



STURGEON COMPOSITE

COURSE DESCRIPTION GUIDE 2022-2023





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A bit about our school

Sturgeon Composite High School offers a full range of programs to meet the educational needs of its students, wherever their dreams and interests lie. From academic, fine arts, and career and technology studies to athletics, special education and leadership programs, the school provides a well-rounded education in a safe and caring environment.

Staff, parents and students work to maintain a learning environment that is responsive to the needs of all students. The goal is to enable all students to develop knowledge, skills and attributes that encourage them to become leaders and successful citizens after graduation.

SCHS Mission

Our mission at Sturgeon Composite High School is to support our students in their pursuit of excellence by providing diverse and challenging programs in a safe and caring environment. Our learning community will be focused on mindful, respectful, and socially responsible global citizenship.

SCHS Vision

We envision a school where...

- Our students receive quality instruction with high standards and expectations by teachers dedicated to professional growth and mastery.
- Our students develop social awareness and good citizenship by encouraging inclusive, respectful, and positive learning between students, staff, parents, and community.
- Our students will be confident and successful; they will strive for excellence to become competent problem-solvers and engaged lifelong learners.
- Our students have a diverse learning experience to acquire a wide variety of knowledge-based and skilled programming in an inclusive environment.
- Our school provides a respectful, safe, and welcoming environment in which students and staff feel empowered and supported.

MAKING THE PLAN

Post-Secondary Goals

- ☐ Apprenticeship
- ☐ University
- ☐ Institute of Technology
- ☐ Community College
- ☐ Other (specify)

Check One 

Career Goals

To Work? ☐ Yes ☐ No

What occupation?

Further education ☐ Yes ☐ No

Where?

What faculty or program?

What subjects are required for entrance?

If you are not certain, what general area would interest you?

Please see Student Services to get started on your My BluePrint profile.

PLANNING INFORMATION

Setting Your Own Path

What Are Your Future Goals?

Before you pick your high school courses, take some time to really think about your future goals. What do you want for yourself in the future? What are your values, interests and abilities? You will face many choices as you start to select your high school courses. If you select carefully, you will graduate prepared for a variety of opportunities. If you're not careful, your choices can be limited.

Remember to Be Flexible

In high school, you will discover more about yourself – what you are good at and what you enjoy. These discoveries may cause you to change your goals and re-evaluate your selection of courses. It is important to set goals and work toward them, but also to be realistic and adaptable.

How High School Courses Work

Two Types of Courses

Let's start at the beginning. There are two types of courses: core and complementary.

1. **Core Courses** are English, Social Studies, Mathematics and Science. These are offered at several levels – or routes. Choosing the highest level that you will succeed at is the best way to keep your options open for the future.

2. **Complementary Courses** offer you a chance to broaden your knowledge by studying a variety of subjects including Art, Music, Second Languages, Communication Technology, Fashion Studies, Sports Medicine and many more.

Every Course Has a Number

- Grade 10 courses begin with a number 1
- Grade 11 courses begin with a number 2
- Grade 12 courses begin with a number 3

*Have Questions or
Need Some Help?*

Selecting the right program and courses can be a daunting task. If you ever have any questions or need more information, your teachers, counsellors and administrators are here for you at any time.

Courses Have a Natural Sequence

Courses are arranged in sequence, such as English 10-1, 20-1 and 30-1. You need to take them in order. For example, you need to complete English 10-1 before taking English 20-1. English 10-1 is the prerequisite for English 20-1. To complete a course and move onto the next one, you need to earn a mark of 50% or higher.

A Note About Routes

You do not need to select all your courses from the same route. For example, you may choose English 10-1, Mathematics 10-3 and Social Studies 10-2. You may also transfer from one route to another. Your principal, counsellor or teacher can advise you on the best way and time to make the change.

Course Changes / Drops

We expect students to remain in the courses they select. Sometimes, however, a course drop or change may be warranted. Students may request a course change by filling out a course change form from Student Services and having their parents sign it. Counselling services and administration then review the request.

Entering Grade 10?

Choosing the Right Route

Your marks help determine which program route you should be registered in. Based on your mid-year report cards, we grant you conditional acceptance during the spring registration. At the end of June, your junior high will typically forward us your final report card or transcript and we will review your registration then.

How Do I Get My Diploma?

100 is the Magic Number

To qualify for the Alberta High School Diploma, you must obtain a minimum of 100 credits in high school. Most of these credits will be earned through required courses as indicated in the chart on page 7. The other credits will be earned through complementary courses you choose. Choose your complementary subjects carefully so you gain skills that will be useful when you graduate.

See the chart on page 7 for specific diploma requirements.

Prerequisite Course	Final Mark (recommended final mark)	High School Course
Language Arts 9	65% or higher	English 10-1
Social Studies 9	65% or higher	Social Studies 10-1
Mathematics 9	65% or higher	Mathematics 10C
Science 9	65% or higher	Science 10

Planning Tip

In planning your schedule, know what Grade 12 subjects you will want to take. That way, you can be sure to take the right prerequisites in grades 10 and 11.



Planning on Post-Secondary?

A high school diploma does not automatically grant you admission to university, college or other post-secondary institutions. Most post-secondary institutions require more core courses than a diploma requires. You will need to take these core courses as complementary choices. Talk to a teacher, counsellor or administrator if you have questions.

Diploma Exams

You are required to write a diploma examination in English 30-1 and 30-2, Social Studies 30-1 and 30-2, Mathematics 30-1, Mathematics 30-2, Biology 30, Physics 30, Chemistry 30 and Science 30. Your final mark in these courses will be a weighted average with diploma exams accounting for 30% and course work contributing the remaining 70%.

PLANNING INFORMATION

How Credits Are Earned

Each Course Has a Credit
Sturgeon Composite High School offers courses in the semester system. Semester one starts in September and finishes at the end of January, while semester two starts in February and finishes in June. Each course is assigned a number of credits, usually based on instruction time.

- A 5-credit course meets every day for one semester
- A 3-credit course meets every other day in one semester

* Students who earn less than 40 credits after grade 10, will not be eligible for a spare in grade 11.

Minimum Credits per Year

Grade 10	Grade 11	Grade 12
Must be registered in 40 credits	Must have already earned 40 credits*	Must have already earned 75 credits
(No spare)	Must be registered in a minimum of 35 credits	Must be registered in 30 credits (15 credits/semester minimum)

Scholarships

Course requirements for the Alexander Rutherford High School Achievement Scholarships have changed. There is also a minimum credit load for Grade 12 students to qualify for a Sturgeon School Division scholarship and/or bursary. Check out the criteria for various scholarships in the Student Services Department.

How Retroactive Credits Can Work

Registered Course Failed	Alternate Course Passed	Credit Granted For
Social Studies 10-1	Social Studies 20-2	Social Studies 20-2 and 10-2
Social Studies 10-2	Social Studies 20-4	Social Studies 20-4 and 10-4
English 10-1	English 20-2	English 20-2 and 10-2
English 10-2	English 20-4	English 20-4 and 10-4
Mathematics 10C	Mathematics 20-3	Mathematics 20-3 and 10-3
Mathematics 10-3	Mathematics 20-4	Mathematics 20-4 and 10-4
Science 10	Science 24	Science 24 and 14
Science 14	Science 20-4	Science 20-4 and 10-4
Mathematics 20-1	Mathematics 30-2	Mathematics 30-2 and 20-2
Mathematics 20-2	Mathematics 30-3	Mathematics 30-3 and 20-3
Social Studies 20-1	Social Studies 30-2	Social Studies 30-2 and 20-2
English 20-1	English 30-2	English 30-2 and 20-2

How Do I Earn Credits?

1. You must earn a minimum mark of 50% to receive a credit in a course. You must also earn a minimum of 50% in one course (e.g. English 10-1) before moving onto the next level of that subject (e.g. English 20-1).

2. If you achieve a final standing of 40-49% in certain courses, you may choose to continue at the next grade level in the lower route. If you pass the next grade level, you will earn credit for this course and its normal prerequisite. These are retroactive credits.

The requirements indicated in this chart are the minimum requirements for a student to attain an Alberta High School Diploma. The requirements for entry into post-secondary institutions and workplaces may require additional and specific courses.

100 Credits

including the following:

ENGLISH LANGUAGE ARTS – 30 LEVEL

(English Language Arts 30-1 or 30-2)

SOCIAL STUDIES – 30 LEVEL

(Social Studies 30-1 or 30-2)

MATHEMATICS – 20 LEVEL

(Mathematics 20-1, Mathematics 20-2 or Mathematics 20-3)

SCIENCE – 20 LEVEL¹

(Science 20, Science 24, Biology 20, Chemistry 20 or Physics 20)

PHYSICAL EDUCATION 10 (3 CREDITS)²

CAREER AND LIFE MANAGEMENT (3 CREDITS)³

10 CREDITS IN ANY COMBINATION FROM:

- Career and Technology Studies (CTS)
- Fine Arts
- Languages⁴
- Physical Education 20 and/or 30
- Locally developed/acquired and locally authorized courses in CTS, fine arts or second languages, Knowledge & Employability occupational courses
- Knowledge & Employability courses
- Work Experience and RAP

10 Credits

in any 30-level course

(IN ADDITION TO A 30-LEVEL ENGLISH LANGUAGE ARTS AND A 30-LEVEL SOCIAL STUDIES COURSE AS SPECIFIED ON RIGHT)⁵

These courses may include:

- 30-level Locally Developed/Acquired and Locally Authorized Courses
- Advanced level (3000 Series) in; Career and Technology Studies Courses
- 30-level Work Experience⁶
- 30-level Knowledge & Employability Program Courses
- 30-level Registered Apprenticeship courses
- 30-level Green Certificate Specialization courses
- Special Projects 30
- Computing Science 30
- Work Experience and RAP

Did you know..?

Important SCHS facts!

- Student Services can help you find your post-secondary requirements.
- At most post secondary institutions, a 30 level Language or Fine Arts course may replace a 30 level Math or Science requirement.
 - A 30 level PE or some CTS courses may be used towards entrance requirements for specific post-secondary institutions.

1. The science requirement – Science 20 or 24 or Biology 20 or Chemistry 20 or Physics 20 – may also be met with any 10-credit combination of Science 10 and 14.

2. See information on exemption from the Physical Education requirement. <http://education.alberta.ca>.

3. See information on exemption from the CALM requirement. <http://education.alberta.ca>.

4. Students may earn any number of credits in each second language, but only a maximum of 25 language credits may be used to meet the 100-credit requirement for the Alberta High School Diploma.

5. 30 level English Language Arts or 30-level Social Studies courses from a different course sequence may not be used to meet the 30-level course requirement.

6. Students may earn any number of credits in work experience, but only 15 credits may be used to meet the 100-credit requirement for the Alberta High School Diploma.

FURTHER NOTES:

- For 30-level courses that have a diploma examination, the final course mark consists of a blend of the school-awarded mark and the diploma examination mark.
- Mature students should consult the Mature Students section for applicable requirements. <http://education.alberta.ca>

KNOWLEDGE AND EMPLOYABILITY



What are Knowledge and Employability Courses?

The purpose of Knowledge and Employability (K&E) courses are to help students:

- Develop essential concepts, skills, and attitudes in preparation for their role in the workplace, community and home.
- Obtain a sense of success and achievement in their learning experiences, thereby enhancing self-esteem.
- Develop entry-level job skills.
- Recognize the need for lifelong learning.
- Become responsible members of society.

Who Takes These Courses?

K&E courses are designed for students who:

- Are 15 years of age or older as of September 1st of the current school year.
- Are experiencing difficulty learning in the regular program.
- May have an achievement lag of one or more years in core subjects: Language Arts, Mathematics, Science, Social Studies.
- May have low self-esteem due to past academic failure.
- Focus well on visual and kinesthetic (hands-on) learning.

How are K&E Courses Different From Other Courses?

- Each course concentrates on the basic skills essential to becoming responsible members of society.
- Instruction in any skills begins with reference to real-life applications. It is often this deliberate reinforcement in a practical area that enables students to understand more fully the need for academic knowledge as it applies to job success.
- There is an emphasis on appropriate teaching strategies to suit the unique learning needs of Knowledge and Employability students.
- Resources are selected on the basis of the needs, interests and reading abilities of the Knowledge and Employability students.

How to Apply

Students are usually recommended for the K&E Program by their school. School counsellors, administrators and classroom teachers make their recommendations and submit names of possible candidates to Sturgeon Composite High School. Parents may also initiate admission procedures by approaching the student's present school or by contacting Sturgeon Composite High School directly.

Information sessions for students are held to help them with their decision regarding K&E courses. Registration forms are submitted by the student's present school and the status of each registration is decided upon and communicated to the school and parents.

What Recognition is Given For Completing the Program?

A provincial Certificate of Achievement will be awarded to a student upon successful completion of the senior high K&E courses.



Can K&E Students Earn a High School Diploma?

Yes! Some students also gain a general high school diploma, although it may take them some extra time. This extra year is available at Sturgeon Composite High School. Requirements will include successful completion of English 30-2 and Social Studies 30-2.

Students must obtain a minimum of 15 credits in English, including English 30-2, a minimum of 10 credits in mathematics, including Math 20-3, and a minimum of 10 credits in science, including Science 24. In addition students must have Social Studies 30-2 and 10 credits (2 courses) in other 30-level courses. Total credits must equal 100.

Are There Exits from the K&E courses?

Yes! There are multiple entry and exit points to accommodate the needs of the individual students. Students who indicate a readiness to tackle one or more of the senior high diploma core subjects can be transferred to the appropriate course(s). Students must be successful at the 10-4 level courses prior to moving to diploma courses. We recommend a mark of 80% or better along with a strong work ethic and good attendance.

Course offerings are dependent on enrolment.

Knowledge and Employability 10-4 level courses provide opportunities for exploration of an orientation toward an occupational grouping in a single career field. In 20-4 level courses, the student progresses from orientation toward preparation, and in 30-4 level courses, students are involved in preparation for direct job entry.

K&E
gives you hands-on
knowledge!

Work Experience 35 is a required course for the Certificate of Achievement for the K & E Program. Students can use either paid employment in the community or volunteer experience as hours towards Work Experience credits. This can be arranged through Student Services.



PLANNING INFORMATION

K&E Grade 10 Schedule (example only)

	SEMESTER 1	SEMESTER 2
BLOCK 1	Mathematics 10-4	Science 10-4
BLOCK 2	Course	Course
BLOCK 3	Physical Education 10	CALM
BLOCK 4	English 10-4	Social Studies 10-4

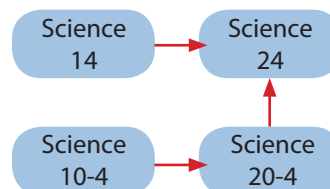
NOTE: This is an example schedule only. Physical Education should be one of the 3 or 5 credit options. All core subjects are 5-credit courses. Options may be 3 or 5 credits.



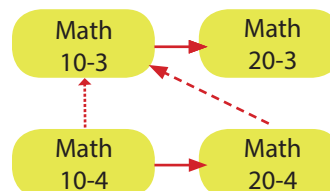
*Questions?
Just ask a school
counsellor.*

TRANSFER ROUTES FROM K&E CORE COURSES TO DIPLOMA COURSES

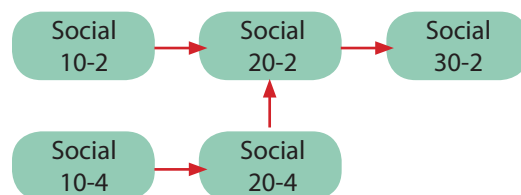
Science



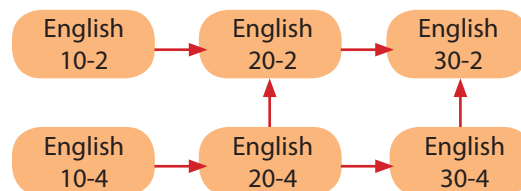
Math



Social Studies



English



NOTE: Students who wish to achieve a High School Diploma after their Certificate of Achievement would have to take ENGLISH 30-2, SOCIAL STUDIES 30-2 and 10 credits of additional 30-level courses, which could include WORK EXPERIENCE 35. If students are moving from regular stream courses into K&E, they must qualify according to Sturgeon School Division policy. You are advised to discuss this with a school counsellor.

*It is recommended that students who pass Math 20-4 and wish to transfer to the Diploma take Math 10-3 first.

Certificate of High School Achievement Requirements

The requirements indicated in this chart are the minimum requirements for a student to attain a Certificate of High School Achievement. The requirements for entry into post-secondary institutions and workplaces may require additional and/or specific courses.

80 Credits

including the following:

ENGLISH LANGUAGE ARTS 20-2 or 30-4

MATHEMATICS 10-3 or 20-4

SCIENCE 14 or 20-4

SOCIAL STUDIES 10-2 or 20-4

PHYSICAL EDUCATION 10 (3 or 5 CREDITS)

CAREER AND LIFE MANAGEMENT (5 CREDITS)

+5 Credits

- 30-level Knowledge and Employability occupational course, or
- 30-level Career and Technology Studies (CTS), or
- 30-level locally developed course with an occupational focus

+5 Credits

- 30-level Knowledge and Employability Workplace Practicum course, or
- 30-level Work Experience course, or
- 30-level Green Certificate course

or 5 Credits

- 30-level Registered Apprenticeship Program (RAP) course

Five 30-level work experience credits are a component of your certificate!

To qualify for a Certificate of High School Achievement, students must successfully complete a minimum of one academic Knowledge and Employability course to the 30 level.



COURSE DESCRIPTIONS



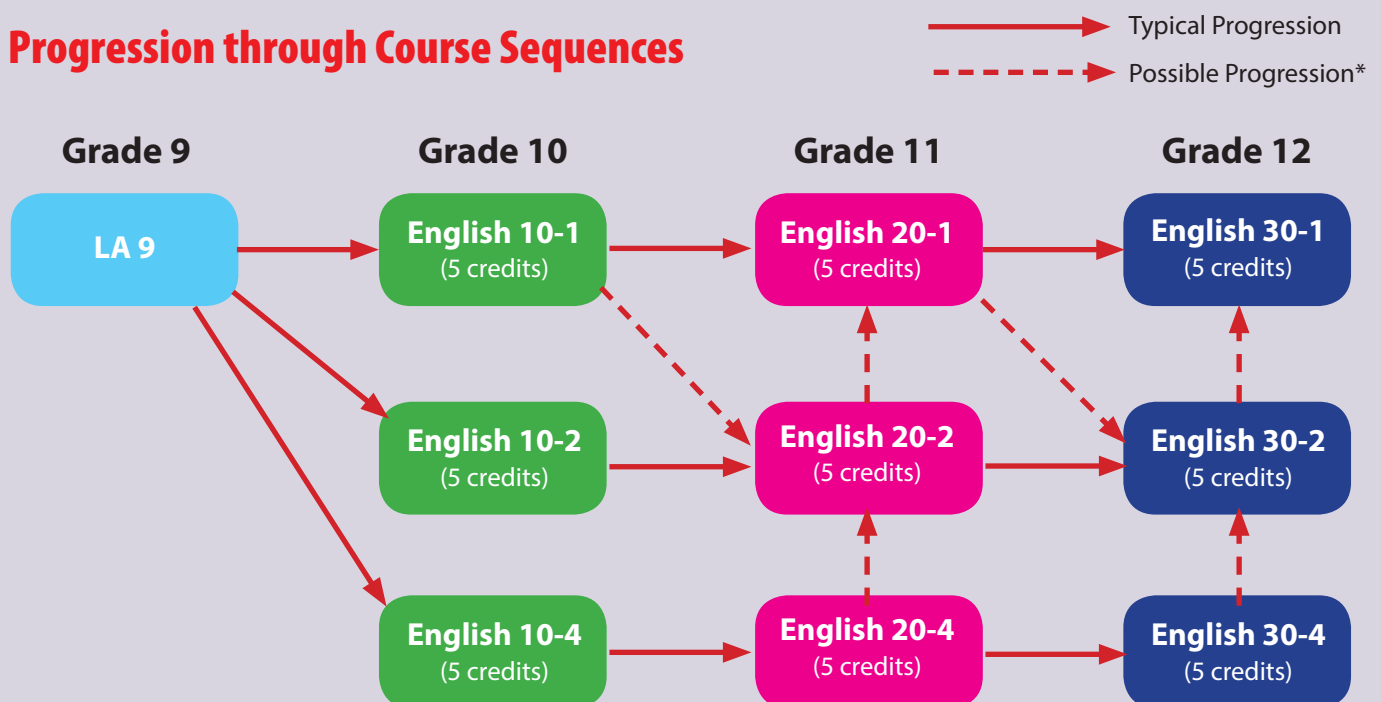
We offer two routes

English

Two Routes – English 10-1/20-1/30-1 or English 10-2/20-2/30-2. Both routes deal with the same skills of reading, writing, viewing, speaking and listening. The English Program provides opportunities for students to experience language in functional, analytical, artistic and pleasurable situations with the aim to develop:

- Awareness and interest in how language works.
- An understanding and appreciation of a wide range of use.
- Flexibility in using language for a variety of purposes.

Progression through Course Sequences



For students in the English 10-2/20-2/30-2 sequence who plan to take English 30-1, the strongly recommended transfer point is English 20-2 to English 20-1, then English 30-1. *Possible transfer route based on teacher recommendation and/or admin. approval.

Did You Know?

Shakespeare's works include the first-ever mention of 2,035 English words including critical, frugal, excellent, assassination and countless.

ENGLISH 10-1

Credits: 5

Prereq: Successful completion of LANGUAGE ARTS 9 or ENGLISH 10-2 (65% recommended)

English 10-1 focuses on the appreciation of literature, by examining genres such as the short story, poetry, the novel, the Shakespearean play, the feature film, and visual and multimedia text. Students are also expected to develop proficiency in using language confidently for a variety of purposes.

ENGLISH 20-1

Credits: 5

Prereq: Successful completion of ENGLISH 10-1 ENGLISH 20-2 (60% recommended)

English 20-1 is based on literary analysis and is designed to increase the student's knowledge and appreciation of literature and his/her communication skills. It includes a study of both Shakespearean and modern drama (optional), the literary essay, poetry, the short story, the novel, visual and multimedia text and film.

ENGLISH 30-1

Credits: 5

Prereq: Successful completion of ENGLISH 20-1 (60% recommended)

English 30-1 includes a study of Shakespearean or modern drama, the literary essay and other non-fiction, poetry, the short story, the novel, visual and multimedia text and film. It is the most intense study of all English courses, with the objective of preparing students to excel in both literary analysis and communication skill.

ENGLISH 10-2

Credits: 5

Prereq: Successful completion of Language Arts 9

English 10-2 offers an opportunity for students to develop their

communication skills, as well as to become involved in various forms of literature and to form personal responses to this literature. Through reading, writing, speaking, listening, and viewing, students are encouraged to explore their own views and experiences. Emphasis is on responding to literature and recognition of ideas contained in it rather than on literary analysis.

ENGLISH 20-2

Credits: 5

Prereq: Successful completion of ENGLISH 10-2

The content of this course includes the study of short stories, poetry, non-fiction, the novel, film, the modern play and multimedia texts. The literature studied will be chosen to increase understanding of humans and society as well as to enhance skills in communication. Considerable emphasis is placed on writing skills.

ENGLISH 30-2

Credits: 5

Prereq: Successful completion of ENGLISH 20-2

English 30-2 includes the study of short stories, non-fiction, novel, modern drama, film and multimedia texts. Emphasis will be on oral and written response to ideas implicit in the literature, but technical literary analysis will be incorporated in the studies.

ENGLISH 10-4, 20-4, 30-4

Credits: 5 each

Rational and Philosophy

The core responsibility of Knowledge and Employability English language arts courses is to foster and strengthen the development of language. Learning the foundational skills of communication

enhances confidence, builds personal identity and enables individuals to create and sustain meaningful relationships. Becoming successful communicators at home, at school, at work and in the community enables students to experience personal satisfaction and become responsible, contributing citizens and lifelong learners.

The aim of English language arts is to enable each student to understand and appreciate language and to use it confidently and competently in a variety of situations for communication, personal satisfaction and learning purposes. Knowledge and Employability English language arts focuses on developing the basic language competencies needed for everyday living at home, in the community and in the workplace.

COURSE DESCRIPTIONS



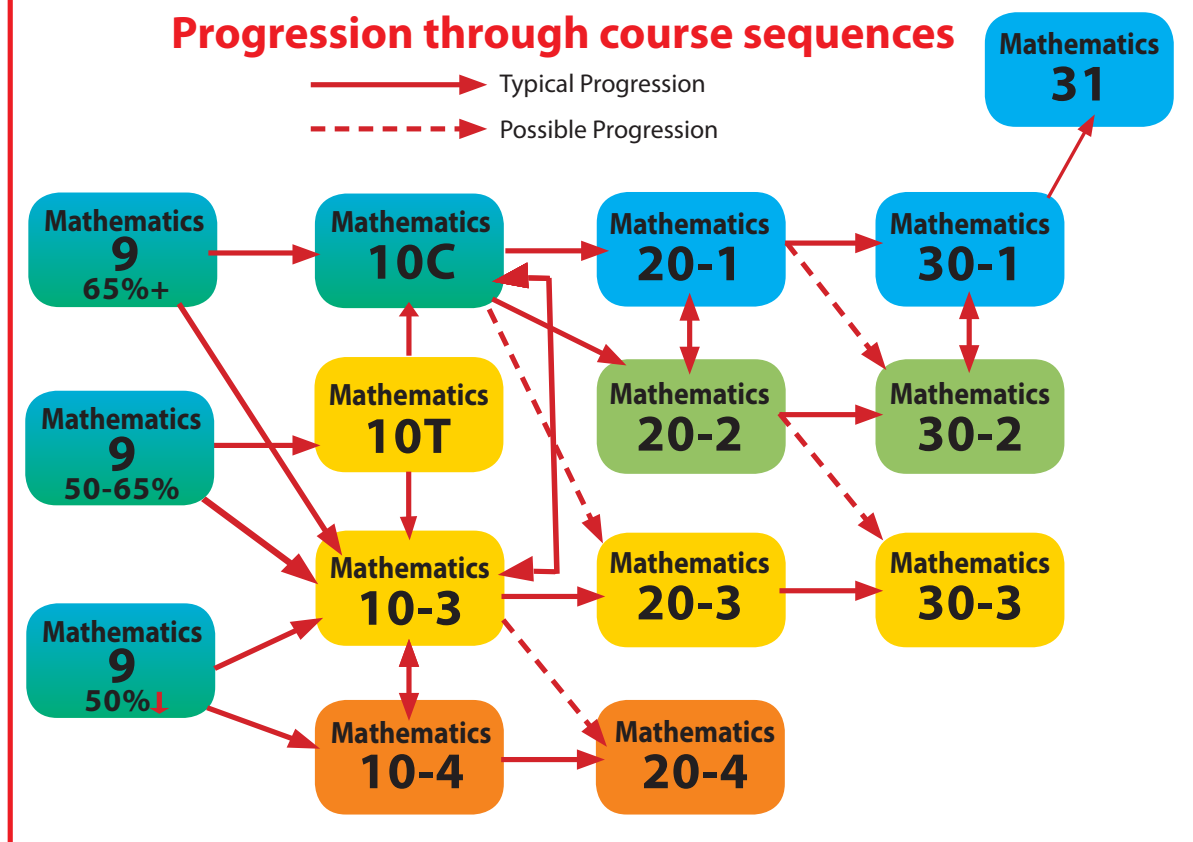
Mathematics

Note: Students require a graphing calculator for all math streams except 10-3, 20-3, and 30-3. The Texas Instruments TI-83 Plus, or TI 84 Plus calculator is recommended at Sturgeon Composite High School.

Your Choice

There are four math streams when entering Grade 10: 10C, 10T, 10-3 and 10-4.

Progression through course sequences



****Students must pass Grade 9 Mathematics to enroll in Mathematics 10C****

For detailed descriptions on each of the courses offered at Sturgeon Composite High School please see the following link to Alberta Education.
https://www.learnalberta.ca/content/mychildlearning/gradeataglanche/hs_math.pdf

MATH 10C

Credits: 5

Successful completion of Math 9 (65% recommended)

A combined course is the starting point for the “-1” course sequence and the “-2” sequence. Each topic area within the Math 10C course requires that students develop a conceptual knowledge base and skill set that will be useful, whether they choose the precalculus 20-1, 30-1 stream or the 20-2, 30-2 stream. The topics covered within a course sequence are meant to build upon previous knowledge and to progress from simple to more complex conceptual understandings.

MATH 20-1, 30-1

Credits: 5

Math 20-1 – Successful completion of Math 10C: (60% recommended)

Math 30-1 – Successful completion of Math 20-1 (60% recommended)

This course sequence is designed to provide students with the mathematical understanding and critical thinking skills identified for entry into post-secondary programs that require the study of calculus. Topics include: algebra and number; measurement; relations and functions; trigonometry; and permutations, combinations and binomial theorem.

Math 30-1 is required for programs such as: Sciences, Math, Engineering, some Psychology, etc.

MATH 20-2, 30-2

Credits: 5 each

Math 20-2: Successful completion of Math 10C

Math 30-2: Successful completion of Math 20-2

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into post-secondary studies in programs that do not require the study of calculus. Topics include: geometry; measurement; number and logic; logical reasoning; relations and functions; statistics and probability.

Math 30-2 is required for programs such as: Art Programs, Nursing, some Business and Psychology, etc.

MATH 10-3, 20-3, 30-3

Credits: 5 each

Math 10-3: Successful completion of Math 9

Math 20-3: Successful completion of Math 10-3

Math 30-3: Successful completion of Math 20-3

This course sequence is designed to provide students with the mathematical understanding and critical thinking skills identified for entry into the majority of trades and for entry into the work force.

Competencies in MATH 15

Credits: 5

Successful completion of Math 9 (50% -65% +)

This course is focused on improving student mastery of mathematical skills, concepts and ideas. Students will build numeracy through thinking critically, identifying and solving complex problems, and demonstrating good communication skills. Learners will engage in collaborative tasks and formative assessments designed to develop student agency and independence while acquiring mathematical knowledge. Students would take Math10-3 or Math 10-4 in second semester.

MATH 31

Credits: 5

This course on “calculus” is designed for students entering the math-intense faculties (e.g. Engineering, Mathematics, and Business). This course is designed for highly motivated, academic students who wish to pursue a beginning course in calculus. Math 30-1 must be taken as a pre or co-requisite course.

MATHEMATICS 10-4, 20-4

Credits: 5

Rational and Philosophy

Knowledge and Employability mathematics courses focus on developing essential mathematics knowledge, skills and attitudes needed for everyday living at home, in the workplace and in the community. This sequence is designed for students whose needs, interests and abilities focus on basic mathematical understanding.

Knowledge and Employability mathematics courses emphasize career/life skills, teamwork, communication skills and thinking processes. Information and Communication Technology (ICT) outcomes and the use of calculators, computers and other technologies are integrated into the courses to help provide quick and accurate computation and manipulation and to enhance conceptual understanding.

COURSE DESCRIPTIONS



Science

SCIENCE 10

Credits: 5

Prereq: Successful completion of Science 9, 14 or 24 (65% recommended)

Science 10 is divided into four units of study with one of the following areas of emphasis identified for each unit: Nature of Science, Science and Technology and Social and Environmental Contexts.

Unit A: Energy and Matter in Chemical Change,

Unit B: Energy Flow in Technological Systems

Unit C: Cycling of Matter in Living Systems

Unit D: Energy Flow in Global Systems

SCIENCE 20

Credits: 5

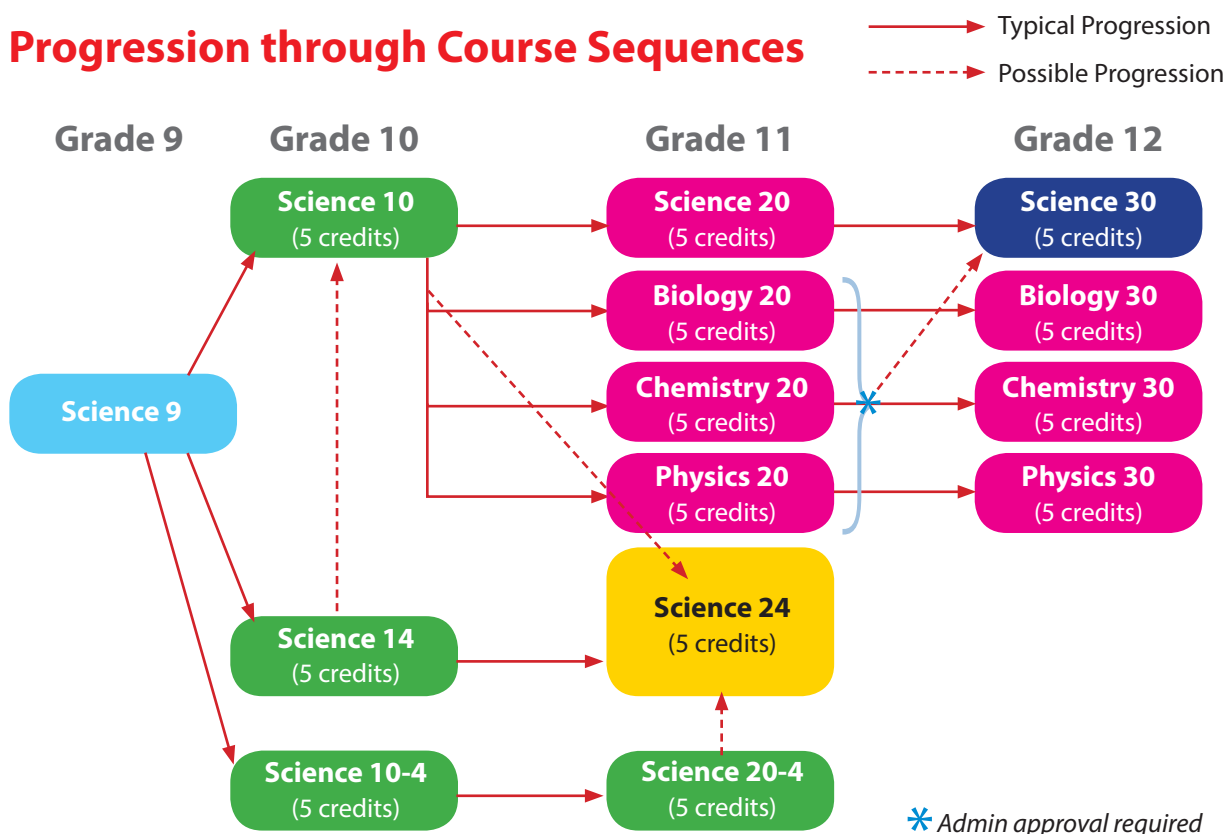
Prereq: Successful completion of SCIENCE 10

Science 20 addresses the development of scientific literacy through the common theme of changes in Chemistry, living systems, motion and geological patterns. The focus is to develop the skills required for scientific and technological inquiry.

No Monkey Business

Humans share 60% of DNA with a banana.

Progression through Course Sequences



COURSE DESCRIPTIONS

SCIENCE 30

Credits: 5

Prereq: Successful completion of SCIENCE 20

Note: It is recommended that students who have not completed Science 20 or Chemistry 20, complete the Chemistry Unit of Science 20 before attempting Science 30. Science 30 addresses the themes of technology and societal issues through scientific principles. The focus of the course is on living systems, solutions, organic compounds, energy transmissions and renewable and non-renewable resources in our environment.

BIOLOGY 20

Credits: 5

Prereq: Successful completion of SCIENCE 10 (60% recommended with a 60% mark in the biology unit)

There are four units of studies in the program:
Unit A: Energy and Matter Exchange in the Biosphere

Unit B: Ecosystems and Population Change

Unit C: Photosynthesis and Cellular Respiration

Unit D: Human Systems.

BIOLOGY 30

Credits: 5

Prereq: Successful completion of BIOLOGY 20 (60% recommended)

The focus in Biology 30 is on understanding the biological principles behind the natural events that occur in the human body; and the human species as a biological entity as well as a cultural one with its associated technologies and societal values. Unit A: The Nervous System and Endocrine System; Unit B: Reproduction and Development; Unit C: Cell Division, Genetics, and Molecular Biology; Unit D: Population and Community Dynamics.

CHEMISTRY 20

Credits: 5

Prereq: Successful completion of SCIENCE 10 (60% in SCIENCE 10 and MATH 10C recommended with a 60% mark in the chemistry unit)

Chemistry 20 consists of the scientific and experimental study of bonding, behaviour of gases, solutions, acids and bases. The focus of the course is the understanding of chemical principles and the mathematical

calculations involved in stoichiometric reactions.

CHEMISTRY 30

Credits: 5

Prereq: Successful completion of CHEMISTRY 20 (60% in CHEMISTRY 20 and MATH 20-1 recommended)

Chemistry 30 studies the interrelationships of equilibrium, energy, and changes affecting matter within a system. The focus of the course is on theoretical problem solving application involving acid-base systems, organic compounds, thermochemical and electrochemical change.

PHYSICS 20

Credits: 5

Prereq: Successful completion of SCIENCE 10 (60% in SCIENCE 10 and MATH 10C recommended with a 60% mark in the physics unit)

Physics 20 consists of the experimental and mathematical study of kinematics, dynamics, circular and oscillatory motion, energy and mechanical waves. The focus of the course involves the study of motion of bodies and application of physical and mathematical concepts.



COURSE DESCRIPTIONS

PHYSICS 30

Credits: 5

Prereq: Successful completion of PHYSICS 20 (60% in PHYSICS 20 and MATH 20-1 recommended)

Physics 30 consists of the experimental and mathematical study of momentum and impulse, force and fields, electromagnetic radiation and atomic physics. The focus of the course is the understanding and application of the interaction of bodies, radiation models, and the development and modification of models of the structure of matter.

SCIENCE 14

Credits: 5

Prereq: Successful completion of Science 9

Science 14 is designed to partially fulfill the science credit requirement for an Alberta High School Diploma. The course is composed of four units. Unit A: Investigating Properties of Matter; Unit B: Understanding Energy Transfer Technology; Unit C: Investigating Matter and Energy in Living Systems; Unit D: Investigating Matter and Energy in the Environment.

SCIENCE 24

Credits: 5

Prereq: Successful completion of SCIENCE 14

Science 24 is designed to complete the science credit requirement for an Alberta High School Diploma. The course is composed of four units. Unit A: Applications of Matter and Chemical Change; Unit B: Understanding

Did You Know?
**The Universe contains
over 100 billion
galaxies!**

Common Energy Conservation Systems; Unit C: Disease Defense and Human Health; Unit D: Motion, Change and Transportation Safety.

SCIENCE 10-4, 20-4 (5 credits each)

Rational and Philosophy

Knowledge and Employability science courses focus on developing and applying essential science skills, knowledge and attitudes needed for everyday living at home, in the workplace and in the community. Science competencies are developed through the investigation of science related problems, questions and issues, and the provision of everyday applications, to help students understand and appreciate the role of science in our society.

Knowledge and Employability science courses emphasize career and life skills, teamwork, communication skills and thinking processes. Each grade level is developed within a scientific-inquiry framework, emphasizing problem-solving and decision-making skills based on students' abilities and everyday applications. Diverse learning experiences within science courses provide students with opportunities to explore, examine and appreciate the interrelationships among science, technology, society and the environment. These learning experiences also develop understandings that will affect the lives of students at home, in the workplace and in the community.

Did you Know?

We have a science laboratory at Sturgeon Composite where students can sign up for work experience and engage in open-inquiry science projects based out of the Science Exploratorium. Students will have the opportunity to use state-of-the-art science equipment and make valuable contacts in industry and academia.

COURSE DESCRIPTIONS

Social Studies

The major distinctions between the Social Studies 10-2/20-2/30-2 courses and the 10-1/20-1/30-1 courses will be in the areas of organization for instruction, instructional methodology, resources and evaluation strategies.

Social is offered in two routes: Social 10-1, 20-1 and 30-1 or Social 10-2, 20-2, and 30-2. The academically rigorous -1 route is designed for students who intend to enroll in a degree program at a postsecondary institution. The -2 route is more general in nature and is designed for students who plan to enroll in a diploma program at the post-secondary level, or enter the workforce out of high school. Please note all students must obtain either Social 30-1 or Social 30-2 to earn an Alberta High School Diploma.

To meet minimum graduation requirements, students must earn 15 credits in Social Studies, including a Grade 12 level Social Studies course.

SOCIAL STUDIES 10-1

Credits: 5

Prereq: Successful completion of SOCIAL STUDIES 9 (65% recommended)

Students will explore multiple perspectives on the origins of globalization and the local, national and international impacts of globalization on lands, cultures, economies, human rights and quality of life. Students will examine the relationships among globalization, citizenship and identity to enhance skills for citizenship in a globalizing world. The infusion of multiple perspectives will allow students to examine the effects of globalization on peoples in Canada and throughout the world, including the impact on Aboriginal and Francophone communities.

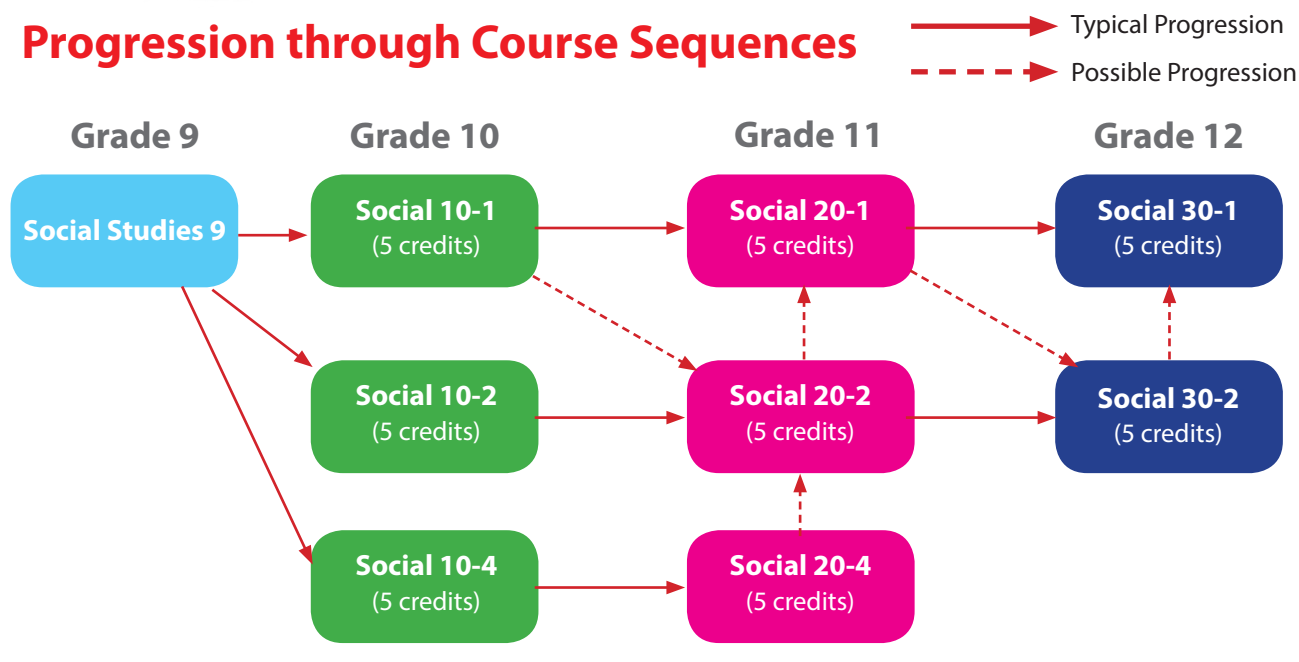
SOCIAL STUDIES 20-1

Credits: 5

Prereq: Successful completion of SOCIAL STUDIES 10-1 (60% recommended)

Students will explore the complexities of nationalism in Canadian and international contexts. They will study the origins of nationalism and the influence of nationalism on regional, international and global relations. The infusion of multiple perspectives will allow students to develop understandings of nationalism and how nationalism contributes to the citizenship and identities of peoples in Canada.

Progression through Course Sequences



COURSE DESCRIPTIONS

SOCIAL STUDIES 30-1

Credits: 5

Prereq: Successful completion of SOCIAL STUDIES 20-1

Students will explore the origins and complexities of ideologies and examine multiple perspectives regarding the principles of classical and modern liberalism. An analysis of various political and economic systems will allow students to assess the viability of the principles of liberalism. Developing understandings of the roles and responsibilities associated with citizenship will encourage students to respond to emergent global issues.

SOCIAL STUDIES 20-2

Credits: 5

Prereq: Successful completion of SOCIAL STUDIES 10-2

Students will examine historical and contemporary understandings of nationalism in Canada and the world. They will explore the origins of nationalism as well as the impacts of nationalism on individuals and communities in Canada and other locations. Examples of nationalism, ultranationalism, supranationalism and internationalism will be examined from multiple perspectives. Students will develop personal and civic responses to emergent issues nationalism.

SOCIAL STUDIES 10-2

Credits: 5

Prereq: Successful completion of Social Studies 9

Students will explore historical aspects of globalization as well as the effects of globalization on lands, cultures, human rights and quality of life. Students will explore the relationships among globalization, citizenship and identity. The infusion of multiple perspectives will allow students to examine the effects of globalization on peoples in Canada and other locations, including the impact on Aboriginal and Francophone communities. Students will develop skills to respond to issues emerging in an increasingly globalized world.

SOCIAL STUDIES 30-2

Credits: 5 Prereq: Successful completion of SOCIAL STUDIES 20-2

Students will examine the origins, values and components of competing ideologies. They will explore multiple perspectives regarding relationships among individualism, liberalism, common good and collectivism. An examination of various political and economic systems will allow students to determine the values of liberalism. Developing understandings of the roles and responsibilities associated with citizenship will encourage students to respond to emergent global issues.

For students in the Social 10-2/20-2/30-2 sequence who plan to eventually take Social 30-1, the recommended transfer point is Social 30-2 to Social 30-1. Students should be enrolled in or have completed an equivalent level English course within the same school year.

SOCIAL STUDIES 10-4, 20-4

(5 credits each)

Rational and Philosophy

Social studies provides opportunities for students to develop the attitudes, skills and knowledge that will enable them to become engaged, active, informed and responsible citizens. Recognition and respect for individual and collective identity is essential in a pluralistic and democratic society. Social studies helps students develop their sense of self and community, encouraging them to affirm their place as citizens in an inclusive, democratic society.

COURSE DESCRIPTIONS

Acceptable gymnasium dress is a complete change of clothing from those worn in the classroom. This includes running shoes and socks, shorts or sweats and a t-shirt or sweatshirt. Showers are available in the locker rooms.

Physical Education / Fitness /Calm

PHYSICAL EDUCATION 10

Credits: 3 or 5

The emphasis in this course is to expose students to a wide variety of sports at an intermediate level. Focus is on skill development and the fundamentals of sport. Students will have an opportunity to increase their fitness through participation in the following dimensions: games, dance, and types of gymnastics, individual activities, and alternative environments. (i.e. Snow Shoeing, X-country skiing etc.)

Note: This course is required for a high school diploma.

PHYSICAL EDUCATION 20

Credits: 5

Prereq: Successful completion of PHYSICAL EDUCATION 10

The emphasis in this course is to expose students to a wide variety of sports at an Advance level. Focus is on game strategies and game play. Students will have an opportunity to increase their fitness through participation in the following dimensions: games, dance, and types of gymnastics, individual activities, and alternative environments. (i.e. Shoe Shoeing, X-country skiing, canoeing, and archery etc.).

PHYSICAL EDUCATION 30 (FEE)

OFF-CAMPUS

Credits: 5

Prereq: Successful completion of PHYSICAL EDUCATION 20

Physical Education 30 (OFF CAMPUS) is an advanced course with an emphasis on game play and leisure time activities. Students will have the opportunity to go on a three day outdoor Ed trip with several outdoor Ed activities such as canoeing, fishing, fire building, and camping. Students will have an opportunity to increase their fitness through participation in the following dimensions: games, dance, and types of gymnastics, individual activities, and alternative environments. (i.e. swimming, racquetball, golf, bowling, wall climbing, curling etc.).

PHYSICAL EDUCATION 30 ON-CAMPUS

Credits: 5

Prereq: Successful completion of PHYSICAL EDUCATION 20

Physical Education 30 is an advanced course where students can continue to build on their skills and fitness from Physical Education 20. This is a co-ed course where students will be exposed to a wide variety of sports and activities. This course is ideal for those students who wish to continue their Physical Education programming, but want to stay on campus. Participants will build leadership experience and will have the opportunity to increase their fitness through participation in games, dance, types of gymnastics, and individual activities.

ROUTES AND SEQUENCES

Phys. Ed 10
(3) or (5)

Phys. Ed 20
(5)

Phys. Ed 30
(5)

COURSE DESCRIPTIONS

OUTDOOR EDUCATION

Credits: 3

Students will have the opportunity to engage with nature and the outdoors. It is offered as a 3 credit class, where students will go on an overnight survival camp, canoe the open water of half moon lake and experience ice fishing in the winter months. If you enjoy the outdoors this is the class for you!



SPORTS PERFORMANCE

10/20/30

Credits: 5

**(Not a replacement for PE10)
All modules must be earned in
the previous level to move on
due to pre-requisites**

This course will explore the theory and practice of health and fitness. Through a variety of kinesiology-related theoretical topics and practical classes, students will learn how the human body is constructed and how athletic performances can be affected by training, nutrition, and mental state.

This course is intended to provide learning opportunities for students with a passion for athletics and personal fitness. You may wish to improve performance, challenge yourself physically and/or potentially pursue a career in the athletic field. This will be completed through a combination of theoretical and practical outcomes.



COURSE DESCRIPTIONS

CALM (CAREER AND LIFE MANAGEMENT) - Mandatory

Credits: 3

Prereq: NONE

The aim of senior high school Career and Life Management (CALM) is to enable students to make well informed, considered decisions and choices in all aspects of their lives and to develop behaviours and attitudes that contribute to the well-being and respect of others, now and in the future. This course includes presentations, demonstrations and activities. CALM is the core course for health literacy at the senior high level in Alberta.

Work Preparedness

CALM helps students develop skills, attitudes and habits to respond to the opportunities and expectations of the workplace.



COURSE DESCRIPTIONS

Fine Arts

ART 10

Credits: 3/5

Prereq: None

This is a very basic general art course. The students should develop aesthetically through appreciation and expression in areas such as drawing, design and painting. Fundamentals are stressed and many different media are experienced.

ART 20

Credits: 5

Prereq: Successful completion of ART 10

Art 20 aims at further development of basic skills in drawing, painting, sculpture and environmental design together with art history related to each area. This will involve at least one individual project where the student makes an in-depth study in his favourite art field. Emphasis will be placed on allowing the student to assess his true interest and potential in a variety of art media.

ART 30

Credits: 5

Prereq: Successful completion of ART 20

Art 30 is an in-depth study of various art activities in drawing design, painting, and/or sculpture. Students should develop ability in assessing the work of others, self-evaluation, and personal interpretation. The student, in consultation with the teacher, plans his/her program.

DRAMA 10

Credits: 5

Prereq: None

This course serves as an introduction to drama. Basic skills relating to mime, movement, stage fighting, improvisation, technical theatre, characterization and voice are the major areas of skill development. Most of the work is based on the student's ability to do improvisation rather than doing traditional scene work. Drama 10 is designed as a preparation course for Drama 20 and 30 and emphasizes the development of individual skills rather than performance skills.

DRAMA 20

Credits: 5

Prereq: Successful completion of DRAMA 10

This course focuses on the basic dramatic skills of speech, movement, improvisation, acting, technical design and theatre studies. These skills will be developed through the exploration of a variety of dramatic forms including collective, radio play, creative drama and film/video with an emphasis on public performances.

Fine Fact

The arts develop student problem solving and critical thinking skills



DRAMA 30

Credits: 5

Prereq: Successful completion of DRAMA 20

This course continues to develop the basic skills from Drama 20 and places further emphasis on playwriting and directing. Scripted material will be explored to provide the student opportunities to apply and extend skills and knowledge.



COURSE DESCRIPTIONS

Music Overview

Be a part of one of the finest music programs in Alberta! SCHS offers courses in band, choir, jazz band, vocal jazz and guitar. Our groups have won numerous awards including the Rose Bowl from the Rotary Music festival and the Provincial Choral Competition. Our students experience excellence daily and maintain a high level of achievement. With our focus on excellence through performance, students will develop leadership, self confidence and their own creativity. Be a part of the award winning tradition. Grow your talent!



COURSE DESCRIPTIONS

MUSIC 10 (INSTRUMENTAL CONCERT BAND)*

Credits: 5

Prereq: Successful completion of Grade 9 band or private study (2 years); see SCHS website for technical requirements

The primary focus of this course is for each student to develop his/her musical technique and ability. The majority of class time is spent developing skills through band rehearsal; however, some time may be spent in small ensembles. Music theory is also explored covering topics such as theoretical rudiments of music and music appreciation.

MUSIC 20 (INSTRUMENTAL CONCERT BAND)

Credits: 5

Prereq: Successful completion of MUSIC 10 (INSTRUMENTAL)

In this second level of high school music, students will develop their musical knowledge and instrumental technique to a higher level. More emphasis is placed on developing as a performer through solo and small ensemble repertoire.



MUSIC 30 (INSTRUMENTAL CONCERT BAND)

Credits: 5

Prereq: Successful completion of MUSIC 20 (INSTRUMENTAL)

This is the senior level course in this program. Continued development of musical technique and ability are furthered, with more focus on leadership skills through conducting and leading small ensembles.

**Students enrolled in instrumental music courses will be provided with a suitable quality band instrument. Students who bring their own instrument will receive a discount on course fees.*

MUSIC 10 (CHORAL)

Credits: 5

Prereq: None

Various styles of vocal music will be explored so that students can develop correct vocal techniques and skills. This will be achieved through group rehearsals, small ensembles and solo work. Music theory is also explored covering topics such as theoretical rudiments of music and music appreciation.

MUSIC 20 (CHORAL)

Credits: 5

Prereq: Successful completion of MUSIC 10 (CHORAL)

Continued exploration of various styles of vocal music so that students can develop correct vocal techniques and skills. Focus will be placed on small ensembles and solo work.

MUSIC 30 (CHORAL)

Credits: 5

Prereq: Successful completion of MUSIC 20 (CHORAL)

This level of choral music will give the student opportunity to further develop their vocal range and ability. More emphasis will be placed on solo performance and individual development.

GENERAL MUSIC 10 (GUITAR)

Credits: 5

Prereq: None

Through the use of individual performance-based courses, the focus of this course will be on basic guitar performance techniques. The students will be taught note reading, basic and intermediate guitar chords and basic music theory. Previous experience not required. A classical guitar is provided.

GENERAL MUSIC 20 (GUITAR)

Credits: 5

Prereq: Successful completion of GUITAR 10

The focus of this program will be on guitar performance techniques at the intermediate level. Through various performance courses and group situations, students will be taught note reading, guitar chords, music theory and small ensemble performance. A classical guitar is provided.

GENERAL MUSIC 30 (GUITAR)

Credits: 5

Prereq: Successful completion of GUITAR 20

The focus will be on guitar performance at the advanced level. Technique, solo performance and group situations will be the focus. A classical guitar is provided.

COURSE DESCRIPTIONS



VOCAL JAZZ 15

Credits: 5

*Monday, Wednesday, Thursday –
Lunch Hour*

Prereq: Teacher invite

This is a performance based vocal ensemble focusing on challenging vocal repertoire from all styles. Skills will be developed through rehearsals, public performances and other events.

VOCAL JAZZ 25

Credits: 5

*Monday, Wednesday, Thursday –
Lunch Hour*

*Prereq: Teacher invite and
successful completion of Vocal
Jazz 15*

This is the second level of the previous course. More focus will be put on leadership within the ensemble.

VOCAL JAZZ 35

Credits: 5

*Monday, Wednesday, Thursday –
Lunch Hour*

*Prereq: Teacher invite and
successful completion of Vocal
Jazz 25*

This is a performance based vocal ensemble focusing on challenging vocal repertoire from all styles. Skills will be developed through rehearsals, public performances and other events.



DRUMLINE 10

Credits: 5

Drumline is now being offered for credits at SCHS. The goal is for all students to gain basic percussion skills on all four drumline featured instruments (Snare, Bass, Tenor, Cymbals). Students will drum every class and learn short memorized percussion patterns and build skills towards performing in varied venues and events. All equipment will be provided and maintained through course fees.



COURSE DESCRIPTIONS

Second Languages

FRENCH LANGUAGE & CULTURE 10

Credits: 5

Prereq: None

French 10 is a beginner course in which all four language skills (speaking, listening, reading and writing) are equally emphasized through the study of thematic units. Grammar, culture and language acquisition skills will be developed to provide the student with a solid foundation in French.

FRENCH LANGUAGE & CULTURE 20

Credits: 5

Prereq: Successful completion of FRENCH 10

Further emphasis is placed on the four skills (speaking, listening, reading and writing) through thematic units of study.

FRENCH LANGUAGE & CULTURE 30

Credits: 5

Prereq: Successful completion of FRENCH 20

This is the highest level of French taught at Sturgeon Composite High School. There is a continued emphasis on reading, writing, speaking and listening skills through thematic units. Upon successfully completing this course, students will have a good command of French, an excellent understanding of how the language works and a solid foundation for post-secondary French studies.

SPANISH LANGUAGE & CULTURE 10

Credits: 5

Prereq: None

An introductory course. Topics include: basic communication, greetings and introductions, school, friends, family, jobs and the house. In all levels, students explore the culture of Spanish-speaking countries, including regional cuisine, dance, music, film and literature.

SPANISH LANGUAGE & CULTURE 20

Credits: 5

Prereq: Successful completion of Spanish 10

Students will learn how to speak in the past and the future about vacations, health, food, and shopping. In all levels, students explore the culture of Spanish-speaking countries, including regional cuisine, dance, music, film and literature.

SPANISH LANGUAGE & CULTURE 30

Credits: 5

Prereq: Successful completion of Spanish 20

Students will learn how to discuss the environment, technology, arts, culture, celebrations, politics and history. In all levels, students explore the culture of Spanish-speaking countries, including regional cuisine, dance, music, film and literature.



COURSE DESCRIPTIONS

Humanities

ABORIGINAL STUDIES 10

Credits: 5

Prereq: None

The course is based on perspectives and worldviews of Aboriginal peoples. It includes the study of traditions and history of Aboriginal peoples in Canada, and particularly in Alberta. Student learning outcomes provide opportunities to examine such topics as governmental structures, literature, the arts and the sciences.

The four themes in Aboriginal Studies 10 are:

- Origin and Settlement Patterns
- Aboriginal Worldviews
- Political and Economic Organization
- Aboriginal Symbolism and Expression.



MILITARY STUDIES 15

Credits: 5

Prereq: None

Canada's military heritage is an important aspect of our Canadian identity and our school community. Canada has played a major role in global affairs starting in World War I which continues to today. In Military Studies, students will critically deal with world problems and conflicts, assess and evaluate military solutions and gain a greater understanding of the Canadian and global context in world affairs.



MILITARY STUDIES 25

CREDITS: 5

Prereq: Military Studies 15

This is the course that follows Military Studies 15. It focuses on world conflict from ancient times to 1850. Some of the topics include the study of warfare in Greece, Rome, medieval Europe, the Crusades, the Mongols, the Hundred Year's War and concluding with the Gunpowder Revolution.



****Note: Military Studies and Aboriginal Studies do not replace Social Studies course requirements.**

COURSE DESCRIPTIONS

Career and Technology Studies (CTS) Locally Developed Courses (LDC)

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CHILDCARE 10

Credits: 10

This program is designed for students who are interested in pursuing a career in childcare, social work, education, family support programming or for students who enjoy working with children. The program will include both a classroom setting to complete the theory portion and a daycare setting to complete the practicum requirements.

Students will have the opportunity to obtain a "Level 1 Early Childhood Educator Certificate" from the Government of Alberta and a "First Aid in Childcare Certificate" upon successful completion of this course.

Please note: A security check is also required of students prior to beginning their practicum experience.



CISCO NETWORKING PROGRAM 10, 20

Credits: 5

Cisco will better prepare students for post-secondary endeavors and to compete successfully in the workforce of the future.

Cisco offers enriched opportunities in Science, Technology, Engineering and Mathematics (STEM).

Cisco creates an enriched STEM learning experience and provides students the opportunity to obtain certification to prepare them for entry level positions right out of High School by becoming a Cisco Networking Academic. The global economy runs on digital networks. Organizations depend on a workforce educated to design, build, and operate these networks. Cisco is acknowledged around the world as the leader in networking technology.



COURSE DESCRIPTIONS

COMMUNICATION TECHNOLOGY

INTRODUCTORY COMMUNICATION TECHNOLOGY 10

Credits: 3/5
Prereq: None

Students will begin with a course in learning the fundamental elements and principles of design for various media and gain an understanding of concepts to prepare for future Communication Technology courses. Based on interest, students will then complete an additional four courses from the following areas: printing, photography, media, animation, audio/video, and/or a project of interest within Introductory Communication Technology courses.

Note: The first course is a prerequisite for every other course in Communication Technology.

INTERMEDIATE COMMUNICATION TECHNOLOGY 20

Credits: 5
Prereq: All modules must be earned in the previous level to move on due to pre-requisites

At the intermediate level, students will continue to build on their skills and knowledge gained at the introductory level. Based on interests and prerequisites, students will complete five intermediate courses from the following areas: printing, photography, media, animation, audio/video, and/or a project of interest within Intermediate Communication Technology courses.

ADVANCED COMMUNICATION TECHNOLOGY 30

Credits: 5
Prereq: All modules must be earned in the previous level to move on due to pre-requisites

At the advanced level, students will further their skills and knowledge, and challenge themselves. Based on interests and prerequisites, students will complete five advanced courses from the following areas: photography, media, animation, audio/video, and/or a project of interest within Advanced Communication Technology courses.

COMPUTING SCIENCE

Credits: 5
Prereq: None

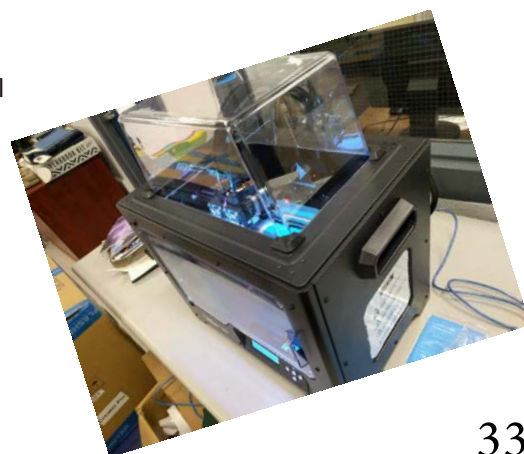
From software developers to network administrators and analysts, there are tremendous opportunities and numerous rewarding careers in the computing science field -- careers that help us interact with the technology around us that enriches our lives to careers that ensure our networks are safe and secure.

The focus of this NEW and exciting computing science program will be on student projects and collaborative work, encouraging creativity and reasoning skills while at the same time also developing and improving important mathematical and computational skills through exploration and experimentation.

INTRODUCTORY GAME DESIGN (COMPUTING SCIENCE 10)

Credits: 5
Prereq: None

This course teaches computer programming through the process of game design. Using the Scratch programming language, students will learn the basics of computer programming by creating simple and fun animations and games using code fragments known as "blocks." Once students have mastered the basics, they will have the opportunity to explore more sophisticated programming approaches and techniques. The added experience will greatly assist students as they transition from mastering the basics in Computing Science 10 to learning how to effectively use common higher level languages such as Java, C and Python in later courses.



COURSE DESCRIPTIONS

INTERMEDIATE APP CREATION & ROBOTICS (COMPUTING SCIENCE 20)

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

Having mastered the basics of programming, students will continue to be challenged as they engage in exploring numerous interesting topics in the fields of App Creation and Robotics.

This course begins where Computer Science 10 leaves off with students learning to explore and utilize several advanced programming techniques (such as procedural programming, data types, files and file structures). As students continue this exciting educational journey, they will learn to use and master at least one higher level language such as Java, C or Python — all industry standards amongst professional programmers and also used in local post-secondary programs (such as NAIT's Computer Engineering Technology Program and the University of Alberta's Computer Science and Computer Engineering Programs).

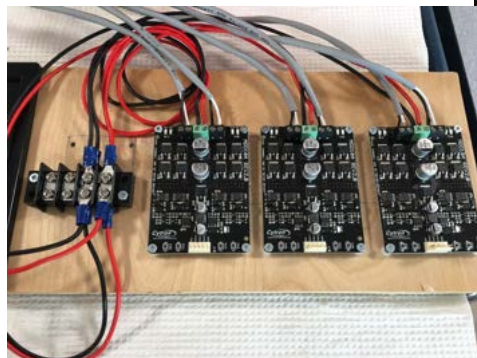
DIGITAL MAKER SPACE (COMPUTING SCIENCE 30)

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

Computing Science 30 is the culmination of the Computing Science Program at Sturgeon Comp, building upon the skills learned in previous courses. Students apply their understanding of coding and how computers work as they explore complex systems through experimentation with the Raspberry Pi microcomputer and the Python programming language. Students will apply what they've learned as they design, develop and build either an advanced autonomous robot or an advanced game or utility app.

Note: Computing Science 30 can be used as an entrance requirement for some post-secondary institutions (e.g., at the University of Alberta, Computing Science 30 is a Group C option that can be used for entrance into several programs including Science, Mathematics and Computing Science).



CONSTRUCTION

INTRODUCTORY CONSTRUCTION TECHNOLOGY 10

Credits: 5

Prereq: None

This strand begins to teach the terminology, tools and processes common with the wood related trades. Students who complete this course will be able to safely use most hand and power tools related to wood and be able to design and build a variety of wood products. The emphasis for learning will be to learn practical skills in the shop.

NOTE: The first course covers safety and tools and is a prerequisite for every other course in this strand. Safety glasses, tape measure, ring binder and a pencil are required on the first day of classes.

INTERMEDIATE CONSTRUCTION TECHNOLOGY 20

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

Cabinet making and furniture making are explored in more depth than at the 10 level. The topics of house framing, surveying and some concrete work will be explored as well. Students will be doing some customer orders in order to practice some of the theory topics.

NOTE: Steel toe boots, safety glasses, tape measure, ring binder, carpenter's apron and a pencil are required on the first day of classes.



ADVANCED CONSTRUCTION TECHNOLOGY 30

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

This strand deals with more advanced topics of building construction and furniture and cabinet making. There will be some customer service work in order to provide students experience with some of the topics.

NOTE: Steel toe boots, safety glasses, tape measure, ring binder, carpenter's apron and a pencil are required on the first day of classes.

COSMETOLOGY

INTRODUCTORY COSMETOLOGY 10

Credits: 5

Prereq: None

This introductory level of Cosmetology introduces the student to the field of hairstyling. It develops a foundation in various basic hairstyling techniques, safety and sanitation and introduces salon skills and professionalism.



INTERMEDIATE COSMETOLOGY 20

Credits: 10

Prereq: All modules must be earned in the previous level to move on due to pre-requisites, extremely limited enrollment

At the intermediate level, students are introduced to customer service in the salon. Skills to be developed include haircutting, hair colouring, chemical texturizing and advanced hairstyling. The number of credits the student earns is dependant upon their participation and enthusiasm in developing a client base. Students are required to purchase scissors, which are available through the Cosmetology lab.

ADVANCED COSMETOLOGY 30

Credits: 10

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

The advanced level Cosmetology student further develops client service skills from the previous levels as well as performing more advanced cutting, colouring and texturizing services. This level introduces basic skin care, makeup and hair removal. The number of credits the student earns is dependant upon their participation and enthusiasm in developing a client base.

Completion of 50 prescribed credits in Cosmetology meets the requirements of the Alberta Apprenticeship Board. For trade certification, students are required to complete 2,100 hours as a registered apprentice in a salon and pass the written and practical apprenticeship exams to attain Journeyman certification.

COURSE DESCRIPTIONS



FABRICATION STUDIES (Welding)

INTRODUCTORY FABRICATION STUDIES 10

Credits: 5

Prereq: None

This is a practical introduction to metal construction and fabrication with emphasis on developing safe workplace skills. Students are given the opportunity to practice both gas and arc welding. Students will participate in project planning and building.

NOTE: The first course covers safety and tools and is a prerequisite for every other course in this strand. Safety gear (coveralls, footwear and safety glasses) will be required.



INTERMEDIATE FABRICATION STUDIES 20

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

This program is intended for students who want to develop advanced welding skills and possibly seek a career in welding. All ten courses are taken concurrently and the emphasis is on project design and construction.

NOTE: Safety gear (footwear and safety glasses) will be required.



ADVANCED FABRICATION STUDIES 30

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

This program is intended for students who want to develop workplace standards in welding. All ten courses are taken concurrently and will include an off-campus placement. Students who successfully complete this program may continue into apprenticeship.

NOTE: Safety gear (footwear and safety glasses) will be required.

COURSE DESCRIPTIONS

FASHION & HOME DESIGN STUDIES

INTRODUCTORY FASHION & HOME DESIGN STUDIES 10

Credits: 3/5

Prereq: None

This program is designed to provide basic knowledge and skills in the areas of fashion, designing, sewing and use of related equipment. Students will learn some of the basics of constructing a garment using a commercial pattern, with a selected number of skills. The students will be given an opportunity to choose courses to create and illustrate their own original home and personal designs.

NOTE: The first course covers safety and tools and is a prerequisite for every other course in this strand.

INTERMEDIATE FASHION & HOME DESIGN STUDIES 20

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

Intermediate level strands help students build on the knowledge and skills developed in Fashion & Home Design Studies 10. Students will choose from courses that provide a broader perspective of many career areas in fashion including merchandising, design and sewing construction.

ADVANCED FASHION & HOME DESIGN STUDIES 30

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

Fashion & Home Design Studies 30 provides students the opportunity to concentrate in an area of personal interest. Strands selected by the student will help them develop advanced skills for future career opportunities.

FILM STUDIES 15

Credits: 5

Film Studies 15 is a film and media studies course that concentrates on the critical contexts of film and media history, and the study of different genres of film such as horror, the western, film noir, comedies, documentaries, experimental films, foreign films and the Hollywood blockbuster. The goal of this course is to help students understand how the auteurs of film structure their work to communicate ideas and feelings to an audience and the historical differences in film making between different genres and between different directors. The skill set required to analyze film is very similar to that required to analyze the traditional mediums of novels, plays, poems, etc. As film is both a powerful communication medium and an art form, this course aims to develop students' skills so they become adept in interpreting films and film media. The focus of this course is to provide students will an alternate outlet to express critical thinking and critical analysis of the various forms of media that has become part of our lives. This course is an excellent for those students wishing to pursue their studies in university or college.



FOODS

INTRODUCTORY FOODS 10

Credits: 3/5

Prereq: None

The Foods strand helps students develop an appreciation for the nature of food, nutrition and health, management, safety, sanitation and equipment, preparation of food, presentation and service, consumerism/food selection, multicultural aspects of food and food ecology. Introductory courses are developed for students who have little or no previous experience in foods.

NOTE: The first course covers safety and equipment and is a prerequisite for every other course in this strand

INTERMEDIATE FOODS 20

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites (minimum 3 credits earned at the 10 level to move on)

These strands help students build on the foundations developed at the introductory level and focus on developing more complex competencies. They provide a broader perspective, helping students recognize the wide range of related career opportunities available in the foods area.

ADVANCED FOODS 30

Credits: 5

Prereq: All modules must be earned in the previous level to move on due to pre-requisites

These strands demand a high level of expertise and help prepare students for entry in the workplace or a related post-secondary program.



COURSE DESCRIPTIONS

FORENSIC 25/35

Credits: 5

Prereq: Science 10

Forensic Science 25 is an option course that includes the study of basic scientific concepts and technologies related to solving crimes. Basic forensic skills such as evidence collection, laboratory analysis, and inquiry in case studies will be addressed from a forensic scientific perspective.

In Forensic Science 35, students will use their understanding of scientific method to investigate criminal case studies, conduct laboratory experiments, and complete research assignments in the following topics: Forensic Entomology; Anthropology; Toxicology; Ballistics; Explosives; and Criminal Investigations.

*Forensics 25 and Forensics 35 do not have to be taken in sequential order.



HEALTH PATHWAYS

INTRODUCTION TO HEALTH PATHWAYS

Credits: 5

Prereq: None

This course is the introduction and prerequisite for Healthcare and Sports Medicine. This is a beginner course which will touch on aspects of both programs and will provide students an opportunity to experience both vocations allowing students to determine which stream they would like to pursue. The course will focus on anatomy and physiology of body systems, caring for the body, basic treatment of injuries and taping techniques. Students will also have the opportunity to earn a recognized First Aid Certificate. Upon successful completion of this course, students will be provided with the option to take Healthcare 20 and/or Sports Medicine.

HEALTHCARE 20

Credits: 5

Prereq: All modules in Intro to Health Pathways must have been earned

Healthcare 20 is an intermediate course which expands on knowledge gained in introduction to Health Pathways. Students will continue to learn about body systems and how to deal with pain, and other chronic conditions. Students will also have the opportunity to earn a recognized First Aid Certificate.



HEALTHCARE 30

Credits: 5

Prereq: All modules in Healthcare 20 must be earned.

Healthcare 30 is an advanced course which includes a practicum where students can apply the skills they have learned within a real health care facility. Students will have the opportunity to job shadow health care workers, and apply practical skills learned in previous classes such as taking and recording vital signs, transferring and ambulating. Class content will be more specific and reflect concerns such as aging, mental health and parenting.



SPORTS MEDICINE 20

Credits: 5

Prereq: All modules in Intro to Health Pathways must have been earned

Sports Medicine 20 will continue to build on the skills learned in Introduction to Health Pathways and will look at the cardiovascular system, sport nutrition, injury prevention and management, and leadership. Students will also have the opportunity to earn a recognized First Aid Certificate.

SPORTS MEDICINE 30

Credits: 5

Prereq: All modules in Sports Medicine 20 must have been earned

Sports Medicine 30 will continue to build on the skills learned in Sports Medicine 20 and will look at the biomechanics of the human body, training and conditioning techniques, injury prevention and management, and social factors influencing sport and society. Students will also earn a credit using their skills in a practical setting.



LEADERSHIP

LEADERSHIP 15, 25, 35

Credits: 3

Prereq: None

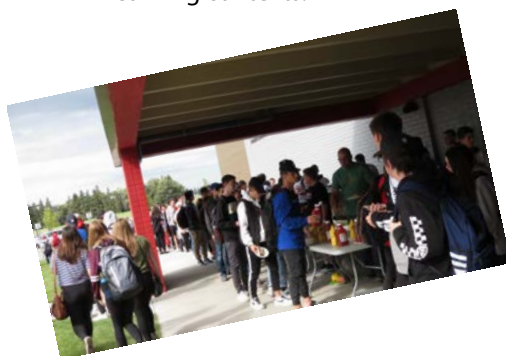
The emphasis of the course is leadership, character development and social responsibility, including servant leadership. The students will demonstrate their understanding of important values and attitudes needed to become a leader of oneself, and thus, be able to lead others by example. Students will actively engage in the delivery and scope of Leadership class by leading various endeavors both in and out of the school and classroom setting. Through this involvement, students will also refine their leadership style, personal vision and gain better understanding of their social responsibilities.

LEARNING STRATEGIES 15

Credits: 3

Prereq: None

Learning Strategies is a course designed to assist high school students in developing understandings, literacies, skills, and values to be successful learners across all subject areas. This course directly involves students to respond to their needs in respect to their courses of study. In collaboration with teachers, educational assistants, peers and parents, students will explore, deepen and develop, and eventually apply a range of strategies for academic success. Progressively, students gain confidence, realize independence, and apply their strategies to other learning contexts.



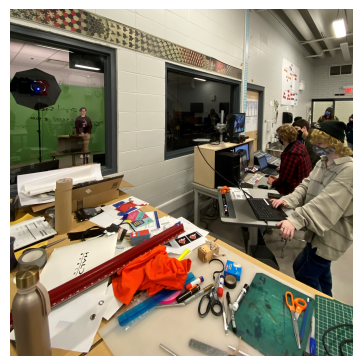
PSYCHOLOGY

Credits: 3

Prereq: None

This course introduces students to the scientific study of human behaviour and mental processes. Students will explore and apply the key concepts behind psychological theories to topics such as the biological bases of behaviour, sensation, perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behaviour, and social psychology. In addition, this course gives students the opportunity to earn university credit in a one hundred level psychology course.

*Can focus on personal, general or abnormal psychology



COURSE DESCRIPTIONS

MECHANICS

INTRODUCTORY MECHANICS 10

Credits: 5

Prereq: None

Materials: Coveralls, safety glasses, steel-toed work shoes/boots

Mechanics 10 is an introductory course designed to expose students to a variety of topics in Automotives. The course consists of six modules at the introductory level and students will spend time in both theory and the shop. Students will gain experience that will allow them to become informed owner-operators of vehicles. Students will also gain trade-relevant skills, behaviors, and attitudes required in the automotive industry.

INTERMEDIATE MECHANICS 20

Credits: 5

Prereq: All modules in Mechanics 10 must be earned to move on due to pre-requisites

Materials: Coveralls, safety glasses, steel-toed work shoes/boots

Mechanics 20 consists of 12 modules at the intermediate level. In addition to theory, students will gain a significant amount of experience in the shop working on customer vehicles in a "real world" shop environment for a growing customer base. Mechanics 20 is offered as a single block or double block for one semester. Students will also have the opportunity to work on their own vehicles as well as a school-based project vehicle. Top achievers will be considered for the Skills Canada Automotive Service competition.

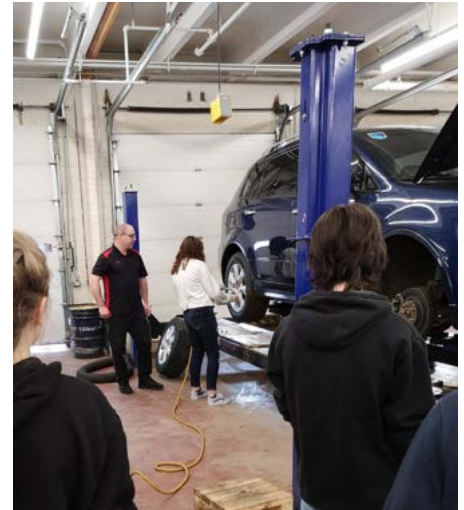
ADVANCED MECHANICS 30

Credits: 5

Prereq: All modules in Mechanics 20 must be earned to move on due to pre-requisites

Materials: Coveralls, safety glasses, steel-toed work shoes/boots

Mechanics 30 consists of 12 modules at the senior level. Students will continue to gain experience working on customer vehicles performing a variety of services and repairs. Mechanics 30 is offered as a single block or double block for one semester. Top achievers will be considered for the Skills Canada Automotive Services competition. In addition to customer work, students will also work on a school-based project vehicles in order to expose them to the 'enthusiast' side of automotives. Students also have the opportunity to work on their own vehicles.



REGISTERED APPRENTICESHIP PROGRAM

(R.A.P)

The R.A.P program is intended for students who are interested in pursuing a vocational career. If students are having success in their courses they can apply to be part of R.A.P. Regular attendance and the ability to work independently is part of the criteria for entry into the R.A.P. The R.A.P coordinator in conjunction with the student and parent, will look at each individual case.



COURSE DESCRIPTIONS

**The programs listed below are offered contingent on Alberta funding.*

Off Campus

Ms. Cadieux

REGISTERED APPRENTICESHIP PROGRAM (R.A.P.) 15, 25, 35

Credits: 5-40

Prereq: Workplace Safety Systems HCS3000

Sturgeon Composite High School's innovative Registered Apprenticeship Program allows full-time high school students to begin an apprenticeship training program as early as Grade 10, earning credit toward both a high school diploma and an apprenticeship program at the same time. This program provides students with different options for their future careers.

WORK EXPERIENCE 15, 25, 35

Credits: 3-10 for each course

Prereq: Workplace Safety Systems HCS3000

Work Experience is employment undertaken by a student as a part of a planned school program that is under the cooperative supervision of a teacher-coordinator and the employer. Credits may be earned to a maximum of 15 credits. Every 25 hours of work is worth 1 credit;

125 hours = 5 credits,

250 hours = 10 credits

375 hours = 15 credits.

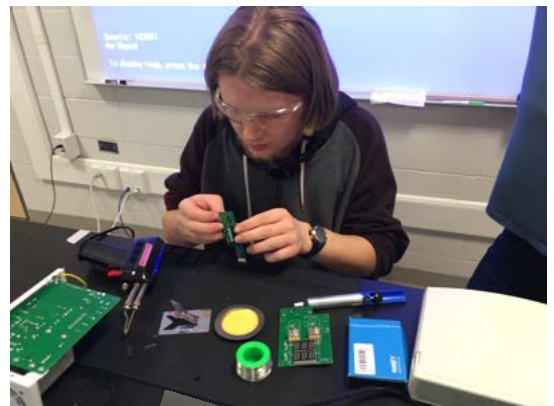
NOTE: Although students can earn 30 credits in work experience, only 15 will apply towards their high school diploma.

GREEN CERTIFICATE AGRICULTURAL TRAINING

The Green Certificate Program is an apprenticeship-style, workforce development, training program serving the agriculture industry. Students can earn up to 16 grade-twelve diploma credits per specialization completed. Students have fun learning more about agriculture in a practical, hands-on environment.

STURGEON COUNTY FIREFIGHTERS AND EMERGENCY SERVICES (if available)

offers a professional National Fire Protection Association 1000 training program which leads to National and International certification to interested and qualified students. Students meet one night per week plus one Saturday per month for training at a local fire hall and take part in local firefighting under mentor supervision. Students also receive training in First Aid/CPR/AED, Dangerous Goods and Wild Land training.



SCHOLARSHIPS

MOST AWARDED SCHOLARSHIPS

Alice Klassen Memorial Scholarship
Coach 'O' Bursary
Dr. Darren Romanowski - Academic Award
Fabrication Award
Frank Robinson Memorial Scholarship Governor
General's Academic Medal
Inter Pipeline Discovery Award
Ken Masse Memorial Scholarship
Maise Metrunec Scholarship
Merit Contractors Construction Award
Phoenix Land Service LTD.
Premier's Citizenship Award
Registered Apprenticeship Program Scholarship
Ron Kur Academic Scholarship Award
Rotary Award of Merit
Schulich Leader Nominee
Shane Rogers Memorial Award
Sturgeon Local #27
Sturgeon Rural Crime Watch
Sturgeon Public Schools Academic Awards
Sturgeon Public Schools Scholarships
Xerox Academic Scholarship
Zac Drolet Memorial Scholarship

**May be subject to change.*

Did you know..?

Not all scholarships are based on academics. Many are tied to Leadership, Community Involvement, Athletics and Volunteerism.





STURGEON COMPOSITE HIGH SCHOOL
STURGEON SCHOOL DIVISION No. 24

Together WE CAN Influence Tomorrow



Sturgeon Composite High School

#30 - 24400 Highway 37, Sturgeon County,
Alberta, Canada T8T 0E9

(1 km east of Highway 28 on Highway 37)

ph 780.973.3301

email: schs@sturgeon.ab.ca

www.sturgeoncomp.ca