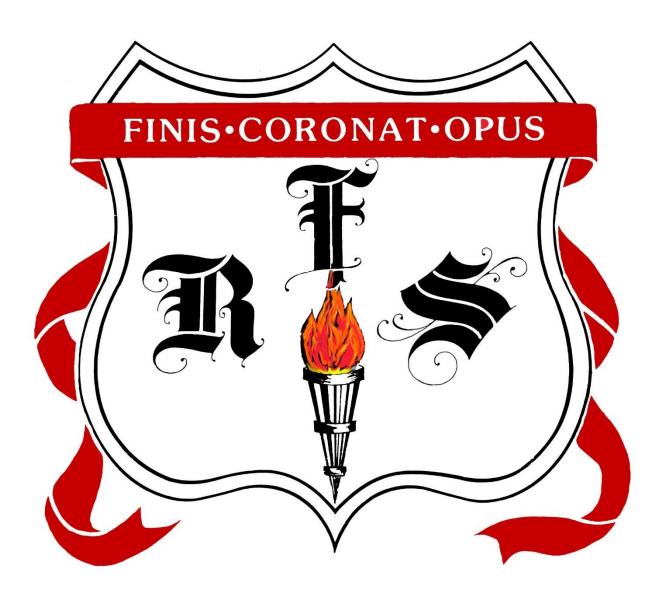
## RICHARD F. STAPLES SECONDARY SCHOOL



# REGISTRATION GUIDE GRAD 2027



## R.F. STAPLES SECONDARY SCHOOL REGISTRATION GUIDE FOR GRAD 2027

## **GRADE TEN REGISTRATION**

In less than three and a half years, grade nine students could be graduating from grade 12. With careful planning, each of you will have selected courses to graduate with your classmates and continue on with some productive, post-secondary activity—be it joining the work force or formal post-secondary education.

**GRADE 10 ORIENTATION-** April 10, 2024 from 5:00 pm - 7:00 pm

#### ALL COMPLETED REGISTRATIONS ARE DUE NO LATER THAN April 22nd

#### THE IMPORTANCE OF GRADE NINE ACHIEVEMENT AND PLANNING

Your academic achievement in grade nine, a pivotal year, determines the courses you can take in high school. In turn, the courses you take in high school determine the post-secondary opportunities available to you. Planning for the future is very important, and you can't plan effectively for high school unless you have some idea about what you want to do after you finish high school. Get serious about your future, set goals and work toward them. Most students who encounter discipline and attendance problems have neglected this strategic process. These next three and a half years will greatly affect your future. A carefully planned course now will lead you through them successfully without having to retrace any of your steps.

#### When planning for the future:

- Be realistic Consider your abilities Consider your interests
- Consider your values Consider what is right for you and not everyone else

If you plan to continue studying at a post-secondary institution, select your courses with the requirements of those institutions in mind. These requirements vary between institutions and within institutions as well. For example, the Faculty of Arts may require that you have a second language in order to be admitted, while other faculties at the same institution may not. Each post-secondary institute publishes its own requirements in booklets called **calendars**. Check out what courses are required in the calendar of the institution you want to attend. They can be accessed over the internet at <a href="www.alis.gov.ab.ca">www.alis.gov.ab.ca</a> (or in Student Services).

Although most post-secondary institutions establish a minimum average grade for admission, this does not guarantee admission if you have that grade. Admission to most programs is highly competitive, which often means that only students with the highest averages gain admission.

Your high school diploma does not guarantee admission to ANY post-secondary institution. Diploma requirements are not always the same as those of post-secondary institutions.

#### ALBERTA HIGH SCHOOL DIPLOMA: GRADUATION REQUIREMENTS

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/or 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)

#### CAREER AND LIFE MANAGEMENT (3 CREDITS)

10 CREDITS IN ANY COMBINATION FROM

- · Career and Technology Studies (CTS) courses
- Fine Arts courses
- Second Languages courses
- Physical Education 20 and/or 30
- Knowledge and Employability courses
- Registered Apprenticeship Program courses
- Locally developed courses in CTS, fine arts, second languages or Knowledge and Employability occupational courses<sup>2</sup>

#### 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 ABOVE) $^3$ 

These courses may include

- 30-level locally developed courses
- Advanced level (3000 series) in Career and Technology Studies courses
- 30-level Work Experience courses4
- 30-level Knowledge and Employability courses
- 30-level Registered Apprenticeship Program courses
- 30-level Green Certificate Specialization courses
- · Special Projects 30
- 1 The science requirement—Science 20 or 24, Biology 20, Chemistry 20 or Physics 20—may also be met with the 10-credit combination of Science 14 and Science 10.
- 2 Integrated Occupational Program (IOP) occupational courses may be used in place of Knowledge and Employability occupational courses to fulfill this requirement.
- 3 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.
- 4 Students may earn a maximum of 30 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 (70%) and the diploma examination mark (30%).

#### 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<sup>1</sup> 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 CREDITS)

#### CAREER AND LIFE MANAGEMENT (3 CREDITS)

#### 5 CREDITS IN

- 30-level Knowledge and Employability occupational course, or
- · Advanced level (3000 series) in Career and Technology Studies courses, or
- 30-level locally developed course with an occupational focus

AND

#### **5 CREDITS IN**

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

OR

#### **5 CREDITS IN**

- 30-level Registered Apprenticeship Program (RAP) course
- 1 To qualify for a Certificate of High School Achievement, students must successfully complete a minimum of one academic Knowledge and Employability course or be identified as a Knowledge and Employability student (710 code) within the 12 months previous to the awarding of the Certificate.

The Knowledge and Employability (K & E) courses are designed to meet the needs of students who have experienced difficulty with the regular program at the junior high level.

Courses within the K & E stream allow students to achieve at their highest level in core courses while providing them with a number of opportunities to gain practical skills in workplace and trade related settings. A number of opportunities to transition to the regular diploma program exist within the K & E stream.

Students will be referred to the K & E stream through our counseling services. Please contact the school at 349-4454, if you have any questions regarding the K & E courses. K & E students will NOT receive a high school diploma. A Certificate of High School Achievement is, in most cases, not sufficient for post-secondary school. Parent's are required to consent to their child's placement in K & E programming yearly.

### **HIGH SCHOOL COURSES**

Returning high-school students register for their courses in the spring before the September term. Grade 10 students must register for a full schedule (40-44 credits) All courses are semestered and are offered for three or five credits, depending upon the length of instruction. A five credit course occurs every day for one semester and three credit courses are every other day for one semester.

A student must attain 50% in order to earn credit in a course. With some CTS (Career and Technology Studies) courses, you can earn more than the normal three or five credits provided you have mastered the course content.

#### **ENGLISH LANGUAGE ARTS**

The English curriculum is designed to assist students in acquiring the skills, attitudes and knowledge they will need to meet the everyday requirements of life and to deepen their understanding and appreciation of literature. In order to accommodate students' needs and interests, three streams are offered: English 10-1, 20-1, 30-1, English 10-2, 20-2, 30-2 and English 10-4, 20-4, 30-4. There is some flexibility in transferring from one sequence to another.

#### **CHOOSE THE RIGHT COURSE**

	Grade 9	Grade 10	Grade 11	Grade 12
Language Arts 9	65% and higher	English 10-1	English 20-1	English 30-1
Language Arts 9	50-65%	English 10-2	English 20-2	English 30-2
Language Arts 9	less than 50% /KAE Language Arts 9	English 10-4	English 20-4	English 30-4

The English 10-1, 20-1, 30-1 sequence, is intended for students who wish to enroll in university and degree programs at post-secondary institutions upon completion of graduation. Students entering this sequence should have a minimum of 65% in Grade 9 Language Arts plus an excellent work ethic. Regular home study is expected of each student. ELA 30-1 culminates with a diploma examination worth 30% of the final mark.

**English 10-2, 20-2, 30-2 sequence,** the "-2" designates that this sequence provides students with minimum graduation requirements. English Language Arts -2 is recommended for students who wish to enroll in diploma programs at a post-secondary institution or wish to enter the labour force following graduation. Students entering this sequence should have a **minimum of 50% in Grade 9 Language Arts** plus a sound work ethic. Regular home study is expected of each student and essential to success in the course. ELA 30-2 culminates with a diploma exam worth 30% of the final mark.

**The English 10-4, 20-4, 30-4 sequence** is intended for students taking Knowledge and Employability courses. Students will develop personal and interpersonal skills through reading, writing and speaking. They will explore issues in our ever-changing world and develop the tools necessary to compete in the world of work.

#### English Language Arts 10-1

In this first course of the diploma sequence, students read and study short stories, poetry, novels, Shakespearean and modern plays and visual texts. It emphasizes the development of writing and reading skills. Regular home study is a requirement.

#### English Language Arts 10-2

This literature-based program develops reading and writing skills. However, speaking, listening and viewing skills receive more emphasis. Students will read and study short stories, poetry, drama, novels,

non-fiction, and visual texts. Regular home study is a requirement.

#### English Language Arts 20-1

Prerequisite: 50% in ELA 10-1

Recommended: minimum 60% in ELA 10-1

Concepts and skills studied in ELA 10-1 continue to be developed with emphasis on essay writing and critical evaluation of literature. Short stories, poetry, non-fiction, a Shakespearean play, novels and visual texts are studied. Home study and independent reading are required.

#### English Language Arts 20-2

Prerequisite: 50% in ELA 10-2

Concepts and skills studied in ELA 10-2 continue to be developed. As well, the course prepares the student to communicate effectively in a variety of situations. Short stories, poetry, novels, non-fiction, drama and visual texts are studied. Communication skills for the workplace are introduced. Home study and independent reading are required.

#### English Language Arts 30-1

Prerequisite: 50% in ELA 20-1

Recommended: minimum 60% in ELA 20-1

In English 30-1, students continue to develop and apply skills to interpret, analyze and evaluate literature. Consistent home study and review are required to meet the challenge of this course. The course culminates in a two-part diploma exam worth 30% of the course mark.

#### English Language Arts 30-2

Prerequisite: 50% in ELA 20-2

In English 30-2, practical communication skills and enjoyment of literature are emphasized. Research skills, resume writing and report writing are also included. Consistent home study and work habits are vital to success in the course. The course culminates in a two-part diploma exam worth 30% of the course mark.

#### **SOCIAL STUDIES**

The purpose of the Social Studies and Social Science curriculum is to help students develop as functional members of an increasingly complex society. Through the following programs, students will develop the knowledge, skills and attitudes, as well as plan reasonable courses of action when faced with a rapidly changing society. Responsible citizenship is the ultimate goal of Social Studies.

#### **CHOOSE THE RIGHT COURSE**

All students who successfully complete Social Studies 9 will have the option of enrolling in one of two streams. These streams are identified as Social Studies 10-1 and Social Studies 10-2. To enhance the chance of success for students entering Social Studies 10-1, a mark of 65% in Social Studies 9 plus an excellent work ethic is recommended. Placement in subsequent grade 11 and 12 courses is dependent upon the students' performance in the grade 10 Social Studies courses. Students enrolled in the K & E

Grade 9	Grade 10	Grade 11	Grade 12
Social St. 9 65% and higher	Social St. 10-1	Social St. 20-1	Social St. 30-1
Social St. 9 50-65%	Social St. 10-2	Social St. 20-2	Social St. 30-2
Social St. 9 less than 50%/KAE Social St. 9	Social St. 10-4	Social St. 20-4	

#### Social Studies 10-1

The world is becoming more complex as a result of increased interconnectedness and globalization. Students will explore varying perspectives regarding the local, national and international impact of globalization. This study will focus on the effects globalization has on cultures, economics, human rights and quality of life. Studying multiple perspectives on globalization will allow students to develop the skills and knowledge necessary to enhance their citizenship in a globalizing world. The effects of historical and contemporary globalization on people in Canada, and the world, including Indigenous peoples or Francophone communities will be the focus of Social Studies 10-1.

#### Social Studies 10-2

Historical and contemporary globalization and its impact on cultures, human rights and quality of life is the focus of study in Social Studies 10-2. Exploring globalization from a variety of perspectives will enable students to develop an understanding of the effects of globalization on citizenship and identity. Issues relating to globalization and its impact on Indigenous peoples and Francophone communities will be examined.

#### Social Studies 10-4 and 20-4

Students will gain an understanding of the world we live in and learn how to become better citizens. Concepts covered will include the structure of our government and how individuals can participate in our democracy. Students will also identify the social knowledge, skills and attitudes required for employability.

#### Social Studies 20-1

Pre-requisite: 50 % in Social Studies 10-1

Recommended: 60% in Social Studies 10-1

This course examines the complexities of nationalism within Canadian and international contexts. Students will study the origins of nationalism and the influence of nationalism on regional, international and global relations. By looking at multiple perspectives students will develop their own understandings of nationalism and how nationalism contributes to their identity as Canadians.

#### Social Studies 20-2

#### Pre-requisite: 50 % in Social Studies 10-2

This course examines the origins of nationalism and the impact this had on communities and individuals in Canada. Examples of nationalism will be examined from multiple perspectives and students will examine personal and community responses to emerging issues as they relate to the topic of nationalism.

#### Social Studies 30-1

Pre-requisite: 50 % in Social Studies 20-1

Recommended: 60% in 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. Students will write an Alberta Education Diploma Exam upon completion. (\*\*\*It is recommended that students complete this course in Grade 12)

#### Social Studies 30-2

Pre-requisite: 50 % in 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 viability of the values of liberalism. Developing understandings of the roles and responsibilities associated with citizenship will encourage students to respond to emergent global issues. Students will write an Alberta Education Diploma Exam upon completion.

#### <u>MATH</u>

The mathematics programs offered at R. F. Staples are designed to meet the diverse needs and abilities of our students. Four streams of mathematics are offered: Math 10C/20-1/30-1; Math 10C/20-2/30-2 and Math 10-3/20-3/30-3 and Math 10-4/20-4. The content covered in each stream is unique to that stream making transfer between streams difficult. For this reason, it is critical that students select the stream that meets their post-secondary requirements and abilities.

#### CHOOSE THE RIGHT COURSE

Grade 9	Grade 10	Grade 11	Grade 12
Math 9 greater than 65% and a good work ethic	Math 10C	Math 20-1	Math 30-1
		Math 20-2	Math 30-2
Math 9 less than 65%	Math 10-3	Math 20-3	Math 30-3
KAE Math 9 greater than 65%			
KAE Math 9 less than 65%	Math 10-4	Math 20-4	

#### Math 10 Courses

#### **Mathematics 10C**

Students who have demonstrated Basic Achievement (or higher) in Math 9 may enroll in Mathematics 10C (*Combined*) and then choose which path they want to take in grade 11, either Mathematics 20-1 or Mathematics 20-2

- Mathematics 10C helps students build on their achievements (especially algebra skills and number sense) to succeed at new challenges in Grade 10. To be successful in this course, students must have good work habits.
- The Mathematics 10C course consists of three main topics:
- 1. **Measurement**: linear measurement, surface area and volume, proportional reasoning, primary trigonometric ratios
- 2. **Algebra and Number**: prime factors and applications, irrational numbers, real numbers, rational exponents, polynomials, factoring
- 3. **Relations and Functions**: relations and functions, linear relations, function notation, systems of linear equations, coordinate geometry, equation of a line, slope

#### **Mathematics 10-3**

Students who did not meet grade 9 level expectations in Mathematics must register in Math 10-3 and students interested in Workplace and Apprenticeship Mathematics should also register in Math 10-3.

#### This course consists of four main topics.

- 1. **Measurement**: linear measurement, area and volume, mass, capacity and temperature, 2-D shapes and 3-D objects (regular, composite and irregular shapes)
- 2. **Geometry**: spatial reasoning, Pythagorean theorem, similarity of polygons, primary trigonometric ratios, parallel lines and transversal, properties of angles
- 3. Number: unit pricing, currency exchange, proportional reasoning, earning an income
- 4. Algebra: manipulating and applying formulas

#### Mathematics 10-4

Students working toward a certificate of high school graduation would enroll in Math 10-4. This course can also be used as a transition from the K&E Math 9 into the diploma stream course math 10-3, as it will help to build essential math skills needed for that course.

#### This course consists of four main topics.

- 1. **Number**: Working with fractions, decimals, percents and integers and apply arithmetic operations to solve everyday problems.
- 2. **Patterns and Relations**: Express and use patterns, variables and expressions with graphs to solve problems at home, in the community and in the workplace
- 3. **Shape and Space**: measuring angles and lengths in both imperial and metric units, and analyzing 2D and 3D shapes in the context of the workplace
- 4. **Statistics and Probability**: Collect, generate, interpret, examine and maintain data, charts and graphs to assist with decision making, including use of probability.

#### **Grade 11 and 12 Courses**

Note: There are multiple progressions for math courses past the grade 10 entry. See the progression chart with recommendations on the next page for more information.

#### **Foundations of Mathematics**

#### (Math 20-2 & 30-2)

This sequence fulfills most high-school students' needs. It is designed to provide students with the mathematical understandings and critical-thinking skills identified for **post-secondary studies** in programs that **do not** require the study of **calculus**.

**For example:** Arts programs, Nursing, some engineering technology programs, Medical technologies, some apprenticeship programs, some business studies

You should always check the most up-to-date information on post-secondary mathematics entrance requirements, which is available on the Alberta Learning Information Service (ALIS) website, directly from the institutions themselves and/or talking to student services.

#### **Pre-Calculus Mathematics**

#### (Math 20-1 & 30-1)

This sequence is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into **post-secondary programs** that **require** the study of **calculus**.

<u>For example:</u> Engineering, Mathematics, Sciences, some business studies, other programs that require advanced math skills.

You should always check the most up-to-date information on post-secondary mathematics entrance requirements, which is available on the Alberta Learning Information Service (ALIS) website, directly from the institutions themselves and/or talking to student services.

#### **Workplace and Apprenticeship Mathematics**

#### (Math 20-3 & 30-3)

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

Most apprenticeship training programs in Alberta will recommend students successfully complete Mathematics 30-3.

However, a small number of apprenticeship training programs may require students to complete the -2 course sequence in order to meet the mathematics entrance level competencies for those trades.

Further information regarding apprenticeships can be found at:

http://www.advancededandtech.gov.ab.ca/planning.aspx.

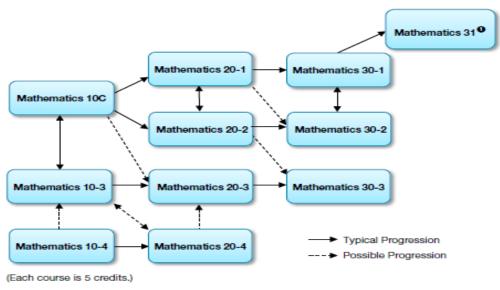
#### Math 31

This course provides an introduction to the math that students will be taught at university or college. Any student entering a college or university program requiring them to take a calculus course (forestry, agriculture, business, science, etc.) should take this course.

#### Math 20-4

This course continues and expands upon the themes covered in Math 20-4. Completion of this course would meet the math requirement for a certificate of high school achievement.

#### **Course Progression for High School Math**



• Mathematics 30-1 is a prerequisite or corequisite for Mathematics 31.

The following suggestions are made for the above progressions:

Math 10C → Math 20-1, greater than 65%

Math 10C  $\rightarrow$  Math 20-2, between 50 and 65%

Math 20-1  $\rightarrow$  Math 30-1, greater than 65%

Math 20-1  $\rightarrow$  Math 30-2, between 50 and 65%

Math 20-2  $\rightarrow$  Math 30-2, greater than 55%

The remaining progressions need completion of the previous course or teacher recommendation.

#### **SCIENCE**

The science curriculum at R.F. Staples helps students acquire a strong academic background in the sciences and an understanding of the relationship among science, technology and society. The science program is designed to help develop critical thinking and scientific inquiry skills. Science is experimental, creative, imaginative and exciting. Students will develop an understanding of the process by which scientific knowledge evolves.

Most incoming Grade 10 students take the 5-credit Science 10 or Science 14 course. Students in the taking courses from the K & E sequence will take Science 14. Students successful in Science 14 usually enroll in Science 24. From Science 10, students may choose courses in Biology 20, Chemistry 20, Physics 20 or Science 20. Most students choose two or three of these courses. From the appropriate 20-level courses, students may choose the next courses in Biology 30, Chemistry 30, Physics 30 or Science 30. Science courses are extremely important when considering your post-secondary future. Most of the programs at NAIT and SAIT require a strong science background to the grade 12 level. Students, be careful, the Science 14-24 sequence may meet the requirement for an Alberta High School Diploma, but it does not meet the requirements for many post-secondary programs.

#### CHOOSE THE RIGHT COURSE

Grade 9	Grade 10	<u>Grade 11</u>	Grade 12
Science 9 65% and higher	Science 10	Biology 20	Biology 30
		Chemistry 20	Chemistry 30
		Physics 20	Physics 30
		Science 20	Science 30
Science 9 less than 65% / Modified Academic /KAE Science 9	Science 14	Science 24	

#### Science 10

Recommended Pre-requisite: 65% on the Grade 9 Science PAT, 65% in Math 9, a good work ethic and enrolled in Math 10C. Students who achieve an 80% or higher in Science 14 may be recommended to continue into Science 10 instead of Science 24.

Science 10 is an introductory course to Biology, Chemistry and Physics which is designed to examine the relationship of science and technology to society (STS). Course content includes: integrated science, biology, chemistry and physics. Students take part in laboratory investigations and problem-solving strategies to become active participants in their own learning. Students use this course to help make decisions as to what second-year science courses to take. Strong math skills are required.

#### Science 14

This course is designed to meet the basic requirements for a high-school diploma. This sequence is for those who are experiencing major difficulties with science and/or math. Students with 64% or less in Science 9 or in the Modified Academic Program should take the Science 14-24 sequence. Those students enrolled in the K & E Program will take Science 14 and receive credits in Science 14 or 10-4 based on class performance. Students who achieve an 80% or higher in Science 14 may be recommended to continue into Science 10 instead of Science 24.

#### Science 24

Pre-requisite: 50% in Science 14

Science 24 continues the study of Biology, Chemistry and Physics as well as their applications. Students who do not reach the acceptable standard or have had significant difficulties with Science 10 may receive retroactive credit for Science 14 and 24 by taking and passing Science 24.

#### Science 20

Pre-requisite: 50% in Science 10

Science 20 continues on the same themes as Science 10 with more depth. There are four units consisting of Chemistry, Physics, Earth Sciences and Biology. Science 20 involves many teacher demonstrations, labs and computer assisted applets. This sequence is for those students who do not want to go in-depth into just one or more of the sciences, but would rather survey all the sciences in moderate detail as well as those students who struggled with, but passed Science 10.

#### Science 30

Pre-requisite: 50% in any 20 level Science course

Science 30 continues on the same themes as Science 20 with more depth. There are four units consisting of Biology, Chemistry, Physics and Energy. Note: Science 30 is NOT recognized for some post- secondary programs.

#### Biology 20

Pre-requisite: 60% in Science 10

Recommended: strong reading comprehension (65% in English 10-1, or 75% in English 10-2)

Biology 20 students study the biosphere, cellular matter and energy exchange in ecosystems. They also study the digestive, respiratory, excretory and circulatory systems of humans. Laboratory work and field studies reinforce concepts learned in the classroom.

#### Biology 30

Pre-requisite: 60% in Biology 20

Recommended: strong reading comprehension (65% in English 20-1, or 75% in English 20-2)

Biology 30 focuses on human electrochemical systems that control the body's development, reproduction and response to environmental changes. Students study the mechanisms for passing on genetic information that cause variations in individual land world populations. A variety of laboratory investigations invoke much discussion about research into current biological challenges.

#### Chemistry 20

Pre-requisite: 50% in Science 10

Recommended: 60% in the Chemistry unit of Science 10

After reviewing the Chemistry in Science 10, Chemistry 20 students study chemical solutions and concentrations, stoichiometry, gases and gas laws, and chemical bonding. Laboratory work is a large component of the course.

#### Chemistry 30

Pre-requisite: 50% in Chemistry 20

Chemistry 30 students review Chemistry 20 and then study energy changes in chemical reactions, oxidation -reduction reactions, chemical equilibrium, acid-base reactions and organic chemistry. Again, course material is closely integrated with laboratory investigations and science, technology and society (STS) issues are emphasized.

#### Physics 20

Pre-requisite: 50% in Science 10

Recommended: 60% in the Physics unit of Science 10

Physics 20 students study kinematics, dynamics, mechanical waves. Demonstrations, experiments and technical applications are integrated throughout the course.

#### Physics 30

Pre-requisite: 50% in Physics 20

Physics 30 students study: 1) conservation laws (energy and momentum,

- 2) electric forces and fields
- 3) magnetic forces and fields
- 4) the nature of the atom
- 5) waves and particles
- 6) radioactivity
- 7) nuclear physics

Experimental work demonstrations, technological applications and science, technology and society (STS) issues are integrated throughout the course.

#### PHYSICAL EDUCATION

#### Physical Education 10 (3 or 5 credit)

This course is designed to develop an interest in activities that one may pursue throughout their lives, whether they are individual or group activities. We provide many positive learning experiences and develop positive attitudes toward leading a healthy and active lifestyle. A major focus is on rules, regulations, skills, and sportsmanship in various sports.

#### Fitness (5 credits)

Fitness is a 5 credit option that focuses on physical fitness and weight training. Depending on the student's need or desire, Fitness can provide extra credit on top of a conventional Phys. Ed program through CTS Modules credits related to the subject area but does not count toward the physical education diploma requirement.

#### Wellness 10 (3 Credits)

This course is designed for students who need to complete PE 10 for their graduation requirements. Note: This course is for students who want a non-traditional PE course.

#### Physical Education 20 (5 credits)

This program is designed to provide a positive learning experience and to develop and maintain a healthy active lifestyle. In accordance with curriculum guidelines, an emphasis on developing and maintaining a fitness program will be strongly stressed. Development of a cognitive understanding in areas related to fitness, sports, teamwork and self-responsibility will be a major focus.

#### Physical Education 30 (5 credits)

With knowledge about physical activity and the opportunity to develop physical, social and emotional skills, this physical education program is intended to emphasize self-initiated participation in physical activities and the formulation of a healthy lifestyle. Special emphasis will be on the development of competency in skills and an introduction to personal leadership growth. Various activities are incorporated with an emphasis on lifetime sports and wellness.

#### **CAREER AND TECHNOLOGY STUDIES (C.T.S.)**

Career and Technology Studies (CTS) is a series of technology based programs available to R.F. Staples students. These courses complement the core academic subjects and allow the student to develop basic and transferable career-specific knowledge, skills and attitudes. Students will also develop confidence in their ability to respond to change and be better equipped to meet the challenge of their personal and work lives.

Students must successfully complete all required pre-requisites prior to admission in subsequent courses.

#### SELECTING COURSES IN C.T.S

Most C.T.S. courses are offered at the introductory, intermediate and advanced levels. Students should initially select C.T.S. strands of greatest interest to them. Upon successful completion of three or five modules in a strand (approximately 75 or 125 hours of instruction), the student will be awarded three credits or five credits. The students then may choose to continue with other courses in that strand to gain additional credits. Students must complete all prerequisite CTS courses before they can enroll in subsequent level courses.

The following C.T.S. strands may be offered:

Media Arts Business Studies Aviation

Carpentry Mechanics

Cosmetology Fashion & Textiles

Food Studies Computer Science

#### **COSMETOLOGY**

Ever dreamed of a career in the beauty industry? How about learning all the latest styles seen on Pinterest? Whether you are looking to learn some basic skills or challenge your current skill set, Cosmetology is for you! This course provides students with opportunities to identify trends and learn current techniques that meet industry standards such as cutting, colouring and styling. This course is offered at the introductory, intermediate and advanced levels to provide students the ability to grow their skills year after year. Students completing all levels of this course may qualify to have credits applied to an apprenticeship.



Esthetics will be offered this year for either 5 or 10 credits. In this course, students will learn how to

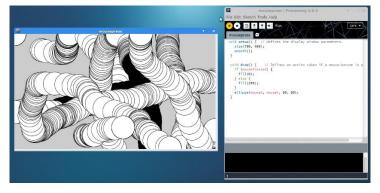
provide skin treatments, hair removal and makeup application. Students will also learn and provide nail services such as manicures, pedicures and nail enhancements using gel and acrylic products.

#### **COMPUTER SCIENCE**

#### Computer Science (3 credit)

Imagine a world without computers. It seems impossible, right? That's why taking a course in computer science matters! Take charge of your digital world and learn about computer logic and how they work, write simple programs, and extend your problem solving skills. Discover more about algorithms, operators, debugging, HTML website design and more!

At the Intermediate level, self-starter students learn Python through CodeHS and Robotics using Phidgets. At the Advanced level, students create a larger scale project using Python and a Raspberry Pi.



#### **MEDIA ARTS**

Media Arts is a 21st-century learning savvy program that offers students creative challenges to develop design and computer skills in a hands-on, media-rich environment. Students have the chance to explore photography with DSLR cameras, video production, 2D/3D animation, and graphic design using industry standard software on Mac computers. Students leave the Media Arts program ready to apply their skills to the fast-paced and rapidly changing technological world.

#### Intro Media Arts

Students begin to develop their designer's eye through graphic design, typography, photography, photo manipulations and a choice between video production or 2D animation. Students will learn Adobe Illustrator, Lightroom, Photoshop and the choice between Premiere and Animate. Students will design

#### Inter./Adv. Media Arts

and make their own t-shirt in this course!

With teacher consultation and mentorship, students decide which skills they would like to continue to develop and which projects to pursue. Students at this level are independent self starters building portfolio worthy final products.

#### Portrait Photography

In this unique business-run class, students have the opportunity to take the graduate portraits for the R.F. graduation class. Students will learn the technical and customer service skills necessary for a successful career in photography. Students will attend an off-site photography professional development opportunity as part of their course. This class has a prerequisite of Media Arts 1.



#### **BUSINESS STUDIES**

#### Business Studies (5 credits)

In Business Studies, students can learn how to start up and manage their own small business, how to play the role of retail store manager, how to develop and use financial information through accounting procedures, and how to manage personal finances and investments. Personal contexts, community partnerships, and examining national and global current events will create a platform for learning that is both personally relevant and demanded in the workforce.

#### Legal Studies (3 credits)

In Legal Studies, students are given the opportunity to explore the Canadian legal system and some of the fundamentals that impact us on a daily basis. The topics to be explored include public, family, private and relationship law.

#### **FOOD STUDIES**

Food Studies is an interactive course in which students get the opportunity to learn basic cooking and basic baking skills. As students move through the semester, they will be exposed to many new cooking skills and try new foods. Students will have the opportunity to create food for themselves as well as catering for within the school and community.

INTRODUCTORY	INTERMEDIATE	ADVANCED
Food Basics	Cake & Pastry	Creative Baking
Contemporary Baking	Yeast Breads & Rolls	Short Order Cooking
Vegetable & Fruits	International Cuisine	Regional Cuisine
Snacks & Appetizers	Creative Cold Foods	Advanced Yeast Products
Milk & Egg Products	Nutrition & Digestion	Food Decisions and Health
Fast & Convenience Foods	Basic Soups and Sauces	Advanced Soups and Sauces

#### **STUDENT LEADERSHIP (Student's Union)**

This course stream is designed to give students the opportunity to have leadership roles in the school through the high school student union and taking a course to earn credits. Students that choose this course will be part of the high school student union for the entire school year but the course is either scheduled everyday for one semester or every other day over both semesters. Coursework is completed independently with students reading course materials, doing individual research, and completing assignments. Involvement in the student union requires attending the lunch break meetings and attending and supporting school events/activities. The projects associated at each level will involve the planning and implementation of school or community events/activities throughout the school year.

#### **Leadership Level 1 (5 credits)**

HSS 1080 Leadership Fundamentals 1 (1 credit)

CCS 1080 Community Volunteerism 1 (1 credit)

HSS 1090 Speaking and Presenting (1 credit)

HSS 1910 Project A (2 credits)

#### **Leadership Level 2 (5 credits)**

HSS 2030 Perspectives on Interpersonal Relationships (1 credit)

HSS 2080 Leadership Fundamentals 2 (1 credit)

CCS 2080 Community Volunteerism 2 (1 credit)

HSS 2910 Project B (2 credits)

#### **Leadership Level 3 (5 credits)**

HSS 3080 Leadership Fundamentals 3 (1 credit)

CCS 3080 Community Enhancement (1 credit)

HSS 3090 Governance and Leadership (1 credit)

HSS 3910 Project D (2 credits)

#### **MECHANICS**

In the Mechanics course, students can increase their knowledge and skills related to the design and maintenance of transportation vehicles through hands-on-experience and classroom study. Whether a student plans to prepare for a particular role in the industry or simply wants to become an informed owner/operator of a vehicle, Introductory Mechanics provides a basic educational opportunity for all secondary students. Students study the following:

INTRODUCTORY	INTERMEDIATE	ADVANCED
Vehicle Service & Care	Pneumatic & Hydraulic Systems	Computer Systems
Mechanic & Welding Fundamentals	Braking Systems	Engine Diagnosis
Tools & Materials	Steering Systems	Engine Tune-up
Engine Fundamentals	Fuel & Exhaust Systems	Drive Train Repair
Buying & Selling Vehicles	Drive Line	Engine Replacement
Electrical Fundamentals	Suspension Systems	Alternative Fuel Systems
Ride & Control Systems	Vehicle Maintenance	Wheel Alignment
	Emission Control Systems	Automatic Transmissions
	Electrical Components	Project D
	Project B	Alternative Energy
	Ignition Systems	Lubrication & Cooling Systems

#### **CARPENTRY**

Carpentry Levels 1, 2, and 3 will prepare students to enter the construction industry after graduation and/or provide them with the necessary skills and knowledge to be able to fix or build some of their own projects as they move out on their own. There is currently a high demand in today's job market for these skills and will be for the foreseeable future.

**Carpentry Level 1 for Girls** is an all-girls program designed to allow girls a more comfortable setting to learn the skills and knowledge connected to all the carpentry levels. The program's objective is similar to the GETT (Girls Exploring Trades and Technologies) program promoted by Skills Alberta Canada which is designed to help girls develop an awareness of trade oriented career options.

Carpentry Level 1	Carpentry Level 2	Carpentry Level 3
CON1010-Construction Tools & Materials - Learn how to use basic	CON2010-Site Preparation-Learn how to prepare a building site for construction	CON3010-Concrete-Structures & Finishes-Place and finish concrete
hand tools  CON1070-Building Construction- Introduction to the trade of	CON2020-Concrete Forming-Build and place concrete forms	CON3030-Wall & Ceiling Finishing- Apply drywall mud, tape and paint to a
construction  CON1120-Product Management- Learn how to draw a print and build	CON2035-Framing Systems*Floor- Learn how to build a floor (residential)	wall; install suspended ceiling  CON3040-Stair Construction-Learn how to create and build a set of stairs
the project  CON1130-Solid Stock Construction- Create a project using solid spruce or pine	CON2045-Framing Systems*Wall- Learn how to build a wall (residential)	CON3050-Roof Structures 2-Learn how to construct a hip roof
CON1140-Turning Operations-Learn how to use a wood lathe and create a project	CON2050-Roof Structures 1-Learn how to build a gable roof	CON3060-Doors & Trim-Install doors, trim and baseboards
CON1160-Manufactured Materials- Create a project using plywood and solid stock edging	CON2060-Doors, Windows, Siding- Learn how to install doors, windows, siding on a building	CON3070-Floorcovering-Prepare and install floorcoverings
CON1910-Special Project A-Can be a variety of student directed projects involving cross curricular activities	CON2100-Agri-structures-Learn how to build a calf or horse shelter	CON3090- Renovations/Restorations-Learn how to complete a renovation
	CON2130-Furniture-Box Construction-Build a box frame for a night table	CON3110-Site Management-Learn how to organize and run a construction project
	CON2140-Furniture-Frame & Panel- Create a frame and panel for a night table	CON3140-Furniture-Surface Enhancement-Enhance a furniture surface using special techniques (CNC
6115	CON2150-Finishing & Refinishing- Prepare and apply a finish to a furniture project	machining)  CON3150-Furniture Repair-Complete a furniture repair of student choice
• 0	CON2160-Cabinetmaking-Web & Face Frame-Create the web face & frame for a cabinet	CON3160-Cabinetmaking-Cabinets & Countertops-Construct a countertop for a cabinet
	CON2170-Canietmaking-Door & Drawer-Create a raised panel door and box drawer for a cabinet	CON3170-Cabinetmaking-Layout & Installation-Design a layout for a cabinet; install a cabinet
	<b>CON2910-Special Project B-</b> Can be a variety of student directed projects involving cross curricular activities	CON3210-Framing Systems- Advanced-Construction on a full sized building
		<b>CON3910-Special Project D-</b> Can be a variety of student directed projects involving cross curricular activities

#### **FASHION & TEXTILES**

The Fashion & Textiles program at RF Staples allows students to work at their own pace to design, create, and use garments for themselves and others. After learning the basic fundamentals of sewing, students are able to work on projects of their choosing - bags, scarves, hats, pants, pillows to just name a few. Also, students will have the opportunity to learn handi-crafts - knitting, crocheting, cross-stitching, and quilting. Many of these art forms are making a revival among youth today. A relaxed, hands-on course for all who are interested.

#### **FINE ARTS COURSES**

R.F. Staples offers a variety of exciting Fine Arts courses meant to meet the needs of both beginning and more experienced students.

#### **MUSIC**

RF's music program offers both beginning and advanced band course options. The creative environment fostered in these courses focuses on preparing students for performances and tours, and collaboration among peers. Participation in the ensembles builds the student's abilities to persevere,

students for performances and tours, and collaboration among peers.

Participation in the ensembles builds the student's abilities to persevere,
focus, and receive constructive feedback. Our music program strives to enhance a student's musical education by challenging their talent and enriching their overall school experience. Practice facilities and equipment are available through arrangements with the Music Department. RF's music program provides skills proficient enough for a student's foundation for post-secondary Fine Arts programs or to

THUNDERBIRI

Senior High Band (Band 15-25-35 or Instrumental Music 10-20-30) (5 credits):

eniov a lifetime of music recreationally.

In this course, we will continue building proficiency on your instrument of choice and perform multiple times throughout the year. Advanced band will run every other day for the full year and will welcome students from the PNCS band program as well as those students who took the beginning band course in the first semester. There may be opportunities for travel with the advanced band program.

#### **FILM STUDIES**

Film Studies is a 5-credit elective that focuses on the analysis of film. It is a survey course that introduces students to the film canon of both Hollywood and world cinema. The course also focuses on analysis, cinematic theory, film movements, and an introduction to the auteur model of cinema.

#### ART 10/20/30

Art helps stimulate creative thinking through the development of hands-on visual skills. Students will have the opportunity to develop and apply skills in many mediums, organize visual elements into meaningful compositions and to encounter art of the past and present.

All art students work together for their first thematic unit. Art 10s continue with teacher guided learning in drawing, painting, 3D works, printmaking, and other mediums. Art 20/30s have a self-directed growth experience by working on their choice of projects in several different mediums.

#### **DRAMA**



#### Drama 10

Drama is both an art form and a medium for learning and teaching. It can develop the whole person — emotionally, physically, intellectually, imaginatively, aesthetically and socially - by giving form and meaning to experience through "acting out." In the senior high drama program, the students not only learn the craft of acting, they learn about the various disciplines which enhance the performance of a play. These include set design and construction, make-up, lighting and sound technologies, stage management, costume design and prop construction. Students exit the drama program with deeper understanding and appreciation of these as an art form.

#### Drama 20

Drama fosters a positive self-concept in students by encouraging them to explore life through assuming roles and acquiring dramatic skills. Imaginative exploration involves creating a dramatic situation, "acting out" that situation, communicating about that situation and reflecting on the consequences. (Reflection provides the knowledge for self-development.) This course reviews the discipline of orientation and explores speech, movement, improvisation, theatre skills, technical theatre, set design and acting at an intermediate level.

#### Drama 30

As students advance in dramatic forms of expression, greater emphasis can be placed upon their development as creators, performers, historians, critics and patrons. In this way, they continue to mature in their appreciation of theatre as a traditional art form. In this course, the discipline of orientation is once again reviewed, while speech, movement, improvisation, theatre skills, technical theatre/design, acting and directing are explored at an advanced level.

#### CAREER AND LIFE MANAGEMENT

#### C.A.L.M (Career and Life Management)

Career and Life Management (C.A.L.M.) is a compulsory 3-credit course. All senior high students must complete this course to receive a high school diploma. This course helps young adults more adequately cope with the rapid changes now occurring in our social, economic and physical world. The C.A.L.M. curriculum challenges young people to acquire the skills and information necessary to shape their lives and contribute constructively to society.

- Topic 1 = Personal Choices health, well-being issues
- Topic 2 = Resource Choices money management, consumer issues
- Topic 3 = Career and Life Choices exploring career options & the world of work

#### C.A.L.M + Info Pro

Students registered for the 5 credit CALM+ class will earn 3 credits for CALM (see description above), 4 credits for computer software skills (presentations, spreadsheets, word processing, keyboarding), and 1 credit for the Personal Taxation module. In this way, students will learn the necessary computer skills for success in high school, post-secondary school, and in many occupational applications. Integrating with the Resource Choices unit of CALM, students will also learn how to complete their own personal tax returns.

#### C.A.L.M + Psychology

Students registered for the 5 credit CALM+ Psychology class will earn 3 credits for CALM and 3 credits for Psychology.

#### **PSYCHOLOGY COURSES**

These courses are open to grade 10, 11 and 12 students.

#### General Psychology 20 (3 Credits)

Psychology is the study of the mind and behavior. General psychology is the foundation of studying science of psychology that deals with basic principles, problems and methods of human development, emotions, motivation, learning, memory, senses, thinking, perception, processing, and intelligence.

#### General Sociology 20 (3 Credits)

Sociology is an exciting field of study that analyzes and explains important matters in our personal lives, our communities, and the world. At the personal level, sociology investigates the social causes and consequences of such things as love, racial and gender identity, family conflict, deviant behavior, aging, and religious faith. At the societal level, sociology examines and explains matters like crime and law, poverty and wealth, prejudice and discrimination, schools and education, business firms, urban community, and social movements.

#### **WORK EXPERIENCE**

The Work Experience program provides students with the opportunity to gain an understanding of the world of work and/or a specific occupation in a hands-on work environment. Students are encouraged to find a placement related to the various careers that they may be exploring. Students registered for Work Experience will be supervised by a teacher-coordinator and employer. A total of 30 credits; 10 at the grade 12 level, may be obtained through Work Experience. Evaluation is based on the employer's evaluation, and an in-school component. Credits are awarded as follows: 75 hours—3 credits and 1 credit for every additional 25 hours.

## STUDENTS MUST COMPLETE HCS3000 - WORKPLACE SAFETY SYSTEMS BEFORE THEY CAN START COUNTING HOURS.

#### REGISTERED APPRENTICESHIP PROGRAM (RAP)

The Registered Apprenticeship Program (RAP) is an apprenticeship program for high school students. Traditionally, apprenticeships in Alberta begin after a student has graduated from high school.

However, some students identify their career interests at an early age and are ready to get started learning and practicing their future trade **while in high school.** RAP is an ideal program for these students.

RAP students divide their time between an approved worksite and their high school. They take regular courses such as English, Social Studies, Science and Math in order to earn their Alberta high school diploma or certificate of achievement. RAP students are both full-time students and registered apprentices.

Participation in our RAP and work Experience programs can only occur after the completion of Grade 10. Students can also enroll in our summer work experience program to earn credits.

#### **AVIATION**

<u>Aviation - Flight 15 (LDC1351)</u> The Aviation - Flight courses are based on expectations equivalent to Transport Canada and as such, students will work with real-world curricula from which they may identify and apply career and life skills through their learning. Students will gain knowledge, understanding and skills through their experiences in this course. Aviation and will be required to think critically, conceptualize and apply the knowledge they gain. At the 15 level, Transport Canada documentation for pilot training, is based on the progression of studying the standards and requirements, and supports obtaining a private pilot's license.

Flight Simulator Prerequisites: None

<u>Aviation - Flight 25 (LDC2351)</u> The Aviation - Flight courses are based on expectations equivalent to Transport Canada and as such, students will work with real-world curricula from which they may identify and apply career and life skills through their learning. Students will gain knowledge, understanding and skills through their experiences in this course. Aviation and will be required to think critically, conceptualize and apply the knowledge they gain. At the 25 level, Transport Canada documentation for pilot training, is based on the progression of studying the standards and requirements that supports obtaining a commercial pilot's licence.

Flight Simulator Prerequisites: All of the following: Aviation - Flight 15 (LDC1351)

<u>Aviation - Flight 35 (LDC3841)</u> The Aviation - Flight 12 course are based on expectations equivalent to Transport Canada and as such, students will work with real-world curricula from which they may identify an apply career and life skills through their learning. Students will gain knowledge, understanding and skills through their experiences in this course. Aviation and will be required to think critically, conceptualize and apply the knowledge they gain. At the 35 level, Transport Canada documentation for pilot training, based on the progression of studying the standards and requirements that supports obtaining an Instrument flying certification.

Flight Simulator Prerequisites: All of the following: Aviation - Flight 25 (LDC2351)

#### INDEPENDENT LEARNING

Independent learning may be scheduled for a grade 11 or 12 student that is unable to appropriately fill their time table with the courses offered in a semester. Several 1 credit CTS courses and 3 or 5 credit option courses are available through our Inreach program. Students work on these courses independently and are expected to work in our Independent lab with help from a teacher and/or PA when needed. Online and print courses are available.

#### **SENIOR HIGH LIFE SKILLS PROGRAM**

This program is designed to meet the needs of students with profound learning needs. It is a continuation of the Junior High Life Skills program where each students' learning is based on identification of needs through standardized assessment. This programming may include individualized program plans (IPP).

#### **STUDENT ACTIVITIES & CLUBS**

Student Union

Dream Merchant Theatre
Graduation Committee
Rotary Programs

Skills Canada

Yearbook

**GSA** 























#### **ATHLETICS**

- Jr. Varsity Boys' Volleyball Team-Sept. tryouts
- Jr. Varsity Girls' Volleyball Team-Sept. tryouts
  Sr. Boys' Volleyball Team- June tryouts
  - Sr. Girls' Volleyball Team-June tryouts
- Jr. Varsity Boys' Basketball Team-Dec. tryouts
- Jr. Varsity Girls' Basketball Team-Dec. tryouts
- Sr. Boys' Basketball Team-Late Nov. tryouts
- Sr. Girls' Basketball Team-Late Nov. tryouts

Archery-December start

Badminton-March tryouts

Track & Field-March/April start

Golf-June tryouts

Curling-November start

Cross Country Skiing-Dec./Jan. start

Cross Country Running-Sept. start

Football-March registration



















## **GET INVOLVED....**