

Michael A. Riffel High School

PROGRAM OF STUDIES






**Grades 10, 11, 12**

**2012 - 2013**

## POST-SECONDARY PREPARATION

Many post-secondary programs require more than simple graduation requirements. For this reason, we encourage students to take more classes than they “need”. Each post-secondary institution has their own admission requirements beyond the basic grade twelve graduation requirements. Please research these requirements when planning your course selections. While many students state they do not “need” courses, the reality is that a large number of students change majors at university or move into new careers later in life. Students should take classes now to avoid future disappointment.

### **We remind students that:**

-  You need a 30-level math or science to enter the University of Regina Faculty of Arts.
-  Science/math/computer science at the University of Regina require Math C30 and at least one 30-level science.
-  Do not assume requirements at one institution match requirements at other institutions offering the same program.

While many students state they do not “need” courses, the reality is that a large number of students change majors at university or move into new careers later in life. Whether one takes a business course at 17 or 30 years of age, one still requires Math B30. Students should take classes now to avoid future disappointment.

## ADVANCED PLACEMENT

The Advanced Placement (AP) Program is a cooperative educational endeavour between secondary schools, colleges, and universities. It allows young people to successfully complete university-level studies in secondary school. To be successful, students will be required to do enrichment assignments. The demands of this course are many, but the educational benefits are worth the time and effort. To achieve university credit, students must successfully write College Board Examinations in May (approximately \$140.00 per examination, paid for by Regina Catholic Schools). Generally, universities want students to achieve 80% or better on the AP examinations.

## TIMETABLE GUIDELINES

- ↗ Grade 10 students cannot have spares.
- ↗ Grade 11 students may have a maximum of one spare a semester (two per year).
- ↗ Check **all** prerequisites.
- ↗ Students entering Michael A. Riffel from public schools take Christian Ethics at the current grade level and are not required to take earlier Ethics classes.
- ↗ Students and parents should discuss course selection carefully.
- ↗ If not enough students register in a course, it cannot be offered.
- ↗ Students may not take ELA or Ethics at grade levels above their own. Only Grade 12's may take Native Studies 30 or Social Studies 30.

## THE CREDIT SYSTEM

Secondary education (Grades 10, 11, 12) operates on a credit system. Generally speaking, for each class successfully completed, the student earns one (1) credit. Students accumulate credits from Grades 10 to 12 and must attain at least 24 credits to graduate.

## GRADUATION REQUIREMENTS

Grade 10 Minimum 8 credits	Grade 11 Minimum 16 credits	Grade 12 Minimum 24 credits (5 of which must be at the 30 level)
<p><b>Compulsory courses are:</b></p> <p>English Language Arts A 10 and English Language Arts B 10;</p> <p>History 10 or Native Studies 10;</p> <p>Science 10;</p> <p>Mathematics 10;</p> <p>Christian Ethics 10;</p> <p>3 electives at level 10 or higher.</p>	<p><b>Compulsory courses are:</b></p> <p>English Language Arts 20; Mathematics 20;</p> <p>Christian Ethics 20;</p> <p>6 additional elective credits at level 20 or 30.</p>	<p><b>Compulsory courses are:</b></p> <p>English Language Arts A 30 and English Language Arts B 30;</p> <p>Social Studies 30; Canadian Studies or Native Studies 30; Canadian Studies;</p> <p>Christian Ethics 30</p> <p>A science 20 or 30;</p> <p>A social science 20 or 30;</p> <p>2 credits in arts education or practical and applied arts at level 10, 20, or 30;</p> <p>2 Christian Ethics classes meet the requirements for 2 P.A.A.;</p> <p>Wellness 10, Physical Education 20 or Physical Education 30.</p>

## PREREQUISITE INFORMATION

**The following require a prerequisite course.  
Courses not listed do not have prerequisites.**

<b>Class</b>	<b>Prerequisite</b>
Accounting 20	Accounting 10
Accounting 30	Accounting 20
Biology 20	Science 10
Biology 30	Science 10, Biology 20 Recommended
Chemistry 20	Science 10
Chemistry 30	Chemistry 20
Computer Networking 20	Computer Networking 10
Computer Networking 30	Computer Networking 20
Computer Science 20	Science 10
Computer Science 30	Computer Science 20
Creative Writing 20	ELA A10 OR ELA B10
ELA 20	ELA A10 and ELA B10
ELA A30 or ELA B30	ELA 20
French 20	French 10
French 30	French 20
Math 20 Workplace & Apprenticeship	Math 10 Workplace & Apprenticeship
Math 20 Foundations	Math 10 Foundations/Pre-Calculus
Math 20 Pre-Calculus	Math 10 Foundations/Pre-Calculus
Math 30 Workplace & Apprenticeship	Math 20 Workplace & Apprenticeship
Math 30 Foundations	Math 20 Foundations
Math 30 Pre-Calculus	Math 20 Pre-Calculus
Math 30 Calculus AP	Math 30 Pre-Calculus
Media Studies 20	ELA A10 OR ELA B10
Native Studies 30	History 10 or Native Studies 10
Physics 20	Science 10
Physics 30	Physics 20 or Math 20 Foundations or Math 20 Pre-Calculus
Social Studies 30	History 10 or Native Studies 10
Studio Art 30L	Visual Art 20
Visual Art 30 AP	Visual Art 20
Workplace and Apprenticeship 20	Workplace and Apprenticeship 10

## SECONDARY COURSE DESCRIPTIONS

### **ACCOUNTING 10 - one credit**

**Prerequisite: none**

This first accounting course introduces students to the purposes and practices of accounting. Topics include accounting careers and concepts, starting an accounting system, journalizing business transactions, posting, developing a work sheet with financial statements, adjusting and closing entries, and accounting for a sole proprietorship. Emphasis is on individualized work with a number of practical simulations.

### **ACCOUNTING 20 - one credit**

**Prerequisite: Accounting 10**

Basic accounting principles are expanded to include the preparation of the Worksheet, Income Statement, and Balance Sheet for a merchandising firm. Analytical ratios are used to interpret financial statements and make managerial operating decisions. Topics include an accounting system with special journals, uncollectable accounts, and end-of-period financial statements for a partnership.

### **ACCOUNTING 30 - one credit**

**Prerequisite: Accounting 20**

This course is designed to review basic accounting concepts, principles and practices with a more advanced treatment of accounting theories and practices. Emphasis is on preparing financial statements for large corporations with shareholders. Statements are analyzed for the purposes of making managerial operating and capital investment decisions. Learning activities in all three accounting courses are directed toward developing the students' knowledge and skills for the workforce and/or college accounting classes.

### **VISUAL ART 10 - one credit**

**Prerequisite: none**

This course is the study of the elements of art and the principles of design. Students attain knowledge and techniques that advance their abilities to create successful artwork. Through the course, the students will be expected to recognize the elements and the principles and be able to discuss other artists' use of these fundamentals. The students will then be expected to apply their new knowledge by creating works that are aesthetically pleasing. Methods include drawing, painting and collaging.

### **VISUAL ART 20 – one credit**

**Prerequisite: none**

Students without Art 10 will encounter a program similar to that described in Art 10. Experienced students will continue to use the fundamentals they learned in the previous year while they respond to the following themes: ideas & inspiration; popular culture and mass media; cultural communities; spiritual images and visual art. During these studies, students will view, discuss and create works using two-dimensional and three-dimensional based media.

### **STUDIO ART 30L- one credit**

**Prerequisite: Visual Art 20**

This course is designed to challenge students with strong artistic ability. Students must work

towards submission of the AP portfolio. During this course, students will complete the “breadth” section of the AP portfolio and begin the concentration section of the AP exam. Students draw, paint, and do printmaking in relation to several topics. Emphasis is on development of individual style and content. **AP Art students must register for both AP Studio Art and AP Portfolio.**

**VISUAL ART 30 AP - one credit**

**Prerequisite: Visual Art 20**

Interested students must meet with Mrs. Luzny. This course is designed for those students who would like to complete portfolio work for submission to post-secondary programs.

**VISUAL ART 30 - one credit**

**Prerequisite: none**

The Art 30 Program is an exploration of self identity in relation to change, differing perspectives and Global Cultural Explorations. The students will explore ways that they and other artists are able to manipulate visual elements and images to express an idea or experience. If a student is taking Studio Art AP, he/she is not eligible for this class.

**BAND 10 / 20 / 30 - one credit each**

**Prerequisite: none**

This class runs all year. Preparation and performance of various musical styles allows students to learn musical concepts and develop technical skills on an instrument. In addition to full band rehearsals, students develop solo and ensemble skills and study musical theory. Students perform at school functions, public concerts, and festivals.

**BIOLOGY 20 - one credit**

**Prerequisite: Science 10**

The student, largely through activities, will learn about the diversity and unity of life. The major themes - classification, botany, zoology, and ecology - will be covered using Saskatchewan and Canadian examples to present the many connections with everyday life. Students have opportunities to dissect organisms. Students will understand their role in nature so they may better appreciate their importance in maintaining life on this planet.

**BIOLOGY 30 - one credit**

**Prerequisite: Science 10, Biology 20 recommended**

Topics include the chemistry of life; the structure and function of cells, the basis of living things; heredity; evolution; physiology. Students extend their understanding of human body functions. These topics provide students with an enhanced appreciation for the common threads that tie all life together and for the immense variety in life.

**CHEMISTRY 20 - one credit**

**Prerequisite: Science 10**

Chemistry 20 includes the study of the fundamental particles of all matter, atoms, and elements. Using an historical approach, the understanding of atomic structure leads to the study of molecules and compounds, chemical reactions, mole concept, and stoichiometry. Using a variety of strategies, including laboratory experiments and independent research, students will see how chemistry is an important part of today’s society.

**CHEMISTRY 30 - one credit**

**Prerequisite: Chemistry 20**

Chemistry 30 includes a review of some key concepts from Chemistry 20 such as atomic theory, periodicity of the elements, nomenclature, mole concept, and stoichiometry. Both laboratory activities and independent research projects lead to a good understanding of chemistry. Key concepts in the course are energy changes, reaction kinetics, equilibrium, acid and bases, and oxidation-reduction. All concepts are related to today's society.

**CHORAL 10 / 20 / 30 – one credit each**

**Prerequisite: none**

Choral is a curricular class combining friendship, teamwork, singing, and performance. Students will be learning singing basics and musical theory. Throughout the year they participate in events such as Christmas concerts and music festivals. The choir takes a yearly tour, performing their spring show and visiting local sites. This class spans the entire school year and is a popular choice for many students.

**CHRISTIAN ETHICS 10 - one credit**

**Prerequisite: Christian Ethics 9**

The course content includes the history, creed, models and sacraments of the Church. Through class readings, discussions, and activities, students are encouraged to examine what kind of people they are becoming. Students are taught a process of moral decision-making based on the life and teachings of Jesus as the example of what it means to be fully human.

**CHRISTIAN ETHICS 20 - one credit**

**Prerequisite: Christian Ethics 10**

This course helps students achieve an understanding of Scripture that can help us integrate and direct our lives. First, the course develops skills for Biblical interpretation to see how Scripture tells a story that gives meaning to human existence. Later, the course focuses on the person and message of Christ in the gospels to help students make sense of their lives.

**CHRISTIAN ETHICS 30 - one credit**

**Prerequisite: Christian Ethics 20**

The course focuses on how the Christian message guides our search for self-understanding. Students discover how Christianity gives meaning to life, death, and beliefs as they gain understanding about the importance of relationships (with God, self and others) and commitments from a Christian perspective. Also, students will be introduced to the contributions of various world religions and spiritualities.

**COMMUNICATION MEDIA 10 - one credit**

This is an introductory class studying multimedia and video production. Students will learn about the fundamentals of filmmaking and web page design. They will develop skills in editing, storyboarding, filming, audio recording, and web-page design.

**COMMUNICATION MEDIA 20 - one credit**    **Prerequisite: Communication Media 10**

This course expands upon the CM 10 course. Students will further develop skills in filmmaking and web page design and will be engaged in all aspects of creating videos from idea development through to public screening. Skills in editing, story-boarding, filming, audio recording, script writing, and lighting will be developed. Projects will focus on school-related activities and may be showcased during school events.

**COMMUNICATION MEDIA 30** – one credit      **Prerequisite: Communication Media 20**

Communication Media 30 engages students in one or more major projects that may focus on audio, video, or multimedia production or a combination of these. It is expected that students will engage in more sophisticated post-production activities at this level. Some students may make use of work study opportunities with communication production companies in their communities.

**COMPUTER NETWORKING 10** - one credit

This course is designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer networking field. Instruction includes safety, networking, network terminology and protocols, network standards. Students completing the 10, 20 and 30 courses in computer Networking may be eligible to write the CCNA exam and receive CCNA certification in addition to high school credits.

**COMPUTER NETWORKING 20** - one credit      **Prerequisite: Computer Networking 10**

This course is designed to provide students with classroom and laboratory experience in current and emerging networking technology that will allow them to enter employment and/or further education in training in the computer-networking field. Topics of instruction include safety, networking, network terminology, and protocols, network standards, LANs, WANs, OSSSI models, Ethernet, Token Ring, Fibre Distributed Data Interface, TCP/IP Addressing Protocol, dynamic routing, routing, and the network administrator's role and function. Additional topics from the following will also be included, as time permits. Advanced router configurations, local area network (LAN) switching, virtual LANs, LAN Design, interior gateway routing protocol (IGRP), access control lists (ACL), Novell, IPX, and network management. Students will begin a Threaded case study, where they will design and document a hypothetical network. The remainder of these topics will be included in the Computer Networking 30 course. Particular emphasis

**COMPUTER NETWORKING 30** - one credit      **Prerequisite: Computer Networking 20**

See Above for description

**COMPUTER SCIENCE 20** - one credit      **Prerequisite: Science 10**

This is an introductory course in computer programming. The course begins with a history of computer programming and the binary number system. Visual Basic will be used to introduce the concepts of computer programming and the binary number system. Visual Basic will be used to introduce the concepts of computer programming. Concepts to be taught include variables, decision statements and loops. Students will also create simple web pages using Dreamweaver. A strong understanding in Math is recommended for success.

**COMPUTER SCIENCE 30** - one credit      **Prerequisite: Computer Science 20**

Students will expand on concepts taught in Computer Science 20. Using a different computer language, students will review previous concepts as well as be introduced to

functions, arrays and file sharing. Time permitting, students will learn the basics of computer networking and set up a small LAN in the class.

**CREATIVE WRITING 20 – one credit**

**Prerequisite: ELA A10 OR B10**

This course focuses on writing as an art form. Students are encouraged to develop creative ideas and express them through writing in a variety of forms and genres. The four major genres include: poetry, short fiction, play writing and non-fiction. One unit is an independent project focused on individual student interest.

**DRAMA 10 - one credit**

**Prerequisite: none**

In this introductory drama class, the students will get experience in a wide variety of drama techniques: tableaux, mime, stage fighting, special stage techniques, vocal training, choral reading, reader's theatre and scene work. Through the course, students will develop a sense of confidence, a sense of community, and an appreciation for the art form.

**DRAMA 20 - one credit**

**Prerequisite: none**

Students study acting and technical operations and are expected to participate and allow themselves to be risk takers. Students take on various roles, studying script, writing script, and improvising scenes. Through the course the students develop their public speaking abilities, and creative thinking skills. More importantly, students learn how to cooperate with one another and gain a respect for others' differences.

**DRAMA 30 - one credit**

**Prerequisite: none**

Students in this course develop their acting skills by studying script, viewing and critiquing plays and producing scenes with fellow classmates. A unit covering the history of drama is included. Through the course, students develop self confidence and a respect for others.

**ENGLISH LANGUAGE ARTS A10 - one credit**

**Prerequisite: ELA 9**

This course is neither a prerequisite for, nor a follow-up to English Language Arts 10B. This course develops two of the following three themes: The Unknown, Challenges and Canadian Frontiers. Short stories, poetry, a novel, a modern play, essays and non-fiction are used to develop skills and proficiency in reading, writing, listening and speaking.

**ELA A10 Advanced – one credit**

**Prerequisite: ELA 9**

This class is for students with a keen interest in English Language Arts and would like an extra challenge. Advanced classes are intended to provide extra rigour and prepare students who are considering the ELA A30/B30 Advanced Placement class. The course themes and course focus remain the same as ELAA10 (see above), however, literature selections, number of assignments, and types of assignments will vary.

**ENGLISH LANGUAGE ARTS B10 - one credit**

**Prerequisite: ELA 9**

This course is neither a prerequisite for, nor a follow-up to English Language Arts A10. The course develops two of the three themes: Equality, Decisions and the Environment.

Short stories, poetry, a novel, a Shakespearean play, essays and non-fiction are used to develop skills and proficiency in reading writing, listening and speaking.

**ELA B10 Advanced – one credit**

**Prerequisite: ELA 9**

This class is for students with a keen interest in English Language Arts and would like an extra challenge. Advanced classes are intended to provide extra rigour and prepare students who are considering the ELA A 30/B30 Advanced Placement class. The course themes and course focus remain the same as ELA B10 (see above), however, literature selections, number of assignments, and types of assignments will vary.

**ENGLISH LANGUAGE ARTS 20 - one credit**

**Prerequisite: ELA A10 & ELAB10**

This course encourages students to reflect on the many aspects of childhood, adolescence and adulthood through the themes of Recollection and Anticipation. Reading comprehension, vocabulary, sentence structure and variety, and essay writing are developed from the literature program, without losing sight of the goal of literature for enjoyment and appreciation. Students study both the reading and writing of essays, with a specific focus on the research essay. Through reading, writing, listening, viewing and presenting activities students will gain an understanding and appreciation of literature and language.

**ADVANCED ELA20**

**Prerequisite: ELA10 & ELAB10**

This class is for students with a keen interest in English Language Arts and would like an extra challenge. Advanced classes are intended to provide extra rigour and prepare students who are considering the ELA A30/B30 Advanced Placement class. The course themes and course focus remain the same as ELA20 (see above), however, literature selections, number of assignments, and types of assignments will vary.

**ENGLISH LANGUAGE ARTS A30 - one credit**

**Prerequisite: ELA 20**

This language-based course is organized around “Canadian Voices and Perspectives” and reflects a balance of the four stands of communication - speaking, listening, reading and writing. The two themes (Canada - Diverse Landscapes and Peoples, and Canada -Diverse Canadian Voices) use a variety of literary forms - poetry, prose and plays - in order to explore the people and personality of Canada.

**ENGLISH LANGUAGE ARTS B30 - one credit**

**Prerequisite: ELA 20**

This course integrates reading, writing, speaking and listening. Students explore their thoughts, beliefs, and assumptions as they examine issues related to their world and to the world of others. The two themes (World Perspectives - The Human Condition and World Perspectives - The Social Experience) employ a variety of literary forms from across the world. Students complete a formal research essay, literary analysis and literary review within the writing component.

**ELA A30/B30 ADVANCED PLACEMENT - two credits Prerequisite: ELA 20**

Bright, diligent, tenacious, and perceptive students who want to prepare for the rigours of

post-secondary programs enrol in this challenging course. Students will complete ELA A30 and ELAB30 courses while they prepare for the AP examination in May (see page one). Students are expected to complete a reading list during the summer months. An interest in literature and determination to learn are prerequisites. This year-long course requires intensive reading, writing, research, and discussion. Interested students should contact Mrs. Johnson.

### **ENTREPRENEURSHIP 30**

**Prerequisite: none**

The goal of Entrepreneurship 30 is to introduce students to the world of business. The course will help students identify entrepreneurship as a future career option. Entrepreneurship 30 will focus on business structure, financing, franchising, home-based business, fads, trends, current market opportunities, advertising/marketing, capital markets, investing, accounting, risk assessment and how to write a business plan.

### **FOOD STUDIES 10 – one credit**

**Prerequisite: none**

The food studies curriculum develops an understanding of food and nutrition principles. It also focuses on the development of self-reliance, independence, and positive social skills and teaches practical food preparation skills. Students are made aware of proper handling of food during preparation to ensure safety and sanitation.

### **FOOD STUDIES 30 – one credit**

**Prerequisite: none**

Food Studies 30 continues to develop knowledge and understanding of basic food preparation and nutrition principles. It is designed to increase resourcefulness to help students to develop self-reliance and independence. This course combines academic and practical foods experiences. It also emphasizes preparation of food to be creative. Students are made aware of proper handling of food during preparation to ensure safety and sanitation.

### **FRENCH 10 - one credit**

**Prerequisite: French 9**

This program uses the communicative/experiential approach to learning French. Students, exposed to various activities, will be encouraged to speak, read and write extensively.

### **FRENCH 20 - one credit**

**Prerequisite: French 10**

The French 20 program increases the student's vocabulary and understanding of the French language through use of the communicative/experiential learning approach. Much student interaction will be encouraged, with theme projects used as final tasks.

### **FRENCH 30 - one credit**

**Prerequisite: French 20**

This course draws on previous Core French classes. A variety of themes encourage use of the language.

### **HISTORY 10 - one credit**

**Prerequisite: Social Studies 9**

Students develop the knowledge, skills, and values necessary to appreciate the past,

understand the present, and influence the future. The theme of this course is social organizations. Within this theme, students will study politics, economics, nationalism, international trade, and international relations in a historic setting. The periods of The Enlightenment, French Revolution, Industrial Revolution, Nineteenth Century Nationalism, Imperialism, and the prelude to World War I will be used to illustrate a variety of global concepts.

**HISTORY 20 - one credit**

**Prerequisite: History 10 or Native Studies 10**

This course examines the major personalities, issues, forces and events that have shaped the 20th Century. We study concepts such as change, ideology, nationalism, imperialism, and collective security. Specific topics include Russian Revolution, World War I, totalitarian regimes, World War II, the Cold War, Arab-Israeli relations, and current world affairs.

**LAW 30 - one credit**

Law 30 exposes students to the principles of law and knowledge of their rights and responsibilities under the law. Students will become familiar with the law as it affects their personal lives. Discussion will involve topics surrounding consumer, property, criminal, tort, contractual, and family law. The course is presented to students through lecture, case studies, discussions, and role-playing activities.

**MATHEMATICS 10 – one credit**

**Prerequisite: Mathematics 9**

**FOUNDATIONS AND PRE-CALCULUS 10**

This course is a pre-requisite for both the Foundations Math and the Pre-Calculus Math in Grade 11. It introduces and/or focuses on the following concepts: factoring, rational and irrational numbers, laws of exponents, operations with polynomials, trigonometry, relations and functions, slope, linear relations, graphing, linear systems, the metric system and imperial measurements.

**MATH 10- WORKPLACE AND APPRENTICESHIP -**

**Prerequisite: Mathematics 9**

This course is a pre-requisite for **Workplace and Apprenticeship 20**. Because it focuses on both the metric and imperial systems of measurement, and because its challenging concepts include area of 2-D shapes and 3-D objects, games involving spatial reasoning, the Pythagorean Theorem, polygons, an introduction to trig ratios (sine, cosine and tangent), angles, pricing and currency exchange, and income, the level of mathematics in this course is quite high. The seven units taught in this course are Unit Pricing and Currency Exchange; Earning an Income; Length, Area and Volume; Mass, Temperature and Volume; Angles and Parallel Lines; Similarity of Figures; and Trigonometry of Right Triangles.

As well, you will need to update your Grade 9 Science as follows

***Students require a math at the 20-level to graduate from high school in Saskatchewan.  
Students must check post-secondary programs of study to determine whether they  
require math beyond the 20-level.***

and/or focuses on the following concepts: inductive/deductive reasoning, proportional reasoning, angles and triangles, sine and cosine laws, data analysis, linear inequalities and basic quadratic functions. As well, students research and present an historical mathematical event or area of interest. The majority of programs at SIAST and faculties in both Saskatchewan universities accept this course.

### **Pre-calculus Mathematics 20** Prerequisite: Foundations and Pre-Calculus 10

This course is a pre-requisite for **Pre-calculus Math 30** in Grade 12. It introduces and/or focuses on the following concepts: absolute value, radical numbers, rational expressions and equations, the primary trig ratios, sine and cosine laws, factoring of polynomial expressions, quadratic functions, quadratic equations, inequalities, arithmetic and geometric sequences and series, and reciprocal functions. Students in this course should be planning to take Calculus in Grade 12.

### **Workplace & Apprenticeship Mathematics 20** Prerequisite: Workplace and Apprenticeship 10

This course is a pre-requisite for **Workplace & Apprenticeship 30** in Grade 12. It asks students to deepen their understanding of topics introduced in Grade 10, including surface area, volume, capacity, formulas, right triangles, 3D objects, and mathematical games involving numerical reasoning. As well, it introduces the following topics: data analysis using a variety of graphs; personal budgeting; compound interest and financial institution services; slope, including using technology; and unit analysis and scale.

### **Pre-calculus 30**

Prerequisite: Pre-calculus Mathematics 20

This pathway focuses on the following concepts: angles; rational and radical functions; operations on and transformations of functions; trigonometric ratios, equations, functions and identities; the unit circle; logarithms; advanced polynomial functions; relations and their inverses; and finally, combinatorics (permutations, combinations and the binomial theorem). As the pre-requisite for Calculus, this course is intended for students heading to university to study engineering, and other academic professions requiring calculus.

### **Workplace and Apprenticeship Mathematics 30** - Prerequisite: Workplace & Apprenticeship Mathematics 30

This pathway continues the focus of its two prerequisites on very “real world” math, including mathematics required for the Trades. Real world applications include how to buy a vehicle, and how to set up a small business. Math concepts include linear relations; limitations of measuring instruments; statistics; probability and odds; triangles, quadrilaterals and regular polygons; transformations of 2-D shapes and 3-D objects; trigonometry – the sine and cosine laws; and puzzles and games involving spatial reasoning. This course is primarily intended for students who want to attend some SIAST programs and/or work in the Trades. This math may be used for entrance into Fine Arts, Arts, Social Work and some Faculty of Education programs at the University of Regina.

### **Foundations of Mathematics 30**

Prerequisite: Foundations of Mathematics 20

This pathway continues the learning begun in Foundations 20 and includes the following topics: inductive and deductive reasoning; financial decision making; set theory and its applications; odds/probability; permutations and combinations; and lastly, logarithmic, exponential, sinusoidal and basic polynomial functions. As well, students have the opportunity to research and present a current event or area of interest using data collection and analysis. This course is intended for students considering post-secondary education routes that do not require calculus.

**MEDIA STUDIES 20 – one credit**

**Prerequisite: ELAA10 or ELAB10**

There are four modules that will be covered in the course. These four modules are Media Awareness, Exploring Television, Advertising, and the Study of Media and culture. You are influenced by Media more than you know. Become an aware consumer of media by taking this course.

**MUSIC 10 - one credit**

**Prerequisite: none**

This course is designed to review the fundamentals of music and provide an opportunity for students to learn how to play an instrument of their choice. Students will work individually on “The Essentials of Music Theory” computer program which covers basic theory concepts. We will also examine the history of music from the Renaissance to the present.

**MUSIC 20 / 30 - one credit each**

**Prerequisite: none**

This class further develops the study of music fundamentals. Students are given the opportunity to learn how to play an instrument of their choice or master the skills they already have on an instrument. The course takes an in-depth look at various musical styles (rock, pop, country, classical, etc.) and looks at the various career opportunities in the music industry.

**NATIVE STUDIES 10 - one credit**

**Prerequisite: Social Studies 9**

This course will begin a process of personal and cultural awareness and understanding and to promote the development of positive attitudes towards Aboriginal peoples. Through the study of First Nation, Métis, and Inuit history and culture, students will better appreciate the contributions made by Aboriginal peoples to the development of Canada and contemporary Canadian society. Specific units of study include: Identity and World Views, Community and Kinship, Governance, and Economics.

**NATIVE STUDIES 30 - one credit**

**Prerequisite: History 10 or Native Studies 10**

The course focuses attention upon the struggles of the Aboriginal peoples of Canada. Students will be encouraged to develop creative and critical thinking skills by examining contemporary issues highlighted include: Land Claims, Politics, Economics, Social Development, Traditional Culture, Treaties, The Indian Act, Residential Schools, Native War Veterans.

**PHOTOGRAPHY 20**

This course consists of several intermediate units of study continued from Photo-Graphics 10. There are 5 optional units of study.

Module 1: Safety Module

Module 2: Camera Lenses & Related Accessories

Module 3: Printing Papers: Black & White and Color

Module 4: Artificial Lighting – Electronic Flash

Module 5: Additional Black & White Printing Techniques

Module 7: Intermediate Digital Photography

Module 8: Critiquing Photographs

Module 9: Professional Portfolios

Extra Units of Study may include:

Photojournalism

Retouching and Hand Coloring

**PHOTO-GRAPHICS 10 - one credit**

**No Prerequisite**

Introduces students to Photography and Graphic Arts as it relates to business and industry today. Students will examine the fundamentals of photography and graphic arts design through the use of technology and manipulation of other resources. Links to personal use and career pathways will be explored. This course may lead to Graphic Arts 20 and 30 course offerings.

**PHYSICAL EDUCATION 20 - one credit**

**Prerequisite: none**

Students experience many leisure activities and recreational facilities in Regina to develop personal skills and the understanding of techniques, skills, and rules. Instructional areas may include aquatics, cycling, rock climbing, racquetball, squash, golf, bowling, tennis, football, softball, and winter activities, as well as team sports and recreational games played in our gym. During the semester, students focus on personal fitness and its importance in everyday life. Classes are divided by sex (male-only; female-only). Fee.

**PHYSICAL EDUCATION 30 - one credit**

**Prerequisite: none**

Students are exposed to leisure-time activities that stress the importance of leading a healthy, active lifestyle as an adult. Our focus is to experience new leisure activities as well as renew knowledge of previously-learned sports. Some leisure activities in which we participate are cycling, rock climbing, golf, squash, aquatics, aerobics, 10-pin bowling, and traditional team sports and recreational games. We include the challenge of working towards a positive fitness level. Classes are divided by sex (male-only; female-only). Fee.

**PHYSICS 20 - one credit**

**Prerequisite: Science 10**

Physics 20 is a laboratory-orientated course that deals with some of man's earliest puzzles - waves, light, and heat. Physics-related mathematics and problem solving are introduced in covering such topics as reflection, refraction, waves and heat capacity. The underlying purpose is to give students a basic understanding of the method and grounds of scientific knowledge, especially with reference to the physics of everyday things.

**PHYSICS 30 - one credit**

**Prerequisite: Physics 20 or Math 20 F/P**

Physics 30 is a major study of introductory Newtonian mechanics, electricity, and nuclear physics. Such topics as straight-line motion, forces that cause motion, vectors, work power and kinetic and potential energy are examined based on a problem-solving approach. We seek to develop an understanding of some simple electric circuits and power supplies. A look at modern nuclear physics will round out the course. Good math ability is necessary.

### **PRACTICAL AND APPLIED ARTS SURVEY B10**

**Applied Technologies (formerly Industrial Arts) - one credit**

**Prerequisite: none**

Applied technologies is a hands-on area which focuses on practical work, lifelong skill development and the safety knowledge required for proper use of shop tools. This is a beginner course that will help the student to develop skills in the following areas: Graphic Arts (AutoCAD Drafting and Engraving), Introductory Metal Fabrication (Oxy Acetylene Gas Welding and Sheet Metal).

### **PRACTICAL AND APPLIED ARTS SURVEY B20**

**Applied Technologies (formerly Industrial Arts) - one credit**

**Prerequisite: P.A.A. B10**

Applied Technologies is a hands-on area which focuses on practical work, lifelong skill development and the safety knowledge required for proper use of shop tools. This course further develops the skills obtained in the P.A.A. B10 course with the addition of enhanced technical areas. There are only three modules in the course it allows for a more in-depth experience. These three modules include: Intermediate Woodworking, Graphic Arts/Technology (Silk Screening and Structural Engineering) and Introductory ARC/MIG Welding with Intermediate Metal Fabrication.

### **PRACTICAL AND APPLIED ARTS SURVEY B20 – one credit**

This survey course utilizes modules from Information Processing, Design Studies, and Graphic Arts. Using Adobe Photoshop and InDesign, the students will be shown how to create everything from brochures, to magazine layouts. The design and layout of the school yearbook will be a large portion of this class.

### **PRACTICAL AND APPLIED ARTS SURVEY B30 - one credit**

Applied Technologies is a hands-on area which focuses on practical work, lifelong skill development and the safety knowledge required for proper use of shop tools. This course further develops the skills obtained in the P.A.A. B20 course and emphasizes the individual talents of each student. Students will rotate through the following three modules. Residential Electrical Wiring (based on household wiring projects). Advanced ARC and MIG Welding with Advanced Metal Fabrication, and finally, a “Build Your Own Project” Wood Working Area.

### **PSYCHOLOGY 20 - one credit**

**Prerequisite: none**

Psychology 20 guides students to a better understanding of themselves as individuals and as part of society. It addresses the question: How are the thoughts, feelings and behaviours of people influenced by the actual, imagined or implied presence of others? Topics include: understanding behaviour, ethics, motivation, attitudes, personality, familial and cultural influences, and substance abuse/addiction. (Not recommended for Grade 10)

students)

**PSYCHOLOGY 30 - one credit**

**Prerequisite: none**

Developmental psychology is the field of psychology that focuses on human development across the life span. Students will learn about human growth and changes in behaviour associated with age, including the various stages of development from prenatal through infancy, childhood, adolescence, adulthood and old age. (Not recommended for students younger than Grade 12).

**PSYCHOLOGY 20/30 - AP - two credits**

This program offers a challenging program for academically motivated students. It covers topics such as the study of psychological methods, the principles of developmental psychology, heredity and environment, understanding personality, personality disturbance, emotions, and motivation. Students are credited with Psychology 20 and 30 in the same year. The course is 2 semesters. It is recommended that students have a minimum 75% average prior to enrolment in this course.

**SCIENCE 10 - one credit**

**Prerequisite: Science 9**

Science 10 serves a dual purpose, to further the scientific literacy of students through the acquisitions of knowledge, skills and attitudes coupled with constructing a foundation for further science courses. There is an emphasis on laboratory work, projects and class work. We examine the major themes of the course: sustainability of ecosystems, chemical processes, motion and weather dynamics.

**SOCIAL STUDIES 30 - one credit**

**Prerequisite: History 10 or  
Native Studies 10**

This course helps develop a thorough understanding of the history, geography, culture, politics, economics and foreign affairs of our country. Critical thinking and research skills are stressed and students are given the opportunity to develop their own views. Some major themes may include: The Road to Responsible Government, French-English Tension, The Powers and Functions of Government, My Rights and Responsibilities as a Canadian, Canada: A Diverse Country, Our First Nations History, and Canada's Regional Economic Disparity. This course will also focus on current events.

**SPECIAL PROJECT 10/20/30 - one credit**

**Prerequisite: none**

Special Project Credits recognize student achievement in areas outside of the regular secondary level program. Only one Special Project Credit may be earned in secondary school at the 10, 20 or 30 level. The project is carried out on a contracted learning basis under the supervision of a teacher. There are guidelines and a form that can be obtained from the school's principal. Students are required to submit a clearly planned proposal to the principal for approval in advance of beginning the project. The written proposal then must be approved by the designated superintendent. Some examples of special projects include student involvement in activities such as Cadet Officer Training and Royal Conservatory of Music.

**SPORTS MEDICINE 20 - one credit**

**Prerequisite: none**

This course allows students to learn various aspects of sports medicine. Topics include anatomy of the skeletal and muscular system, injury assessment and management, first aid, preventative taping and nutrition for athletes. In addition, students will be exposed to various sports medicine related careers through guest speakers and a research assignment. There is an emphasis on projects, practical work and unit exams. If a student has a credit in Sports Medicine 10, he/she is NOT eligible for this course.

**VOCAL JAZZ 10L, 20L, and 30L - one credit each**

**Prerequisite: Must be enrolled in Choral**

Vocal Jazz is a class that is an extension of the choral program therefore students must be enrolled in choral as well. Students should be able to read music. The class focuses on jazz repertoire. Students examine the techniques used by various musicians who have made outstanding contributions to jazz, and apply these techniques to their own vocal jazz training. Interested students must meet with Mr. Hicks.

**WELLNESS 10 - one credit**

**Prerequisite: none**

Students come to understand and appreciate components of wellness -physical activity, the development of and participation in sport skills, physical fitness, stress management, healthy eating, leisure and relationships. We study bowling, broomball, golf, racquetball, tennis, skating, cycling and many in-school sports. Wellness 10 recognizes the need for the development of the entire individual (body, mind, and spirit). Classes are divided by gender (male-only; female-only).