course that explores everyday science topics through practical, interdisciplinary learning. This course is ideal for students interested in science but prefer a non-traditional science classroom approach and would like to explore specific science topics outside of the core provincial curriculum.

SC40SX est le cours complémentaire de SC30SX, mettant l'accent sur des sujets liés à la société, à la science et à l'environnement. Les thèmes de ce cours sont organisés autour d'enjeux actuels, où les connaissances scientifiques et leurs implications sont présentées de manière unifiée, intégrant les domaines de la biologie, de la chimie, de la physique, des géosciences et des sciences de l'espace.

## TECHNOLOGY EDUCATION PROGRAM COURSE DESCRIPTIONS

*These courses are offered to grade 11 and 12 students who have not taken the introductory (20S) courses in previous years.*

### **FURNITURE TECHNOLOGY – FURNTECH40S**

This course gives grade 11 & 12 students a broad, introductory overview to the carpentry cluster. Students will develop basic knowledge, skills, and attitudes related to carpentry.

### **INTRODUCTION TO ELECTRICAL TRADES - EL20STG**

This introductory course will teach the student about basic and advanced house wiring techniques. Students will learn the proper skills to work safely with electricity. They will gain the ability to install a basic circuit, upgrade old switches and lights or even fix broken equipment as a homeowner would.

### **INTRODUCTION TO CULINARY - FS20SSG**

This Course is designed for students to gain practical experiences working with culinary ingredients, applying appropriate cooking methods and cooking techniques when preparing food. Under the guidance of a culinary art instructor students will learn how to sustain themselves in their nutritional needs, cook and prepare food in a state-of-the-art kitchen.

The core objective of this course is to transfer knowledge and skill, for students to be able to source products, understand nutritional facts / needs to prepare food and develop an understanding of the core ideas of recipes. Further students will discover the idea “from farm to table” the environmental and nutritional impact of food processing as well the notion of vegetarian diet and veganism and its impact on food and health.

### **INTRODUCTION TO GRAPHIC DESIGN - GD20SG**

This course introduces students to the field of graphic design. Students will begin to focus on basic design theory, the design process, and their practical application.

### **INTRODUCTION TO AUTOMOTIVE TECHNOLOGY – PM20SG**

This course is intended for any grade 11 and 12 student who wants to learn more about how to care for the cars they drive. The students can explore the Automobile and small engine repair without committing to the Vocational Automotive program. This exploratory course introduces students to the basics of the small engine, the automobile, its systems, maintenance and repair. Students learn how to use hand tools accurately and safely, perform measurements, and interpret technical repair procedures using software and diagnostic equipment.

## **APPLIED COMMERCE EDUCATION**

### **BUSINESS MANAGEMENT – BM40S**

Business Management focuses on developing planning, leading, organizing, controlling, and staffing skills. Students will study various management styles and participate in activities related to human resources, inventory, finance, and project management. This course is designed for students interested in furthering their knowledge of management strategies used in various settings and furthering their knowledge of business ownership. Students will put their learning into practice in Husky Haven. Management students will take on management roles within the school store, including ordering merchandise, training employees, and planning for the store’s overall success.

## **AUTOMOTIVE TECHNOLOGY**

At College Sturgeon Heights Collegiate, our Automotive Technology program is a dynamic and interactive program. The program is designed to help students develop a working understanding of the basic purpose, construction, operation and service of all automotive components and assemblies while potentially earning a level 1 apprenticeship standing. Through a combination of theory and practical application students will learn about and demonstrate their ability to service, diagnose and repair a wide variety of vehicles and systems using state of the art tools and equipment.

### **THIS PROGRAM INCLUDES:**

- Electrical Systems
- Brake Systems
- CV Assembly
- Drivetrain/Transmission Systems
- Engine Fundamentals
- Engine Reconditioning
- Engine Diagnostics
- Electronic Systems
- Fuel Systems
- Light Service and Repair
- Suspension Systems
- Shop Safety
- WHIMIS Training

Course Options:

### **Introduction to Automotive Technology (AT10S)**

\*Not included for Technology Education Diploma or Accreditation

### **Automotive Systems and Service (AT20S)**

A student wanting to develop skills in the automotive service and repair industry must have knowledge of the basic principles related to automotive systems and service. Students learn safety, tool and equipment, automotive systems and service procedures and are introduced to diagnosis strategies.

### **Engine Fundamentals and Service (AT30SSA), Chassis Fundamentals and Service (AT30SSB), Drivetrain Fundamentals and Service (AT30SSC) – 3 credits**

Students will learn to safely perform preventive maintenance, basic automotive repairs, and detect problems through early warning signs. Students will learn engine reconditioning, drive train systems, brake systems, and wheel alignment. Classes combine knowledge-based theory and hands-on shop work.

### **Automotive Electrical Systems (AT40SSA), Vehicle Systems Part 1 (AT40SSB), Vehicle Systems Part 2 (AT40SSC), Applied Diagnostic Strategies (AT40SSD) – 4 credits**

The focus of these courses is on current technology and advanced automotive systems. Students learn about engine and emission controls, airbag and antilock brake systems, automotive electrical system basics and diagnostic strategies to help them find system faults. Career preparation and school to work programming are presented.

## **AVIATION – PILOT GROUND SCHOOL**

The Pilot Ground School cluster of courses has been developed to teach students all of the knowledge, skills and attitudes required for the Ground School component of their Private Pilot’s License, administered by Transport Canada. Students who complete this 8 course cluster, and meet Transport Canada requirements (including a minimum number of hours of flight instruction) are then qualified to write the Transport Canada Private Pilot License Airplane Category written exam. Students can obtain their Private Pilot’s License by completing their flight instruction through one of the Flight Training Units approved by Transport Canada. Students can begin their flight instruction at any time, including while enrolled in this cluster, as long as they meet the Transport Canada requirements. More information on the exam can be found in this document: TP 12880E (06/2010) Study and Reference Guide for written examinations for the Private Pilot Licence – Aeroplane fifth edition, which is found here:

<https://www.tc.gc.ca/Publications/en/TP12880/PDF/HR/TP12880E.pdf>

Besides completing their Ground School training, students completing this cluster will also learn about various sectors in the aviation industry, including a variety of aviation careers, such as commercial pilot, air traffic controller, meteorologist, aircraft maintenance engineer, and aeronautical engineering.

After successfully completing the cluster, students will have obtained knowledge and skills which will ease their transition to post secondary education opportunities in aviation. These include BSc. in aviation or meteorology, air traffic control diploma, and engineering programs in maintenance and aeronautics.

#### **INTRODUCTION TO AVIATION – AV20S**

This course provides a general introduction to the following program topics: aerodynamics, mechanics of aircraft, knowledge of air laws, meteorology, and psychology of pilot decisions, human factors, and navigation.

#### **PRINCIPLES OF FLIGHT – AV30S**

In this largely theoretical course, students focus on aerodynamics, theory of flight, mechanics of aircraft, air law, radio theory, airdromes, and airports, as well as engines, airframes, systems, and instruments.

#### **METEOROLOGY & NAVIGATION – AM30S**

In this course, students will develop theoretical and practical understanding of meteorology, and its application to aviation. They will also develop theoretical and practical understanding of navigation, especially as it relates to flight planning.

#### **FLIGHT SIMULATION LAB – FLS30S**

This course, students focus on following correct procedures while performing flight training exercises as they fly simulated aircraft. This provides them with the opportunity to incorporate the theory that they have previously learned. As part of their experience flying simulated aircraft, students learn required radio procedures. **One must have a prerequisite of the Introduction to Aviation- AV20 course to register**

#### **ADVANCED AVIATION –AAV40S**

In this course, students will gain advanced understanding of navigation technologies, aerodynamics, the relationship between meteorological conditions and aircraft performance, and air law. **One requires a prerequisite of the 30s courses to register.**

#### **HUMAN FACTORS – AHF40S**

This course focuses on human factors in aviation, including the pilot and the operating environment, aviation psychology, pilot decision making, and aviation physiology.

#### **AVIATION OPERATIONS – AO40S**

In this course, students will develop understanding of all sectors of the aviation industry and focus on those sectors in which they are interested in pursuing. They will have the opportunity to discover the aviation-related facilities in their area, such as air operators, airports and airdromes, repair and maintenance facilities, control towers and centres, etc. **This course needs to be taken along with Applied Aviation- AA40S.**

#### **APPLIED AVIATION – AA40S**

In this course, students develop understanding of careers in the aviation industry, including training and employment opportunities, and focus on those careers in which they are interested in pursuing. Students will have the opportunity to meet with people who work in specific careers in aviation. They will also develop a resume as part of their plan to obtain their preferred career in aviation. **This course needs to be taken along with Aviation Operations- AO40S.**

## **CULINARY ARTS**

In the Culinary Arts program, you'll gain practical experience in the kitchen while studying and researching the business of cost control, sanitation and safety, menu, nutrition, and kitchen management. You'll learn to produce food quickly and in quantity while working with others. Graduates are prepared to seek entry-level employment such as line cook, and pantry cook (garde manger). The mission of the Culinary Arts Program is to provide an environment for students to become learners possessing the skills, knowledge, creativity, and ethical values necessary to flourish in the rapidly changing culinary, restaurant and catering professions. Experienced industry professionals impart their knowledge and up-to-date technical acumen to their students, and curriculum relies heavily on actual participation in projects that are practical and technical in scope.

Culinary Arts Program at Sturgeon Heights Collegiate is a certified Accredited Program; Apprenticeship Manitoba recognizes trades-related courses or programs of study offered by many training institutions, colleges, and high schools. Accredited programs offer prospective apprentices the opportunity to gain basic trades-based knowledge and skill.

For further information: <https://www.gov.mb.ca/wd/apprenticeship/discover/mbtrades/cook.html>

## **EXPLORATION OF THE CULINARY ARTS – CA10SS**

\*Not included for Technology Education Diploma or Accreditation

## **COOKING PRINCIPLES – CA20SS**

This course is intended for students wishing to pursue the Culinary Arts. The emphasis is on hands-on activities. Students learn the specifics of sanitation and safety in a commercial kitchen. They also learn about tools and equipment, knife handling and safety, and general preparation procedures for different types of food and beverage. The course provides information and practical experience on the effects of heat on food, setting up workstations, cooking terms and methods, principles for seasoning and flavouring, and how to read and follow recipes. Student will practice measurement and scaling techniques.

**NOTE:** Students registered in the Grades 11 or 12 program must sign up for all credits.

## **CULINARY ARTS – FS30SSA, FS30SSB, FS30SSC**

Credit Value: 3 courses, 1 per course.

**Practical Skills:** The emphasis is on volume production for employment in the hospitality industry. Meals are prepared for the staff and the student cafeteria as well; there are several banquets and special catering events throughout the semester in which students will need to participate.

**Theory:** This level consists of topics which include: W.H.M.I.S.; Food Safety and Sanitation; Planning and Organization of Work Activities; The Recipe: Its Structure and Its Use; Preparation and Presentation of Baked Goods; Preparation and Cooking of Stocks; Sauces and Soups Preparation and Presentation of Desserts; Preparing Hot and Cold Beverages; Preparation and Cooking of Fresh Vegetables, Fruit, Starches and Farinaceous Products; Preparation and Cooking of Meats and Poultry. There is a final practical/theory examination upon completion of the course.

## **CULINARY ARTS – FS40SSA, FS40SSB, FS40SSC, FS40SSD**

Credit Value: 4 courses, 1 per course.

**Practical Skills:** The emphasis is on volume production employability skills for employment in the hospitality industry. Students prepare soups, sauces, daily chef's specials. Special catering and banquets are part of the course. **Theory:** This level consists of topics which include: W.H.M.I.S.; Food Safety and Sanitation; Use of Dairy Products, Eggs, and Breakfast Cookery; Sauces and Soups; Preparation, The Menu and Costing, Preparation and Cooking of Stocks; Cooking and use of Convenience Products; Preparation and Presentation of Cold Food and Cold Buffets; Planning and Organization of Work Activities; Preparation, Cooking and Storage of Food Items for Freezing and Chilling. There is a practical/theory final examination upon completion of the course.

## **INTERACTIVE DIGITAL MEDIA**

Interactive Digital Media is a course that explores various creative multimedia industry software and technologies. The courses are largely project based and designed for students to explore new ideas and technology in the multimedia industry. Interactive Digital Media is offered from Grade 10 to 12 increasing in depth and focus. Each level progresses from learning the basics of the various software and equipment, to advanced development of creative assignments and projects.

This program is intended for imaginative and motivated individuals who have a desire to explore new ways of expressing their creativity through multimedia.

## **INTRODUCTION TO INTERACTIVE DIGITAL MEDIA – DMD20S**

The Introduction to Digital Media Design program provides up-to-date Technical Vocational training in web design, mobile game and app development, digital photo & video, and 2D & 3D animation.

## **INTERACTIVE DIGITAL MEDIA DESIGN – DMD30S**

Course is a continuation of theory and skill development of the Grade 10 level course.

## **FUTURES IN INTERACTIVE DIGITAL MEDIA – DMD40S**

The grade 12 Digital Media Design program provides up-to-date Technical Vocational training in web design, mobile game and app development, digital photo & video, and 2D & 3D animation. It teaches both design fundamentals and technical skills, and encourages creativity, imagination, professionalism, and a strong work ethic. As a graduate of this program, you will be able to design and build advanced responsive websites, shoot, and edit high end digital video and motion graphics, develop complex games & apps, and construct detailed 2D animation & 3D models.

## ELECTRICAL TRADES TECHNOLOGY

The Sturgeon Heights Electrical Trades Technology program teaches and prepares students for life after high school, no matter what their path may be. Students can get direct entry into Electrical Apprenticeship, Electrical Distribution Warehouses, or further their training with post secondary schooling at university, trades colleges, public utilities or even to become a qualified handy person as a proud homeowner.

### **INTRODUCTION TO ELECTRICAL TRADES TECHNOLOGY – EL20S**

The course is an introduction to the working world of electrical and electronics. Students will learn the theory, characteristics, and fundamentals of electron flow associated to work safely with Direct Current. Students will learn extensively using a hands-on approach by building various electronic projects, using meters, soldering, making their own circuit boards, troubleshooting broken electric devices, and even fixing things from home.

### **ELECTRICAL TRADES DC FUNDAMENTALS – EL30ST**

Students will be introduced to electrical technology by studying DC circuit theory. Areas of study include instrumentation, measurement, component recognition, value determination, and fabrication. Students will learn Ohm's law as it relates to series, parallel, and combination circuits.

### **RESIDENTIAL WIRING – EL30SS**

Students will be introduced to Canadian Electrical Code (CEC) standards. They will learn to design, install, test, and troubleshoot branch circuits, and become familiar with the tools, techniques, materials, and devices associated with it. Students will also be introduced to blueprint reading.

### **ELECTRICAL WIRING METHODS – EL30SSB**

Students will be introduced to alternative wiring methods and the CEC codes associated with them. They will work with various types of raceways and cables, and become familiar with the tools, techniques, materials, and devices associated with them.

### **ADVANCED RESIDENTIAL WIRING – EL40SS**

Students will build on the knowledge and skills that they learned in residential wiring, including home automation technologies, and service and demand load calculations.

### **ELECTRICAL TRADES AC FUNDAMENTALS – EL40ST**

Students will become familiar with AC theory, including electrical fundamentals, magnetism, electromagnetism, and RLC circuits. Students will also focus on cross-curricular knowledge from mathematics and physics.

### **ADVANCED ELECTRICAL WIRING METHODS – EL40SSB**

Students will build on the knowledge and skills that they learned in Electrical Wiring Methods. Students will also be introduced to motor controls, PLCs, raceway calculations, voice data video (VDV) structured cabling, as well as retrofitting and/or upgrading existing electrical installations.

### **APPLIED ELECTRICAL TRADES TECHNOLOGY – EL40SSC**

Students will build on the knowledge and skills that they learned in Electrical Wiring Methods. Students will also be introduced to motor controls, PLCs, raceway calculations, voice data video (VDV) structured cabling, as well as retrofitting and/or upgrading existing electrical installations.

## GRAPHIC DESIGN

Graphic Design is a comprehensive certificate program offering the latest instruction in graphic design and print communications technology. Students will learn and practice the fundamental elements, principles, techniques, and applications that are pertinent to the overall development specific to the Graphic Design & Print Communications Discipline.

### **FUNDAMENTALS OF GRAPHIC DESIGN – GD20S**

This course introduces students to the field of graphic design. Students will begin to focus on basic design theory, the design process, and their practical application.

### **GRAPHIC DESIGN AND LAYOUT – GD30S**

Students will expand the knowledge and skills acquired in Fundamentals of Graphic Design and focus on the theory and practical application of graphic design and layout.

### **ILLUSTRATION FOR GRAPHIC DESIGN – GD30SA**

Students will expand the knowledge and skills acquired in Fundamentals of Graphic Design and focus on the theory and practical application of illustration.

### **INTERACTIVE GRAPHIC DESIGN – GD30SB**

Students will expand the knowledge and skills acquired in Fundamentals of Graphic Design and focus on the theory and practical application of interactive graphic design.

#### **ADVANCED GRAPHIC DESIGN AND LAYOUT – GD40SA**

Students will expand the knowledge and skills acquired in Graphic Design and Layout and focus on the theory and practical application of graphic design and layout to solve client-driven design challenges.

#### **ADVANCED ILLUSTRATION FOR GRAPHIC DESIGN – GD40SB**

Students will expand the knowledge and skills acquired in Illustration for Graphic Design and focus on the theory and practical application of illustration to solve client-driven design challenges.

#### **ADVANCED INTERACTIVE GRAPHIC DESIGN – GD40SC**

Students will expand the knowledge and skills acquired in Interactive Graphic Design and focus on the theory and practical application of interactive graphic design to solve client-driven design challenges.

#### **GRAPHIC DESIGN PORTFOLIO – GD40S**

In this course, students apply the knowledge and skills learned in previous courses to produce a graphic design portfolio to obtain entry-level employment or self-employment opportunities or gain admittance to a post-secondary program.

### **HAIRSTYLING**

Recognition has been given to the College Sturgeon Heights Collegiate Hairstyling program, which meets the required standards, needed by the Manitoba Apprenticeship Board. At Sturgeon Heights Collegiate, we have an accredited hairstyling program. This means that once a student graduates and completes all the required levels and the government practical exam, they will achieve their Level 1 Apprenticeship. After graduation, students can continue to work towards their next 1500 hours to complete level 2. Upon completing their level 2 apprenticeship, they are required to gain at least 70% on their written government exam.

For further information: <https://www.gov.mb.ca/aesi/apprenticeship/discover/mtrades/hairstylist.html>

#### **HAIRSTYLING – Grade 9 – H20S**

Credit Value: 1 credit

##### A) Introduction to Hairstyling

This is an introductory Hairstyling course. Students will learn to use the basic tools, products, and styling techniques necessary to familiarize them with the Hairstyling Profession as a career choice. The course is approximately 70% practical and 30% theoretical.

#### **HAIRSTYLING - HS20SA and HS20SB**

Credit Value: 2 credits, 1 per course.

##### A) Basic Hairstyling

##### B) Basic Haircutting & Thermal Styling

Students are encouraged to develop an artistic appreciation of the world of beauty and fashion. Students will perform skills such as shampooing and scalp treatments, basic styling, permanent wave wrapping, French braiding, and much more. Evaluations are based on theoretical understanding and practical abilities. Students must register for both credits.

**NOTE: Students registered in the Grades 11 or 12 program must sign up for all credits.**

#### **HAIRSTYLING – HS30S, HS30SA, HS30SB, HS40SC**

Credit Value: 4 courses, 1 per course.

##### A) Intermediate Haircutting & Barbering

##### B) Hair Colouring

##### C) Intermediate Hairstyling

##### D) Chemical Texture Services

The Grade 11 hairstyling courses will focus on barbering techniques, and the continued development of haircutting implements. As well, an introduction to colour theory and the continued development of hair colouring techniques will also be explored. Curriculum content will also focus on wigs and hair enhancements along with wet and thermal hair styling techniques. The theory of permanent waving and chemical relaxing, as well as the practical application of permanent waving.

#### **HAIRSTYLING – HS20SS, HS40SSA, HS40SSB, HS40SSC, HS40SSD**

Credit Value: 5 courses, 1 per course

##### A) Related Salon Services

##### B) Advanced Hairstyling & Colouring

##### C) Advanced Haircutting

##### D) Salon Operations

##### E) Certificate Preparation

The Grade 12 hairstyling courses will focus on special effects hair colour, corrective colour, as well as advanced wet and thermal hairstyling techniques. Also, students will focus on advanced haircutting and permanent waving techniques, as well as practical application of chemical hair

relaxers. The business operations of a hair salon, as well as the creation of a resume and career portfolio will be explored, and finally the preparation for students to successfully complete their Provincial Examination.

## BROADCAST MEDIA TECHNOLOGY

Broadcast Media is a 5-credit program that offers students the latest instruction in video production and broadcast media communications technology.

Students will be introduced to the tasks and equipment used in audio, video, and film production in a variety of projects. They will learn the skills and roles involved in the pre-production, production, and postproduction of different types of video media. They will also develop a clear understanding of the importance of media today.

### INTRODUCTION TO BROADCAST MEDIA TECHNOLOGY - BM20SSA

This course will introduce students to all aspects of video production including storyboard creation, script writing, video camera operation, shot composition, and editing. This course is recommended before other Grade 11 and Grade 12 media production courses.

### VIDEO POST-PRODUCTION FOR BROADCAST MEDIA - BM30SSA

Students will explore storytelling through video projects incorporating advanced production values such as lighting, sound design, and post-production.

### SINGLE CAMERA PRODUCTION FOR BROADCAST MEDIA - BM30SSB

Students will create non-narrative video projects such as biographical, instructional, and editorial formats incorporating advanced production values such as lighting, sound design, and post-production.

### ELECTRONIC NEWS GATHERING/DOCUMENTARY & FILM PRODUCTION - BM40SSA/BM40SSB

Students will learn Electronic News Gathering techniques and create documentary videos. Emphasis will be placed on script preparation and copywriting.

## PHOTOGRAPHY

Sturgeon Heights Photography is where student can unleash their photographic creativity using professional DSLR cameras and equipment. In this program, we start with the basics, covering proper composition and editing techniques. As the course progresses, students are shown more advanced techniques and equipment. Students get to use our fully equipped studio to produce professional results. They discover much more advanced editing techniques using Adobe Photoshop. Students are offered many chances to work with real clients and live events as well as field trips that encourage their photographic creativity. As students build their skills, they start to focus on developing their portfolios in preparation for post-secondary education or transition to employment.

### EXPLORATION OF PHOTOGRAPHY – PD10SS

Step into the world of digital photography! In this course, you'll learn how to capture striking images, experiment with light and composition, and tell stories through your photos. Everything you do builds toward one exciting project: creating your own photo cube. At the end of the course, you'll have a unique, hands-on display of six of your best shots to take home and show off.

No experience needed — just bring your curiosity and creativity!

### INTRODUCTION TO PHOTOGRAPHY – PD20SS

This is an introduction to digital photography. Some computer experience is beneficial as this course makes extensive use of technology. Students will be using digital point and shoot cameras that will be provided.

### PHOTOGRAPHIC EQUIPMENT – PD30SS

This is an intermediate photography course that focuses on composition and creativity in digital photography. Students will explore equipment and techniques that were not previously covered in the introduction courses. Computer experience is required as this course makes extensive use of technology. Students will be using DSLR cameras that will be provided. It is recommended that students have prior experience in Photography.

### APPLIED PHOTOGRAPHY – PD40SS

This is an advanced digital photography course that focuses on portfolio development and workplace transition. Students will explore equipment and techniques that were not previously covered in any of the previous courses. It is **STRONGLY** recommended that students have prior experience in Photography and image editing. Students will be using DSLR cameras that will be provided.

## WELDING

This program is a Level 1 'Apprenticeship MB Certified Program. On successful completion of these Welding courses, students who maintain a grade of 70% or higher, may be qualified for level 1 of the Provincial Industrial Welding Apprenticeship Certificate.

Further information:

<https://www.gov.mb.ca/aesi/apprenticeship/discover/mbtrades/welder.html>

**WELDING: Introduction - WE20S**

The 20S course is an introduction to the welding trade. Students will learn how to weld with both oxyacetylene and mig welding equipment in a safe manner.

**WE30SSA, WE30SSB, WE30SSC**

Credit Value: 3 courses, 1 per course

WE30S builds on the skills learned in WE20S and includes: Metal Design Fab Oxy-Acetylene, Basic MIG procedures and Basic ARC procedures.

**Students who complete WE20S in grade 9 can take WE30SSA in their grade 10 year.**

**WE40SSA, WE40SSB, WE40SSC, WE40SSD**

Credit Value: 4 courses, 1 per course

The 40S courses refines WE20S and WE30S skills to include out-of-position arc welding. Many metal trades skills such as tig-welding, blueprint reading, and metallurgy are included. Repair and construction projects are also undertaken. Students are tested by the Canadian Welding Bureau (CWB) at the end of the course.

**WOODWORK TECHNOLOGY****Woodwork Technology – WT10G**

This grade nine course lays the foundation of basic woodworking skills. Students are introduced to a variety of different tools and equipment within a woodworking/carpentry course through project design. Students build several projects utilizing different machines and are taught safe operating procedures of all equipment in the room. Students can design and build their own choice project in the latter part of the course. Students will exit the course being able to follow technically written instructions, apply basic measurement skills, and understand the importance of drafting and quality in design.

**Woodwork Technology - WT20G**

This grade nine course lays the foundation of basic woodworking skills. Students are introduced to a variety of different tools and equipment within a woodworking/carpentry course through project design. Students build several projects utilizing different machines and are taught safe operating procedures of all equipment in the room. Students can design and build their own choice project in the latter part of the course. Students will exit the course being able to follow technically written instructions, apply basic measurement skills, and understand the importance of drafting and quality in design.

**Woodwork Technology - WT30S**

An extension of WT20G, this program provides students with a working understanding of the key elements associated with woodworking. Some topics covered are advanced machine use, CNC router design, and furniture building. Students will be required to use larger machinery in the lab, including the planer, jointer, and miter saw. Project design using MastercamX6 programs, will be encouraged as part of this challenging program.

**Woodwork Technology - WT40S**

In this final year, students become proficient in the use of all available woodworking machines and power tools. Many aspects of machine care, use, maintenance, and safety are taught. Projects are designed using MastercamX6 programs. Simple and advanced jigs and fixtures are introduced on various operations and machines. The main objective is for students to use previous years' experiences in Industrial Arts to plan, develop and construct quality, rewarding projects that reflect the individual's creative design and building abilities.

**GRADE 9 TRY A TRADE**

Students have the opportunity to try one selection of four Technology Education courses. These courses will be studied for approximately 5 weeks each and combine to form 1 credit. Each of these trades can be studied further at CSHC, however, skills like problem solving and teamwork transfer well to all future classes. A subject specific focus on safety begins each course.

**Option 1:**

Automotive Technology – Aviation – Culinary Arts – Welding

**Option 2:**

Broadcast Media – Graphic Design - Interactive Digital Media Design – Graphic Design - Photography