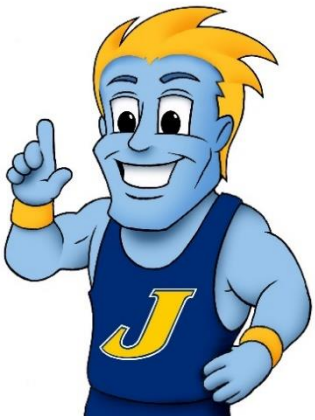
St. James Collegiate

Academy of Science & Technology

JIMMIES



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Visit the St. James Collegiate website at:
http://www.sjasd.ca/school/stjames

St. James Collegiate Course Code Listing

Grade 9 Core Courses	Course Code
English	EN10F
Mathematics	MA10F
Physical Education	PE10F
Physical Education – **Female Fitness**	PE10FF
Science	SC10F
Social Studies	SS10F
Grade 9 School Based Options	**Course Code**
Applied Information and Communication Technology 1 Applied Information and Communication Technology 2 (Both half credits are taken together) (1 credit)	IT15FA IT15FB
Autobody	ABR10S
Dance	DA10SS
Drama	DR10SS
Electronics & Wood Technology	EL15G WT15G
Environmental Science	SC30S
French	FR10F
Business Innovations	BN10S
Graphic Communications Technology	GT10G
Hairstyling	HS20S
Hockey Canada Skills Academy	HA11G
Mathematics Transitional	MA10FT
Concert Band	MB10SS
Guitar	MG10SS
Theatre Production	TP10SS
Visual Arts	VA10SS
Welding	WE10S

Grade 10 Core Courses	Course Code
English	EN20F
Geography	GE20F
Mathematics - Essentials	MA20S
Mathematics -Introduction to Applied and Pre-Calculus	MA20SPA
Physical Education	PE20F
Physical Education – **Female Fitness**	PE20FF
Science	SC20F
Grade 10 School Based Options	**Course Code**
American History	HI20G
Autobody	ABR20S
Digital Imaging & Desktop Publishing (Yearbook Creation)	DP25S DP35S
Creative Promotions	CP20S
Dance	DA20SS
Drama	DR20SS
Electronics	EL20G
Entrepreneurship	EP20S
Family Studies	FA20S
Foods and Nutrition	FN20S
French	FR20F
Graphic Communication Technology	GT20G
Hairstyling (2 credits)	HS20SA HS20SB
Hockey Canada Skills Academy	HA21G
Life Works Planning - Career Development	LF20S
Concert Band	MB20SS
Guitar	MG20SS
Theatre Production	TP20SS
Exercise Science	EXERSCI40S
Visual Arts	VA20SS
Wood Technology	WT20G
Welding	WE20S

St. James Collegiate Course Code Listing

Grade 11 Core Courses	Course Code
English Comprehensive Focus	EN30SC
English Transactional Focus	EN30ST
English Literary Focus	EN30SL
History	HI30F
Mathematics - Applied	MA30SA
Mathematics - Essentials	MA30S
Mathematics - Pre-Calculus	MA30SP
Physical Education	PE30F
Physical Education - Female Fitness	PE30FF
Grade 11 School Based Options	**Course Code**
Accounting Essentials	AE30S
Autobody (3 credits)	ABR30SA ABR30SB ABR30SC
Biology	BI30S
Chemistry	CH30S
Dance	DA30SS
Drama	DR30SS
Electronics	EL30S
Exercise Science	EXERSCI40S
Retailing Perspectives	RP30S
Family Studies	FA30S
Foods and Nutrition	FN30S
French	FR30S
Graphic Communications Technology	GT30G
Hairstyling (4 credits)	HS30S, SA, SB, SC
Hockey Canada Skills Academy	HA31G
Applied Horticulture	HORT30S
Concert Band	MB30SS
Jazz Band	MJ30SS
Guitar	MG30SS
Theatre Production	TP30SS
Physics	PH30S
Sustainable Wilderness Education	WE31G
Topics in Science	SC230S
Visual Arts	VA30SS
Wood Technology	WT30G

Grade 12 Core Courses	Course Code
English – Comprehensive Focus	EN40SC
English - Transactional Focus	EN40ST
English Literary Focus	EN40SL
Mathematics - Applied	MA40SA
Mathematics - Essentials	MA40S
Mathematics - Pre-Calculus	MA40SP
Physical Education	PE40F
Physical Education - Female Fitness	PE40FF
Grade 12 School Based Options	**Course Code**
Accounting Systems	AE40S
Autobody (4 credits)	ABR40SA ABR40SB ABR40SC ABR40SD
Biology	BI40S
Business Management	BM40S
Chemistry	CH40S
Dance	DA40SS
Drama	DR40SS
Electronics	EL40S
Exercise Science	EXERSCI40S
Family Studies	FA40S
First Nations, Métis & Inuit Studies	FM40S
Foods and Nutrition	FN40S
French	FR40S
Global Issues	GI40S
Graphic Communication Technology	GT40G
Hairstyling (4 credits)	HS40SSA, SSB, SSC, SSD
History of Western Civilization	HI40SW
Hockey Canada Skills Academy	HA41G
Intro to Calculus and Advanced Mathematics	AM40S
Law	LW40S
Concert Band	MB40SS
Jazz Band	MJ40SS
Guitar	MG40SS
Theatre Production	TP40SS
Physics	PH40S
Psychology	PY40S
Science - Practical Lab Skills	SC40SLS
Topics and Trends in Business	TT40S
Topics in Science	SC40S
Visual Arts	VA40SS
Wood Technology	WT40G

Compulsory Core Courses

The following section contains the compulsory subjects required to graduate from the five-core subject areas, English, Mathematics, Science, Social Studies and Physical Education. These subject areas have additional **OPTION COURSES** available and their description can be found in the options section of this handbook. ***This option section begins on page 23.***

ENGLISH LANGUAGE ARTS

FOUNDATION COURSES – GRADE 9 AND 10

ENGLISH - EN10F
This is an integrated, theme-based course designed to provide students with a solid foundation of literacy skills, knowledge, and learning strategies. The course emphasizes reading comprehension, personal and critical response, and interpretation of a variety of text forms. Students also learn to collect, organize, and synthesize information through research and inquiry processes.

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

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

FOCUS COURSES – GRADE 11 AND 12
In grade 11 and 12, students choose one of three English curriculum focus courses to meet graduation requirements. These courses include the Literary Focus, the Transactional Focus, and the Comprehensive Focus. Unlike English language arts courses in the grades before Grade 11, Grades 11 and 12 courses offer different specializations based on the purposes for reading, writing, listening to, speaking, viewing, and representing texts. The Comprehensive Focus course covers a variety of purposes and provides an equal amount of time on working with texts for pragmatic (50%) and aesthetic (50%) purposes. The Transactional Focus course gives more weight to experiencing texts for pragmatic (70%) rather than aesthetic (30%) purposes. The Literary Focus course places more emphasis on working with texts for aesthetic (70%) rather than pragmatic (30%) purposes. Each of these courses is different from but equivalent to the others, and you can complete any or all three for credit.

All three focuses satisfy university entrance requirements. Students at the grade 12 level are required to write the Provincial ELA Standards Test, usually at the end of the first semester.

ENGLISH COMPREHENSIVE FOCUS - EN30SC
This course addresses the learning outcomes identified by the provincial curriculum for the grade 11 Comprehensive Focus. Students read and respond to a balance of pragmatic and aesthetic texts. For example, transactional or non-fiction texts are used for practical, every-day purposes, while literary texts are used for aesthetic, expressive, and creative purposes.

ENGLISH LITERARY FOCUS - EN30SL
The Grade 11 Literary course provides students with the opportunity to explore novels, plays, short stories and poetry. The course examines how writers use techniques or devices in their works, and more importantly, the effects these techniques have on the reader.

ENGLISH TRANSACTIONAL FOCUS – EN30ST
The grade 11 transactional provides students with the opportunity to create and reflect upon personal goals and begin examining career choices. They also have the opportunity to create connections and explore the inquiry process through research. All of these skills are explored using a variety of materials that include novels, poetry and non-fiction texts.

ENGLISH COMPREHENSIVE FOCUS - EN40SC
This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Comprehensive Focus. Students read and respond to a balance of pragmatic and aesthetic texts at a more advanced level than the grade 11 course.

ENGLISH Literary Focus - EN40SL
This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Literary Focus. Students read and respond primarily to literary or aesthetic text forms - including poetry, short prose, Shakespearean plays, and novels - at a more complex and deeper level than at the grade 11 level.

ENGLISH TRANSACTIONAL FOCUS - EN40ST
This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Transactional Focus. Students read and respond primarily to transactional, pragmatic, or functional texts at a more advanced level than at the grade 11 level.

MATHEMATICS

Grade 9

TRANSITIONAL MATH - MA10FT
These courses are designed for students who have struggled with Math in previous years and would benefit from additional time to first review previous content. The additional practice helps students make the transition from Grade 8 mathematics to Grade 9 mathematics.

MATHEMATICS FOUNDATIONS - MA10F
This course provides the foundation for the various mathematics courses at the grade 10 level. The course includes, but is not limited to, statistics, probability, measurement, algebra, geometry and problem solving.

Grade 10

MATHEMATICS ESSENTIAL - MA20S
Grade 10 Mathematics Essential is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Mathematics Essential topics emphasize consumer applications, problem solving, decision-making, and spatial sense. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in everyday life in a technological society.

MATHEMATICS INTRODUCTION TO APPLIED AND PRE-CALCULUS - MA20SPA
The grade 10 introduction to Applied and Pre-Calculus is intended for students considering post-secondary studies that require a math pre-requisite. The topics studied form the foundation for topics to be studied in both grade 11 Applied and Pre-Calculus Mathematics. Students will engage in experiments and activities that include the use of technology, problem solving, mental mathematics and theoretical mathematics to promote the development of mathematical skills.

Grade 11

MATHEMATICS APPLIED - MA30SA

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

Topics include:

• Quadratic Functions, Proofs, Statistics, Systems of Inequalities, Mathematics Research Project, Trigonometry

MATHEMATICS ESSENTIAL - MA30S

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science related fields. This is a one credit course comprising two half credits, each emphasizing consumer applications, problem-solving and decision making, as well as number sense and spatial sense.

Students are expected to work both individually and in small groups on mathematical concepts and skills encountered and used in a technological society.

Topics include:

• Analysis of Games and Numbers
• Interest and Credit
• 3-D Geometry
• Statistics
• Managing Money
• Relations and Patterns
• Trigonometry
• Design Model

MATHEMATICS PRE-CALCULUS - MA30SP

This course is designed for students who intend to study calculus and related mathematics as part of a post-secondary education. The course comprises, primarily, a high-level of theoretical mathematics with an emphasis on problem solving and mental mathematics, supported by cumulative exercises and testing.

Students are required to learn mathematical concepts through practice and regular homework. Many of the questions and problems on exercises, tests and examinations can be expected to be different from those presented in class.

Topics include:

• Quadratic Equations and Functions
• Radicals & Rational Equations and Expressions
• Sequences
• Inequalities
• Algebra
• Trigonometry
• Relations and Functions

Grade 12

MATHEMATICS APPLIED - MA40SA
This course is intended for students considering post-secondary studies that do not require a study of theoretical calculus. It is context driven and promotes the learning of numerical and geometrical problem-solving techniques as they relate to the world around us.

MATHEMATICS ESSENTIAL - MA40S
This course is intended for student whose post-secondary planning does not include a focus on mathematics and science- related fields. Grade 12 essential Mathematics (40S) is a one-credit course consisting of two half-credits each emphasizing consumer applications, problem solving, decision-making, and spatial sense.

MATHEMATICS PRE-CALCULUS - MA40SP
This course is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It builds on the topics studied in Grade 11 Pre-calculus Mathematics and provides background knowledge and skills for the study of calculus in post-secondary institutions.

ADVANCED TOPICS IN MATHEMATICS - CALCULUS & ADVANCED MATH - CL45S and AM45S
This is an introductory course that will cover higher level math topics from the first-year university courses Calculus and Linear Algebra. Topics include limits, derivatives, applications of derivatives, integrals, complex numbers, matrices, and Statistics. This course is ideal for any students who have enrolled in MA40SP and who plan to enroll in university facilities such as Agriculture & Food Sciences, Arts (Economics), Engineering, Management, Pharmacy, Science (Mathematics, Actuary, Biochemistry, Chemistry, Computer Science, Ecology, Zoology, Statistics) etc. There are no exemptions for the final exam. Students who enroll in the course will earn two provincial half credits – 0.5 for Calculus and 0.5 for Advanced Math.

SCIENCE

SCIENCE FOUNDATION - SC10F
SC10F is divided into four major units: Reproduction, Atoms and Elements, Nature of Electricity, and Exploring the Universe. The Reproduction unit involves the study of human reproduction and genetics. Atoms and Elements is an introduction to the basics of chemistry. The Nature of Electricity unit has students investigating static and current electricity. Exploring the Universe leads students through an exploration of the universe and the study of space science and technology.

SCIENCE FOUNDATION - SC20F
The SC20F program is composed of four major units: Dynamics of Ecosystems, Chemistry in Action, In Motion, and Weather Dynamics. Dynamics of Ecosystems has students examining ecosystem relationships, population dynamics, biodiversity and how human activities affect ecosystems. The Chemistry in Action unit is a continuation from SC10F's Atoms and Elements. Students will study chemical reactions, nomenclature basics, principles of acid-base chemistry, and the effects of chemical use in the environment. Basic kinematics along with the concepts of inertia, force, impulse and momentum are looked at during the In Motion unit. The complex relationships that influence weather and climate are pursued in the Weather Dynamics unit including the impact of human activities on our global climate.

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

CHEMISTRY - CH30S
Using the kinetic molecular theory, students will look at physical properties of matter, including phase changes and vaporization. Students will also be studying physical characteristics of gases, gas laws, chemical reactions, stoichiometry, solutions and their physical characteristics, and organic chemistry including IUPAC nomenclature. Included in their studies will be a look at how chemistry has affected our quality of life.

PHYSICS - PH30S
The PH30S course is divided into four major areas: Waves, Nature of Light, Mechanics and Fields. Some of the concepts studied in waves are the physical characteristics of waves, superposition of waves and wave interference. The concept of waves continues into the Nature of Light where light is looked at in terms of its wave characteristics and particle characteristics. Carrying on from the SC20F program, students will continue the study of kinematics during the Mechanics unit. To complete and overview of basic physics, students will address the concept of fields with respect to gravitational, magnetic, electric and electromagnetic fields. Included in their studies will be a look at how the relationship between physics and science and technology has influenced our quality of life.

SCIENCE CURRENT TOPICS – SC230S
Multidisciplinary topics based on current issues serve as the organizing themes for this course, in which scientific knowledge and its implications are presented in a unified manner, integrating the areas of biology, chemistry, physics, the geosciences and the space sciences. The course shifts the focus from teaching concepts and facts to teaching critical thinking and problem-solving skills developed through the study of a particular topic, from which key concepts and facts will evolve naturally from the context at hand.

BIOLOGY - BI40S
In this course, students are exposed to foundation concepts regarding the Biology of the world around us. The interdependence of life is a recurring theme in the course work. Students are expected to integrate information gained in previous units and apply that information throughout the semester. Topics of study include Ecology, Biological Diversity and Genetics. Specific emphasis will be placed on the use of Biotechnology including; genetically modified food, forensics, recombinant DNA technology, Human Genome Project and Gene Therapy.

CHEMISTRY - CH40S
Chemistry 40S students in this very comprehensive course will study five units consisting of Kinetics, Chemical Equilibrium, Acid-Base Equilibrium, Solubility Equilibrium and Oxidation-Reduction. Within these units, concepts such as factors affecting reaction rates, Le Chatelier's Principle, pH, buffers and electrochemical cells are a few that will be addressed. Throughout the program, students will gain an understanding of observation and inference in this experimental science.

PHYSICS 40S - PH40S
Students in this very comprehensive course will study four units consisting of Mechanics, Fields, Electricity and Medical Physics. Students will have been exposed to the elementary concepts of these units in PH30S and apply them to such new concepts as projectile motion, circular motion, work and energy, low Earth orbits, electric circuits and radiation. Throughout the program, students will gain an understanding of how science, technology and the environment are related in a physical sense.

SCIENCE CURRENT TOPICS - SC40S
SC40S is the complement course to SC30S with concentration on topics in society, science and the environment. SC40S topics based on current issues; serve as the organizing themes for this course, in which scientific knowledge and its implications are presented in a unified manner, integrating the areas of biology, chemistry, physics, the geosciences and the space sciences.

PSYCHOLOGY 40S - PY40S
Psychology is the scientific study of behaviour and mental processes. It uses the scientific method to discover ways of understanding the complexities of human thought and behavior, as well as differences among people.

Studying psychology gives students lifelong skills such as dealing with issues proactively, solving problems, learning, and nurturing healthy relationships. It helps students understand themselves, and deal with issues in their own lives such as inner conflicts, relationships with parents and peers, and intimacy. It also helps students understand societal problems like addiction, violence, and prejudice.

This course exposes students to the major topics found in the field of psychology. It also emphasizes the issues that are of direct interest and relevance to students completing high school.

SOCIAL STUDIES

SOCIAL STUDIES - SS10F
In this course we will learn about how our government works, how people immigrate to Canada and become citizens and what makes us unique as Canadians. In addition, we will examine some basic Canadian geography as well as global issues such as poverty, working conditions in the developing world, war and environmental challenges. In our examination of each issue, we will discuss how we as Canadians can actively respond to these issues. This course is also offered in French where applicable.

GEOGRAPHY - GE20F
The focus of this course is the environmental and political issues in geography that impact our lives and those of future generations within the context of North America. Major topics of discussion will include: the impact of energy use on our planet; sustainable development; issues related to trade and industry; food production and related issues; population growth and city planning; use of Global Positioning Systems (GPS) and Geographic Information Systems (GIS). This course is also offered in French and as preparation for the IB program.

CANADIAN HISTORY - HI30F
This course engages students in historical inquiry and asking essential questions to focus on Canada from pre-contact times until the present. Canadian History emphasizes important skills and concepts in historical thinking and focuses on five major themes: First Nations, Métis and Inuit Peoples, French-English Duality, Identity, Diversity and Citizenship, Governance and Economics, and Canada and the World.

HISTORY OF WESTERN CIVILIZATION - HI40SW
Topics of study will focus on events that have impacted our society today. These will include an in-depth examination of Greek and Roman History, the founding of Western Religions, the Renaissance and Reformation, the French Revolution and Napoleon, and major events of the Twentieth Century including WWI and WWII.

LAW - LW40S
This course introduces students to all aspects of the Canadian justice system; however, the primary focus is on criminal law. From arrest procedure to young offenders and the dilemmas of imprisonment, this course is taught using a variety of formats including case studies, debates, mock trials, guest speakers, and a visit to the law courts. Law 40S is an excellent foundation for students interested in pursuing criminology courses at the college or university level.

GLOBAL ISSUES: CITIZENSHIP AND SUSTAINABILITY – GI40S
Students examine the social, political, environmental and economic impact of a variety of current and emerging world issues such as media awareness, human trafficking, genocide, sustainability and gender issues. Students will also consider how every individual is connected to global issues. Part of their study will focus on quality of life locally, nationally and globally. Students will also choose a global issue and take action in their school or wider community. This course was formerly known as World Issues.

PHYSICAL EDUCATION

PHYSICAL EDUCATION - PE10F

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

PHYSICAL EDUCATION - PE10FF – An ALL-female version of PE10F. This course will concentrate on individual fitness as opposed to competitive team sports. We have found that in some cases our female students feel more comfortable taking physical education class with just other female students. This option is available and is the same credit as the above PE10F.

PHYSICAL EDUCATION - PE20F

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

PHYSICAL EDUCATION – PE20FF – An ALL-female version of PE20F. This course will concentrate on individual fitness as opposed to competitive team sports. This option is available and is the same credit as the above PE20F.

PHYSICAL EDUCATION - PE30F

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them and engage in active lifestyles into their futures. Students will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport. The focus of this content will be on health and personal planning.
Students will be graded for completion of the course with a Complete or Incomplete designation.

PHYSICAL EDUCATION – PE30FF – An ALL-female version of PE30F. This course will concentrate on individual fitness as opposed to competitive team sports. This option is available and is the same credit as the above PE30F.

PHYSICAL EDUCATION - PE40F

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them and engage in active lifestyles in the future. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development. The focus of this content will be on health and personal planning.
Students will be graded for completion of the course with a Complete or Incomplete designation.

PHYSICAL EDUCATION – PE40FF – An ALL-female version of PE40F. This course will concentrate on individual fitness as opposed to competitive team sports. This option is available and is the same credit as the above PE40F.
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HOCKEY CANADA SKILLS ACADEMY

The philosophy of the St. James Assiniboia Hockey Academy is to provide students different paths to achieve academic and personal success. The program is designed to allow students the opportunity to further develop their hockey skills while not altering or sacrificing the provincial curriculum goals or expectations. The goals of the St. James Assiniboia Hockey Academy are consistent with other officially licensed HCSA franchises from across Canada, and include:

- Development of fundamentally sound hockey skills in individuals regardless of their skill level
- Development of confidence, leadership, and a positive attitude toward self and others
- Building of life skills such as commitment, dedication, accountability and teamwork
- Mentorship, coaching and development of personal fitness program
- Increasing academic achievement through involvement in a school athletic program
- Introduction of new players into the Minor Hockey System

The program is comprised of two components. On-ice skill development includes skating stride, passing and receiving, shooting, simulation and development of game tactics. Off-ice Development places emphasis on improving the overall fitness level of the players, as well as preparing their mind and body for optimal performance and lifelong healthy living.

HOCKEY CANADA SKILLS ACADEMY - HA11G

The course is comprised of two components. On-ice skill development includes skating stride, passing and receiving, shooting, simulation and development of game tactics. Off-ice Development places emphasis on improving the overall fitness level of the students and also includes components such as, Respect in Sport, Floorball, Sport Psychology, Nutrition, and Video Analysis of Skills. St. James Assiniboia Hockey Academy is designed for male or female hockey players wishing to improve their skills regardless of their current skill level.

HOCKEY CANADA SKILLS ACADEMY - HA21G

This course is a continuation of HA11G. On-ice skill development builds on skills taught in HA11G. Off-ice development continues to emphasize the overall fitness level of the players and also includes; acquiring the IP Coaching Level, Floorball, Sport Psych, Nutrition and Video Analysis of Skills. It is designed for male or female hockey players wishing to improve their skills regardless of current skill level.

HOCKEY CANADA SKILLS ACADEMY - HA31G

This course is a continuation of HA21G. On-ice skill development continues to emphasize skill development and builds on skills taught in HA21G. Off-ice development continues to emphasize the overall fitness level of players and also includes: Coach Certification, Floorball, Volunteering to Coach, Sport Psych, Nutrition and Video Analysis of Skills. The course will be offering a coach/mentorship program along with an expectation of students developing a personal fitness program for on-ice conditioning.

HOCKEY CANADA SKILLS ACADEMY - HA41G

The 41G course builds on the previous St. James Hockey Academy courses where both on and off-ice individual skill development continues to be the focus. On the ice, players learn to execute individual skills as well as advanced 3 vs 3 team tactics. In the off-ice program, students are provided with Referee Training, Floorball, Coaching within the Academy, Sport Psych, Nutrition, Video Analysis of Skills, Agility and Strength Training.

For more information on programming visit: ***www.stjameshockeyacademy.ca***

ST. JAMES COLLEGIATE OPTIONAL COURSES

MATH – some descriptions are repeated earlier in this document.

GRADE 9 TRANSITIONAL MATHEMATICS - MA10FT
This course is designed for students who have struggled with Math in previous years and would benefit from upgrading. Math teachers and Student Services personnel will identify these students in their grade 8 school year and strongly recommend that they be registered in grade 9 Transitional Math.

INTRODUCTION TO CALCULUS AND ADVANCED MATHEMATICS – AM40S
This is an introductory course that will cover higher level math topics from the first-year university courses Calculus and Advanced Topics in Math. Topics include limits, derivatives, applications of derivatives, integrals, complex numbers, matrices, statistics and conic sections.

This course is ideal for any students who have enrolled in MA40SP and who plan to enroll in university facilities such as Agriculture & Food Sciences, Arts (Economics), Engineering, Management, Pharmacy, Science (Mathematics, Actuary, Biochemistry, Chemistry, Computer Science, Ecology, Zoology, Statistics)

HUMANITIES – HISTORY & ENGLISH

AMERICAN HISTORY - HI20G
This course deals with the influence of the USA on Canadian society. Students will also get the chance to examine American society, its institutions, leaders, its penchant for constant conflict, and the evolution of the United States as a world leader. Students will gain a greater understanding of our massive neighbours to the south while improving their reading, writing research and critical thinking skills, all of which will be useful when they study Canadian History and English in Grade 10-12.

HISTORY OF WESTERN CIVILIZATION - HI40SW
Topics of study will focus on events that have impacted our society today. These will include an in-depth examination of Greek and Roman History, the founding of Western Religions, the Renaissance and Reformation, the French Revolution, dictators like Mussolini, Hitler and major events of the 20th Century including WWI and WWII.

GLOBAL ISSUES: CITIZENSHIP AND SUSTAINABILITY – GI40S
Students examine the social, political, environmental and economic impact of a variety of current and emerging world issues such as media awareness, human trafficking, genocide, sustainability and gender issues. Students will also consider how every individual is connected to global issues. Part of their study will focus on quality of life locally, nationally and globally. Students will also choose a global issue and act in their school or wider community. This course was formerly known as World Issues.

LAW - LW40S
This course provides students with an overview of the Canadian legal system. As well, students will discuss and examine court cases and current events of a legal nature, thereby building critical thinking skills. This is an excellent course for those who are considering a career in law enforcement, criminology or the legal profession. Students visit the Law Courts building for a morning tour of the building and have an opportunity to sit in on a real court case.

PSYCHOLOGY 40S – PY40S

Psychology is the scientific study of behaviour and mental processes. It uses the scientific method to discover ways of understanding the complexities of human thought and behavior, as well as differences among people. Studying psychology gives students lifelong skills such as dealing with issues proactively, solving problems, learning, and nurturing healthy relationships. It helps students understand themselves, and deal with issues in their own lives such as inner conflicts, relationships with parents and peers, and intimacy. It also helps students understand societal problems like addiction, violence, and prejudice. This course exposes students to the major topics found in the field of psychology. It also emphasizes the issues that are of direct interest and relevance to students completing high school. Students explore the scientific methods upon which psychology is based, which they can then apply to their daily lives. This is not a prerequisite for psychology 42, however it is recommended.

FIRST NATIONS, MÉTIS, AND INUIT STUDIES – FM40S

First Nations, Métis & Inuit Studies (FM40S) addresses the contemporary lives of Aboriginal peoples in Canada. This course will examine the recent history of Aboriginal Peoples' efforts to protect their rights, freedoms, culture and self-determination. It will also examine a variety of current topics and issues that are relevant to Aboriginal and Canadian society. These topics will also be compared to the lives of indigenous peoples internationally to better understand the global context of these issues.

BAND, DANCE AND GUITAR

Although the development of musical skills on a woodwind, brass or percussion instrument is the primary focus of the Band program at St. James Collegiate, there are many equally important areas that are covered in all Concert Band (MB) and Jazz Band (MJ) courses. Ensemble (teamwork) skills, creative expression, self-discipline and self-awareness will be developed through practice, rehearsal and performance.

CONCERT BAND (MB) and JAZZ BAND (MJ)

In Concert Band and Jazz Band the emphasis is placed on performance and consistent participation. Students will be exposed to a wide variety of musical styles and performance opportunities. Both non- semester courses are offered every second day throughout the year. Students wishing to take Jazz Band (MJ) are required to be registered in the corresponding Concert Band (MB).

CONCERT BAND - MB10SS

It is recommended that students entering Band 10G have prior experience playing a woodwind, brass or percussion instrument. If a student lacks this requirement or does not meet grade level expectations, the teacher will recommend private lessons in order to catch up to the group. Students registered for Band 10G are part of the grade 9 Concert Band. Students will attend both full Band classes and smaller sectional classes as required by the director. Emphasis will be placed on skill development and music theory will be covered as it arises in the repertoire. Participation in all performance events such as concerts, festivals, workshops and School Division proceedings is a required part of this course.

CONCERT BAND - MB20SS

Students registered for Band 20G are part of the grade 10 Concert Band. Students will attend both full Band classes and smaller sectional classes as required by the director. Emphasis will be placed on skill development and music theory will be covered as it arises in the repertoire. Participation in all performance events such as concerts, festivals, workshops and School Division proceedings is a required part of this course.

CONCERT BAND - MB30SS

Students in grade 11 who register for Band are considered to be part of the Symphonic Band or Senior Con- cert Band. Students will attend both full band classes and smaller sectional classes as required by the director. Emphasis will be placed on skill development and music theory will be covered as it arises in the repertoire.
Participation in all performance events such as concerts, festivals, workshops and School Division proceedings is a required part of this course.

CONCERT BAND - MB40SS

Students in grade 12 who register for Band are part of the Symphonic Band or Senior Concert Band. Students will attend both full Band classes and smaller sectional classes as required by the director. Emphasis will be placed on skill development and music theory will be covered as it arises in the repertoire.
MB40S students will be required to participate in one or two small ensemble units to enhance their musical understanding and ensemble skills. Participation in all performance events such as concerts, festivals, workshops and School Division proceedings is a required part of this course.

JAZZ BAND - MJ30SS, MJ40SS

(Grade 9 and 10 Jazz band will not be offered. It will be this way in all school in our school division for the 2021-2022 school year)
These courses are designed for interested students who have reached a proficient level of achievement on their Band instruments. Students enrolled in these courses will study various forms of jazz, swing, pop, Latin, funk and rock music. These courses will involve group practices and sectional rehearsals, with an increased emphasis on improvisation, jazz articulation, phrasing and interpretation. All students in the Jazz Band (MJ) must be registered in the corresponding Concert Band (MB). Participation in all performance events such as concerts, festivals, workshops and School Division proceedings is a required part of this course.

DANCE – DA10SS, DA20SS, DA30SS, DA40SS

No previous dance experience is required. Various forms and genres of dance will be explored. There will be creative choreography and in-class performance elements in this course, but other forms of assessment will also be considered. This is a multi-grade course, which allows for inter-grade connections and a collaborative learning environment.

GRADE 9, 10, 11 AND 12 GUITAR - MG10SS, MG20SS, MG30SS, and MG40SS

This course is designed for students who have an interest in learning and playing contemporary rock music. Students will learn to play or improve on their playing of lead guitar, rhythm guitar, bass guitar, drums, key- boards, vocals or a combination of these. Four credits can be obtained in high school, one in each of the grades 9 through 12. All levels of student ability will be accepted into this course, from beginners to advanced players. The first half of the semester will focus on individual study of the acoustic guitar. Students will learn
to properly tune their instrument, gain a knowledge of the notes of the guitar neck, major and minor chords, rhythm and strumming patterns, and the application of these skills within the context of a song. During the second half of the semester, students will have the opportunity to explore a variety of instruments.
Student groups will be formed based on ability levels and musical interests. Each group will select songs to study, and will work together to practice and perform their chosen songs. It is recommended that instrumentalists have concurrent registration in Band, as students would benefit from understanding how to read and discuss music.

BUSINESS STUDIES

BUSINESS INNOVATIONS – BN10S

This course provides an awareness of opportunities in business and develops an understanding of the importance of business concepts. Topics include consumerism, economic systems, money, credit, job hunting skills, layout and design of retail displays, human relations with customers and cash register operations. The school's store, "Jimmies Junction", and the computer lab will provide "hands-on" practical experience.

CREATIVE PROMOTIONS - CP20S

This course is designed to help students develop skills in the theoretical and practical applications of projects related to assessing needs, catering to appeals, meeting needs through advertising, display, personal selling and special activities.

ENTREPRENEURSHIP – EP20S

This course is designed to contribute to the growth and development of students and to emphasize skills that will assist young people to effectively plan and start small businesses. This is important because small business owners constitute one of Canada's most valuable economic resources. Students will create a business plan for a business that interests them. A business plan looks at the product/service offered, place (how it is going to be sold) price (to cover the cost of goods sold, expenses and profit) and promotion (how are people going to become aware of your product) competition and the customer. The business plan is something that is given to investors/banks to see if they would be interested in investing in the business.

LIFE WORKS PLANNING - CAREER DEVELOPMENT - LF20S

Students will explore potential occupations, demonstrate employability skills, develop specific occupational skills, and have visitor presentations, experience volunteerism and community placements. With career information and experience, students will acquire enhanced self-confidence, motivation, self-knowledge and a greater sense of direction and responsibility.

ACCOUNTING ESSENTIALS - AE30S

This course provides a thorough introduction to fundamental accounting principles, concepts and procedures. Topics include preparing financial statements, the basic accounting cycle, cash control and banking. The school store Jimmies Junction is often used when discussing accounting issues.

RETAILING PERSPECTIVES- RP30S

This course provides a basic introduction to the skills and practices required in job entry-level positions in retail merchandising. RT30S provides vocational preparation both for students seeking part-time retail employment and for those who choose to leave school for full-time employment. Students study the four P's (product, place, price, and promotion) and the two C's (competition and consumer) of Retailing.

ACCOUNTING SYSTEMS – AE40S

Accounting 40S is designed as a continuation of Accounting 30S to further the skills required to meet the daily duties performed by the accounts payable clerk, the accounts receivable clerk and the accounting supervisor. Students will look at completing the Accounting Cycle for a Merchandising Company. Accounting 30S is strongly recommended. This course satisfies the compulsory core mathematics requirement at grade 12.

BUSINESS MANAGEMENT - BM40S

This course introduces the marketing student to leadership principles and practices in the management cycle of planning, organizing, directing and controlling. The course provides a systematic approach to handling routine activities in business and personal life and would be an asset to any student. Each student will have an opportunity to manage the school store Jimmies Junction for one or two weeks within the semester during your lunch hour.

TOPICS AND TRENDS IN BUSINESS - TT40S

Students will develop a variety of skills and knowledge necessary for a successful business career. This course involves a short-term placement in a local business or organization. Topics include: ethics and etiquette, resume preparation, applications and interview skills, office organization, meetings, research skills, telephone techniques, interpersonal skills, stress management, and oral and written communications.

COMPUTER TECHNOLOGY – ICT COURSES

GRADE 9 COMPUTER TECHNOLOGY - IT15FA + IT15FB

This course acts as a stepping-stone to the more advanced courses in later grades. Students will experiment with various communication technologies including:

- Creating digital presentations
- Basic webpage construction
- Digital photo enhancement Photoshop
- Graphic creation
- Video/Audio editing, recording, and production
- Intro to computer animation

NOTE: Students must register for the two half credit courses listed above

DIGITAL PHOTOS & YEARBOOK PUBLICATION - DP25S + DP35S

This year-long course is open to all students who have an interest in learning about how to take better digital photographs and how to plan, design and create a school yearbook. Course concepts include:

- Digital Camera Operation
- Photo Composition
- Advanced Photography Techniques
- Editing & adjusting photos using Photoshop
- Publication Planning
- Publication Layout & Design
- Publication Production (InDesign)

NOTE: Students must register for the two half credit courses listed above

GRAPHIC ARTS & TECHNOLOGY

GRAPHIC COMMUNICATIONS TECHNOLOGY - GT10G

This course is an introduction to graphic design and communications through print and digital media. Students will develop skills in document layout by creating ads, business cards, and digital drawings in 2D and 3D environments using Apple's Pages, Adobe InDesign, Adobe Illustrator and Google Sketch-Up. A major part of the course is devoted to developing digital darkroom skills in Adobe Photoshop and foundations of digital photography using various digital cameras. A lab fee will be collected the first week of the course.

GRAPHIC COMMUNICATIONS TECHNOLOGY – GT20G

This course is the continuation of Graphic Communications GT10G. Students will develop skills in portrait, event, and sport photography using various digital cameras. Digital darkroom techniques will be focused on portrait retouching in Adobe Photoshop. Vector drawings in Adobe Illustrator will be integrated with raster images in Adobe Photoshop. Students will also expand their multi-page document layout skills and design techniques in Adobe InDesign. Further development of advertising skills will take place through design of brochures, posters, and flyers. The video project will include Chroma key (green screen) editing and basic compositing techniques in a non-linear video editing software. Students will also expand on 2D and 3D drawing techniques in Google Sketch-Up. **A lab fee will be collected the first week of the course.**

GRAPHIC COMMUNICATIONS TECHNOLOGY - GT30G

This course is the continuation of Graphic Communications 20G. Students enrolling in this course must have credit in Graphic Communications 20G or equivalent. Students will develop skills in advanced vector drawing, combining vector and bitmap images, and creating art using Adobe Photoshop and Illustrator. Photography and video projects will be combined with photo/video journalism to create documentaries. Video editing skills will be expanded to compositing with multiple video/audio tracks and importing various graphic formats into a non-linear video editing software. Students will also work with 2D web animation in Adobe Flash, explore graphic out- put for print in both aqueous and digital formats, as well as learn about heat transfers for T-shirts and pressure sensitive vinyl (decals). **A lab fee will be collected the first week of the course.**

GRAPHIC COMMUNICATIONS TECHNOLOGY – GT40G

This course is the continuation of Graphic Communications GT30G. Students enrolling in GT40G must have credit in Graphic Communications GT30G or equivalent. This course will be diversified allowing students to pursue their interest in a specific area of graphic communications with a major project in one of the following:

- Interactive video production for the Internet
- Advertising through print documents
- Photo and/or video journalism
- Architectural design and modeling with 3D graphics

Students will also expand their knowledge of creating artwork with Adobe Photoshop and Illustrator. Interactive web content will be created using Adobe Dreamweaver and action script in Adobe Flash. **A lab fee will be collected the first week of the course.**

DRAMA - THEATRE

Grade 9 DRAMA - DR10SS

Drama 10S is a practical course in personal and teamwork skills. Students will be expected to participate in-group, duo, and occasional solo activities. Evaluation will be based on a combination of evaluation strategies based on process, progress (emphasizing participation), assessed assignment mark (presentation grade), self-evaluation, and other notations.

Grade 10 DRAMA - DR20SS

This course is an extension of the Drama 10S program.

Grade 11 DRAMA – DR30SS

This course is an extension of the Drama 20S program.

Grade 12 DRAMA – DR40SS

This course is an extension of the Drama 30S program.

THEATRE PRODUCTION – TP10SS, TP20SS, TP30SS, TP40SS

Theatre Production is a course designed to introduce the student to the world of musical/theatre productions. The student will be able to expand their knowledge of theatre production through a general study of the role of the director, actor, producer, and stage manager. Some of the topics covered this semester may include the following:

- History of Musical Theatre/Theatre
- Makeup Design
- Costume and Prop Design
- Audition Prep
- Maquette Making (Set Design)
- Developing a Mic Chart
- Performance Critiques (Hamilton)
- Vocal Technique (if allowed)
- Production Poster & Program
- Lip Sync Battles
- Lighting Cues
- Dance
- & More!

Students will be expected to participate in group, duo, and solo activities (with physical and social distancing measures in place). Evaluation will be based on a combination of evaluation strategies based on the process, progress (emphasizing participation), assessed assignment mark (presentation grade) and self-evaluation.

SCIENCE

TOPICS IN SCIENCE (PRACTICAL LAB SKILLS) - SC40SH

As part of the Topics in Science Program, this course will provide students with a variety of skills and concepts that will help prepare them for science at the post-secondary level. Emphasis will be on improving student skills in the lab (measurements, lab techniques, sources of error, lab reports), research skills (citing references, data analysis, presentation of information). This course is intended for students who have successfully completed Chemistry, Biology or Physics at the grade 11 level.

APPLIED HORTICULTURE – HORT30S

Learn the secret of growing plants through this hands-on course. Topics include house plant care, lawn maintenance, tree planting and pruning, greenhouse management, plant pest control, weed science and lower arranging. The classroom greenhouse, potting room and schoolyard are utilized in our study. Tours and speakers will supplement the program.

ENVIRONMENTAL SCIENCE – SC30S (This course even though having the code 30S is designed for grade 9 students who are interested in environmental issues and is taught in grade 9)

Students will have an opportunity to explore a variety of environmental issues from a sustainable development perspective. The focus will be on the ways in which the environment, society and the economy are all interconnected and how each needs to be considered when making decisions. Course concepts and outcomes will have a primarily Manitoba- based focus, looking at what issues are currently affecting our province and how they affect the people, the economy and the Manitoba environment.

TOPICS IN SCIENCE - SC30S (This course is designed for grade 11 and/or 12 students)

Students have a choice in the topics which serve as the organizing themes in this course based on current issues integrating the areas of biology, chemistry, and physics. Inquiry based learning and critical thinking is developed through the study of topics such as forensics, science of music, sports science, and design and construction. Students engage in many hands-on activities and applications of scientific method from which the concepts and facts naturally emerge.

TOPICS IN SCIENCE - SC40S
This is a compliment course to SC 30S with a concentration on topics in society, science and the environment such as the human endeavor in space, learning to code, infectious diseases, and nutrition. These serve as organizing themes for the course in which scientific knowledge and its implications are presented in a unified manner, integrating all areas of science.

HUMAN ECOLOGY

FAMILY STUDIES - FA20S
This course is designed for students to gain theoretical aspects of child development from pre-natal to pre- school as well as gaining practical skills in overseeing and working with children. Practical experience will be gained in a childcare setting and using the baby simulator.

FAMILY STUDIES - FA30S
This course is designed for students to gain theoretical aspects of child development from pre-school to teen, as well as gaining practical skills in overseeing and working with children. Practical experience will be gained in a childcare setting and using the baby simulator.

FAMILY STUDIES - FA40S
This course focuses on the individual, the family, society and the factors that affect quality of life. Units of study include the family foundation, strengthening relationships, managing with insight, supporting family and friends, growing as a person, moving towards independence, and forming your own family. Practical experience will be gained in an elderly care setting.

FOOD AND NUTRITION - FN20G
The students state, explain, and apply knowledge of concept in a safe and responsible manner throughout the learning period. The students show evidence of life skills such as teamwork, problem solving, critical thinking, creativity, decision making and performance skills. They apply, reflect and improve learning on nutrients, digestions, food groups, nutrition for different ages and stages, through practice that is developed, assessed and improved as learning progresses.

FOOD AND NUTRITION - FN30S
The students communicate and apply knowledge of concepts in a safe and responsible manner throughout the learning period as they review kitchen skills. They also develop a practiced method that helps them to design and create products that meet specific criteria, that could be used at home, and other institutions in the future. These include safe food supply, review of nutrients, cultural food choices, diet and diseases and protein foods.

FOOD AND NUTRITION - FN40S
The students communicate and apply knowledge of concepts in a safe and responsible manner throughout the entire learning period. They improve their appreciation for global foods and world nutrition, and also demonstrate problem solving, teamwork as well as individual performance, decision making, and creativity. They research and present evidence in different topics they have learned about in the previous years and consistently engage in creating well made products. These include making and decorating cakes, making bread, making beverages and, individually demonstrating the different cooking methods.

FRENCH

FRENCH FOUNDATIONS - FR10F

Basic French courses are taught in French. Students will participate in a variety of activities to further their linguistic competence. Students will have the opportunity to begin practicing their reading, writing and communication skills.

FRENCH FOUNDATIONS - FR20F

This course follows the same objectives as 10F. Students will find that the course material is at a more challenging level. A communicative - experiential approach to the French language is emphasized.

FRENCH FOUNDATIONS - FR30S

This course is a continuation of French 20F with emphasis on reading, writing and communication skills as well as a cultural component.

FRENCH FOUNDATIONS - FR40S

This course is a continuation of French 30S with emphasis on reading, writing and speaking skills. Fluency and comprehension will be further developed through varied enrichment activities.

PHYSICAL EDUCATION

EXERCISE SCIENCE – ES40S

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

SUSTAINABLE WILDERNESS EDUCATION – WE31G

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

VISUAL ARTS

VISUAL ART - VA10SS

This program is designed to expand learning in the visual arts, beyond skill development. It is designed to provide students with opportunities to identify, separate, relate, analyze, evaluate, and express ideas and feelings with visual images. The program will introduce students to the “art inquiry process,” where there is no pre-determined outcome to an idea. Each of the units involves an idea that provides opportunities for students to explore some aspect of their personal world, their natural or social environment, or some other cultural/ historical form of expression related to the idea. Maintaining an Idea Journal/Sketchbook is integral in the course.

VISUAL ART - VA20SS

The studio program in AR20G is designed to expand learning in the visual arts by taking into account various areas of thinking and learning in the arts, including criticism and appreciation, media and technique, and his- tory and culture. IDEAS are central to students’ artistic expression. Through the “art inquiry process,” students are encouraged to express their own reaction to ideas, and to examine the ideas expressed by others. Maintaining an Idea Journal/Sketchbook is an integral part of the course.

VISUAL ART - VA30SS

This course further develops and refines those skills learned in Art 20G. The practical assignments in this course will reflect the greater flexibility the student possesses in terms of exercising options on the basis of expressed personal preferences. Thus, while there will still be certain assignments, which must be completed by all students, individual projects will come to the forefront, utilizing the art inquiry process. Maintaining an Idea Journal/Sketchbook is an integral part of the course.

VISUAL ART - VA40SS

This course is the natural culmination of the study under-taken in the previous courses. Students will have greater responsibility for the assignments completed, in the sense that they will decide upon the ideas they wish to study in greater depth. While students will be required to demonstrate skills, which they have learned, a heavy emphasis will be placed on originality as opposed to mere competence. The intent of the program is to see students’ progress over the four years from a teacher-directed to a student-directed program. Maintaining an Idea Journal/Sketchbook is an integral part of the course.

TECHNICAL AND VOCATIONAL

AUTOBODY

GRADE 9

EXPLORATION OF COLLISION REPAIR REFINISHING – ABR10S

This is a course intended for students interested in sampling the trade. The emphasis is on hands on learning activities. Students will learn to follow safety procedures, select and use common hand and power tools, operate a metal inert gas (MIG) welder on sheet metal, repair minor damage, and prepare panels for painting.

GRADE 10

INTRODUCTORY COLLISION REPAIR REFINISHING – ABR20S

In this entry level course, the emphasis is on hands on learning activities. Students will learn to follow safety procedures, select and use hand and power tools and abrasives, operate a metal inert gas (MIG) welder on sheet metal, repair minor damage, apply body filler, prepare panels for painting and detail vehicles.

GRADE 11

FUNDAMENTALS OF COLLISION REPAIR REFINISHING – ABR30SA

In this course students will learn about vehicle construction, and the use of materials, fasteners, and adhesives. They will apply measuring and estimating skills to restore vehicles to original manufacture's specifications. They will select materials, tools and equipment for surface preparation, clean and sand vehicles, apply masking materials, operate and maintain paint spray guns, and demonstrate paint shop health and safety procedures.

AUTOMOTIVE METALS AND WELDING – ABR30SB

In this course students will learn about metallurgy, focusing on the types of metals used in vehicle construction. Students will develop welding skills while operating and maintaining different types of welding equipment, such as inert gas (MIG), plasma arc, and resistance spot welding equipment.

CORROSION PROTECTION – ABR30SC

In this course students will learn about corrosion, oxidation, and electrolysis, and the theory behind corrosion protection. They will learn to select materials, tools, and equipment for surface preparation, clean and sand substrates, apply masking materials, operate and maintain spray guns in order to protect substrates from corrosion.

GRADE 12

DAMAGE ANALYSIS AND STRUCTURAL REPAIRS – ABR40SA

In this course students will increase their knowledge of and skill in analyzing damage, planning repairs, and measuring and straightening. They will repair and replace damaged panels and structural components, repair and replace glass components, and restore corrosion protection.

WELD ON BOLT ON PANEL REPLACEMENT – ABR40SB

In this course, students will learn to remove and replace interior/exterior trim and hardware, and transfer components, replace bolt-on and weld-on body panels, replace outer door panels, and adjust body panels and bumper assemblies. Students will be introduced to oxyacetylene cutting and welding along with GTAW, (Gas Tungsten Arc Welding) Silicon Bronze welding, and Aluminum pulse welding.

SURFACE PREPARATION AND REFINISHING – ABR40SC

In this course students will learn to prepare vehicles for spot repairs, panel repairs, blending, and complete refinishing. Students will mix and prepare paints for spraying. They will refinish, reassemble, and clean vehicles for delivery, and follow paint shop health and safety procedures.

COLOUR THEORY AND CAREER PREPARATION – ABR40SD

Students will learn color theory and tinting principles as they spot repair and blend with refinishing materials; plastic parts; perform final detailing; and correct common paint problems. They will also learn the skills required to transition from high school to the workplace and will create a portfolio and resume.

WELDING TECHNOLOGY

EXPLORATION OF WELDING TECHNOLOGY – WE10S and WE20S

This course is meant for students interested in exploring welding and will be introduced to the many different skills involved in this vocation.

HAIRSTYLING

GRADE 9

HAIRSTYLING - HS10SS - Introduction to Hairstyling

Students will be introduced to the history of hairstyling. An introduction to materials and equipment are the basics for this course. Students use mannequins to learn basic braiding techniques, shaping and directing the hair. Theory areas include ethics, hygiene, bacteriology, sanitation, trichology, diseases and disorders, safety and career options.

HAIRSTYLING - HS20S - Introduction to Hairstyling

During this term, students will learn basic shampoo and conditioning techniques. Draping procedures and the protection of the client are emphasized. Rollers, pin-curls and finger waves are the foundation of this section, with limited work in quick service techniques (blow dryers and curling irons). Hair shaping procedures are introduced during this section, with the emphasis on angles and elevation.

GRADE 10

HAIRSTYLING - HS20SA - Basic Hairstyling

Hair shaping is introduced into this course, with emphasis on the 0º, 45º, 90º and 180º haircuts. An introduction to other angle cuts is presented. Additional styling techniques using blow dryers and curling irons (quick service) will be taught at this time with emphasis on safety procedures.

HAIRSTYLING - HS20SB - Basic Hair Cutting

This section of the course focuses on razor cutting, thermal styling using the Blow-dryer and thermal irons as well as straightening irons. An introduction to clipper cutting and an emphasis on safety procedures. This
section also introduces the students to chemical work and to basic wrapping and spiral wrapping for permanent waves, which are performed on models and mannequins

GRADE 11

HAIRSTYLING - HS30S - Intermediate Haircutting and Barber

Barbering techniques is the focus in this section. An emphasis on shaving with a razor, preparing the client for a taper haircut, and client consultation procedures are the main focus.

HAIRSTYLING - HS30SA - Hair Colouring

Advanced cutting techniques are introduced to prepare for salon work. Students are also introduced to selection, application, processing and removal of temporary, semi-permanent and permanent colors in the Level 10 system. Double applications and highlights with color and bleach are also performed on mannequins. Also included will be tinting beards, moustaches and sideburns.

HAIRSTYLING - HS30SB - Intermediate Hairstyling

A continuation of first semester with emphasis on hair colouring with advanced techniques such as Balayage, Ombre, and advanced foil techniques.

HAIRSTYLING – HS30SC - Chemical Texture Services

Additional study is completed on various permanent wave techniques, including bricklaying, directional wrap- ping, piggyback and rod to roller transfers. Other areas are specialized block and sectioning techniques.
Introduced at this time are various styles on longhaired mannequins using plait rolls and twists. Theory on wig styling, hairpieces and extensions is also included. Hair pressing is introduced with emphasis on hair relaxing with sodium hydroxide and permanent waverelaxers.

GRADE 12

HAIRSTYLING - HS40SSA - Advanced Hairstyling and Colouring
Curriculum content focuses on special effects hair colour, corrective hair colour, as well as advanced wet and thermal styling techniques.

HAIRSTYLING - HS40SSB - Advanced Haircutting and Chemical Texture Services
Curriculum content focuses on advanced haircutting and permanent waving techniques, as well as the practical application of chemical hair relaxers.

HAIRSTYLING - HS40SSC - Salon Operation
Curriculum content focuses on the business operations of a hair salon, as well as the creation of a resume and career portfolio.

HAIRSTYLING - HS40SSD - Certificate Preparation
Curriculum content focuses on preparing students to successfully challenge the Provincial Practical Examination.

WOOD TECHNOLOGY & ELECTRONICS

WOOD TECHNOLOGY - WT15G
This course lays the foundation of basic woodworking skills. Students are introduced to a variety of different tools and equipment within a woodworking/carpentry course through project design. Students build several projects utilizing different machines and are taught safe operating procedures of all equipment in the room. Stu- dents can design and build their own choice project in the latter part of the course. Students will exit the course being able to follow technically written instructions, apply basic measurement skills and understand the importance of drafting and quality in design.
WT15G MUST is taken in conjunction with ET15G.

ELECTRONICS - EL15G
This is an introductory course where students will learn the basic electronic concepts. Students will have the opportunity to create several projects and learn the basics of electronics repairs among other learned skills in this course. No previous experience is required
ET15G MUST be taken in conjunction with WT15G.

NOTE: Students must register for the two half credit courses listed above

WOOD TECHNOLOGY - WT20G
This program is an extension of WT15 and provides students with a working understanding of the key elements associated with woodworking. Topics covered are, design, safety, machine use, measurement and finishing. The principle objective is to have students learn the major concepts and processes through hands on activities using present-day industrial tools and materials.

ELECTRONICS - EL20G
This course is an introduction to electronics where students will learn skills such as soldering, reading schematics, and using breadboards. Students will be guided through projects from basic to more complex as their level of understanding increases. Advanced skills such as using meters, creating printed circuit boards, and troubleshooting broken electronics are covered in this course.

WOOD TECHNOLOGY - WT30G

This program is an extension of WT20G, this program provides students with a working understanding of the key elements associated with woodworking. Some topics covered are advanced machine use, CNC router design, and furniture building. Students will be required to use larger machinery in the lab, including the planer, jointer, and miter saw. Project design using MastrcamX6 programs, will be encouraged as part of this challenging program.

ELECTRONICS - EL30S

This program is an extension of the 20S course. Students will build upon previous skills and concepts to create more advanced electronics projects. Students will gain valuable troubleshooting skills to fix and repair various electronic items. The main focus is to cover advanced DC circuits and apply this knowledge to projects de- signed by the students.

WOOD TECHNOLOGY - WT40G

In this final year, students become proficient in the use of all available woodworking machines and power tools. Many aspects of machine care, use, maintenance, and safety are taught. Projects are designed using Master- camX6 programs. Simple and advanced jigs and fixtures are introduced on various operations and machines. The main objective is for students to use previous years' experiences in Industrial Arts to plan, develop and construct quality, rewarding projects that reflect the individual's creative design and building abilities.

ELECTRONICS - EL40S

In this final year, all previous skills and knowledge will be reviewed in addition to learning new concepts related to electronics. Students will apply knowledge to plan, develop and construct projects that demonstrate learning. Students also can compete at the Manitoba Robot Games, Manitoba Skills Competition and Science Fairs.

St. James-Assiniboia Diploma Planning Sheet

Provincial Diploma

Note: students completing a St. James Academic or Advanced Academic will automatically receive a Provincial Diploma

Grade 9		**Grade 10**		**Grade 11**		**Grade 12**	
Compulsory	Credit	Compulsory	Credit	Compulsory	Credit	Compulsory	Credit
English 10F	1.0	English 20F	1.0	English 30S	1.0	English 40S	1.0
Mathematics 10F	1.0	Mathematics 20S	1.0	Mathematics 30S	1.0	Mathematics 40S	1.0
Phys. Ed. 10F	1.0	Phys. Ed. 20F	1.0	Phys. Ed. 30F	1.0	Phys. Ed. 40F	1.0
Social Studies 10F	1.0	Geography 20F	1.0	History 30F	1.0	Grade 12 Option #1	1.0
Science 10F	1.0	Science 20F	1.0			Grade 12 Option #2	1.0
School Based Options		School Based Options		School Based Options		*School Based Options	
Option 1 (required)	1.0	Option 1 (required)	1.0	Option 1 (required)	1.0	Option 1 (required)	1.0
Option 2 (required)	1.0	Option 2 (required)	1.0	Option 2 (required)	1.0	Option 2	
Option 3 (required)	1.0	Option 3 (required)	1.0	Option 3		Option 3	
Option 4 (required)	1.0	Option 4 (required)	1.0	Option 4		Option 4	
Option 5		Option 5 (required)	1.0	Option 5		Option 5	

NOTE: 30 credits are the minimum requirements for graduation