## 2016 / 2017





# Grade Eleven and Twelve Course Handbook WINDSOR PARK COLLEGIATE 

1015 Cottonwood Road Winnipeg, MB

R2J 1G3
Phone: (204) 256-7316
FAX: (204) 256-2856
Principal: Marilyn Thorington
Vice-Principal: Reno Gerl

## Windsor Park Collegiate: Credit Check Worksheet

In order to graduate, all students are expected to complete:
17 compulsory credits and 13 optional credits for a total of 30 credits
$\square$ Of the 13 optional credits, one must be a grade eleven credit, and two must be grade twelve credits.

| Grade Nine | Grade Ten | Grade Eleven | Grade Twelve |
| :---: | :---: | :---: | :---: |
| English 10F $\quad \square$ | English 20F $\quad \square$ | English 30S $\quad \square$ | English 40S $\quad \square$ |
| Math 10F $\quad \square$ | Math 20S $\square$ <br> Ess Intro  | Math 30S Ess App PreC $\square$ | Math 40S Ess App PreC $\square$ |
| Soc. Studies 10G $\square$ | Geography 20F $\quad \square$ | History 30G/S | Physical Ed. 40F $\square$ |
| Science 10F $\quad \square$ | Science 20F $\quad \square$ | Physical Ed. 30F $\square$ | Option 40 |
| Physical Ed. 10F $\square$ | Physical Ed. 20F $\square$ | Option 30 | Option 40 |
| Option | Option | Option | Option |
| Option | Option | Option | Option |
| Option | Option |  |  |

## Important Notes:

In order to graduate you must complete all the requirements above. For example, if you have 34 credits, but do not have a grade 12 English credit, you are NOT eligible to graduate.

There can be a big difference between high school graduation requirements and post-secondary (university/college) entrance requirements. You may graduate from high school but be unable to enter the school of your choice because you have not taken the right credits.

Remember to include special language or music credits, credits earned at Manitoba Institute of Trades and Technology (MITT) or Louis Riel Arts and Technology Centre (ATC), distance education courses and/or summer school courses.

## Course Registration Instructions:

The following are the details of what you need to know the day that you sit down to sign up for your courses for next year.

Step One: Write down on the worksheet all of the courses that you have successfully completed or will complete by the end of this year.

Step Two: Decide on what programs you wish to be a part.
Standard High School
$\square$ AP Calculus
$\square$ Career Internship Program (CIP)
$\square$ Louis Riel Arts and Tech Centre (ATC)
$\square$ Winnipeg Technical College (WTC)
Step Three: On your worksheet, check off the compulsory courses (bold) that you must take next year. (Remember if you have failed a compulsory course, you must take it again.)

Step Four: Read through the list of optional courses on the following pages of the handbook.
Step Five: List five options in order of priority from your first choice to your fifth choice. (Not all choices will be scheduled.)

1) $\qquad$
2) $\qquad$
3) $\qquad$
4) $\qquad$
5) $\qquad$
Step Six: Bring these worksheets with you on course selection day so that you can easily sign up for next year. You will be signing up for your courses on-line with a Student Services Teacher.

Step Seven: Look for course verifications which will be sent to your home in early spring.
Step Eight: Sign and return course verification with Registration Fees. This will determine your official registration.

Step Nine: Timetables and opening day information will be mailed out in late August.

## Important Note:

Once choices have been made and finalized, classes will be organized and staff determined. Courses that have very low enrollment may not be offered or may be combined with others. It is important that you put a lot of thought into the courses that you want as it will be very difficult to make changes to course requests at a later date.

## Compulsory Courses: English Language Arts:

## English Language Arts Flow Chart:

Grade $9 \quad$ Grade $10 \quad$ Grade 11


Notes:

- Students can take only one English in grade 11
- Students may need two Grade 12 English courses for some postsecondary institutions (Transactional Forms 40S)
- For more info on CIP contact Student Services


## Grade 12

English 40S Comp. Focus

And

Transactional Forms 40S

Or

And
Transactional Forms 40S

Or

CIP English 40S
Comp. Focus
And

CIP English 40S
Tech Comm. Forms

## ENGLISH LANGUAGE ARTS LITERARY FOCUS 30S 1 credit <br> PREREQUISITE: English Language Arts 20F

The Literary Focus is to enable students to develop an appreciation and understanding of creative and expressive language. The emphasis of the course is the use and understanding of the aesthetics of language. The course emphasizes the aesthetic purposes of text through the study of novels, drama, Shakespeare, poetry, film, short prose, mass media and the creation of original work by the students. All students write a final exam worth $25 \%$ of their final grade.

## ENGLISH LANGUAGE ARTS COMPREHENSIVE FOCUS 30S 1 credit

## PREREQUISITE: English Language Arts 20F

This course develops students' ability to think critically and to function more effectively within their community. Students will be exposed to materials to further develop their literacy skills and enable them to respond to and interact with a variety of texts: short stories, poetry, drama, film, a Shakespearean text (Macbeth), magazines, newspapers, and the Internet as springboards for reflective and critical thought. Students are immersed in texts that inform, persuade, analyze, foster understanding and empathy, reflect culture, express feelings and experiences. Essay forms are given more prominence at this level to provide a solid foundation for writing at the grade 12 level. The proper use of grammar, punctuation, spelling, and vocabulary in all assignments is emphasized. All students write a final exam worth $25 \%$ of their final grade.

## ENGLISH LANGUAGE ARTS CIP COMPREHENSIVE FOCUS 30S 1 credit PREREQUISITE: English Language Arts 20F

This course offers a two-prong approach to English: 1. An introduction to the Career Internship Program (CIP) experience at the grade 12 level offering opportunities for participants to explore personal and career aspirations. The writing of cover letters and résumés and a two-day job shadow experience offer hands-on experiences to hone and shape future goals. 2. Students study English with both a transaction and literary: they consider point of view, rhetorical and narrative technique, connotative and figurative language, and a variety of stylistic considerations within short stories, poetry, drama, film, a Shakespearean text (Macbeth), magazines, newspapers, and the Internet. Students write and study in texts that inform, persuade, analyze, foster understanding and empathy, reflect culture, and express feelings and experiences. Essay forms are given more prominence at this level to provide a solid foundation for writing at the grade 12 level. The proper use of grammar, punctuation, spelling, and vocabulary in all assignments is emphasized. All students write a final exam worth $25 \%$ of their final grade.
Note: Students taking CIP English Comprehensive Forms 30 S pay a fee to attend Manitoba Theatre Centre drama productions, located on Market Street downtown.

## ENGLISH LANGUAGE ARTS LITERARY FOCUS 40S 1 credit

PREREQUISITE: English Language Arts Comprehensive Focus or Literary Focus 30S
Through literary selections, visual texts and creative writing students develop a greater insight and understanding of themselves and their place in the world. The course emphasizes the aesthetic purposes of text through the study of novels, short stories, drama, poetry, film, contemporary media, at least one work by Shakespeare, and creative writing. The course also includes an Exit Novel Presentation worth $10 \%$ of the final grade. The Exit Novel Presentation is a compulsory activity for all Windsor Park Collegiate students that demonstrates reading, writing, speaking, listening, viewing, and representing skills developed over a K-12 English career. Students in grade 12 are expected to write and speak using the proper conventions of language. All students write the Provincial Standards Test (Exam) worth 30\% of the final grade.

## ENGLISH LANGUAGE ARTS COMPREHENSIVE FOCUS 40S 1 credit

PREREQUISITE: English Language Arts Comprehensive Focus or Literary Focus 30S
Comprehensive English, designed to focus on both transactional and literary language, incorporates a balance of pragmatic language (everyday) with aesthetic language (literary). Activities in this course may include oral discussion, letter writing, improvised drama, journals, formal presentations, film, fiction (reading and writing), poetry, and a traditional novel study. The course also includes an Exit Novel Presentation worth $10 \%$ of the final grade. The Exit Novel Presentation is a compulsory activity for all Windsor Park Collegiate students that demonstrates reading, writing, speaking, listening, viewing, and representing skills developed over a K-12 English career. Students in grade 12 are expected to write and speak using the proper conventions of language. All students write the Provincial Standards Test (Exam) worth 30\% of the final grade.

## TRANSACTIONAL FORMS (ELTC40S) (Second Credit) 1 credit

PREREQUISITE: English Language Arts Comprehensive Focus or Literary Focus 30S
The grade 12 Transactional English second credit course will focus on practical applications of reading, writing and research skills, specifically targeted to students considering post-secondary education. The class readings will be diverse and come from varied sources. The writing assignments will challenge students to write various practical styles and formats.

## ENGLISH LANGUAGE ARTS LANGUAGE AND TECHNICAL COMMUNICATION 40S 1 credit This English course is compulsory for, and only open to, students enrolled in the CIP program and is to be taken as an option.

PREREQUISITE: English Language Arts Comprehensive Focus or Literary Focus 30S
Technical language is a form of transactional communication, but with a stronger emphasis on direct language, technical precision, and larger audiences. Students learn of the prevalence of technical documents in everyday life, and how they are shaped and formed for particular audiences; engage specific technical documents that impact on workplaces, such as memos, emails, letters, and technical reports; and improve technical writing styles by applying grammatical concepts such as active/passive voices, parallelism and technical punctuation to all assignments and tasks. Students also learn the art and technical technique involved in documents such as brochures, posters, manuals, and promotional advertisements. Students study the "language" of technical communication that includes graphics, direct and emphatic discourse, flowcharting, and other facets of communication that create effective, accessible documents for specific users. All students participate in a three-month team "Tech Project", a business plan that involves the creation of an innovative idea, concept, or invention. The course culminates in a final exam presentation of the Tech Project to a panel of partners in the community. This course is well suited to students who intend to enter the business world or to further their studies at Technical Colleges
or University Business/Management and Engineering programs. Students who intend to study other areas would still benefit from the course's emphasis on clear written communication.

## Compulsory Courses: Mathematics:

## Mathematics Flow Chart:



## AP MATHEMATICS 42S 1 credit

Windsor Park is proud to offer AP Calculus Math. Mathematically talented students can obtain a university credit in mathematics before they finish high school if they follow the following schedule.

| Grade | Semester One | Semester Two |
| :---: | :---: | :---: |
| *Nine | Math 10F (in either semester) |  |
| **Ten | Introduction to Pre-Calc and Applied (in either semester) |  |
| ***Eleven | Pre-Calc 30S | Pre-Calc 40S |
| Twelve | AP Calculus |  |
| *A minimum mark o <br> **A minimum mark <br> ***A minimum mark | required in math 10 is required in Introd is required in both | math. <br> Applied <br> order to take AP math. |

Notes:

- Students can take more than one math course per year in grades ten to twelve
- *Students planning to take AP math should see table above and more info on page 14
- Grade 12 MATH COURSES HAVE A FINAL PROVINCIAL ACHIEVEMENT TEST worth a certain percentage:
o Grade 12 Pre-Calculus and Grade 12 Applied - 30\%
o Grade 12 Essential - 20 \%
Each of the mathematics programs is sequential, and is designed to meet different interests, learning needs and education/career goals of students. Students and parents are advised to follow recommendations of their mathematics teachers when selecting a mathematics program. If you have concerns about a recommendation please speak to the teacher. Once a program choice of either Pre-Calculus or Applied Math has been made, it is not possible to switch between the two without the required prerequisites. (For example, after receiving credit in Grade 11 Pre-Calculus a student COULD NOT receive a credit in Grade 12 Applied Math without first taking Grade 11 Applied Math.) Going from the Applied or PreCalculus stream to the Essential Math stream is allowed as long as the student has successfully received a Math credit from the previous grade. When students choose courses which best suit their needs and abilities, they have the greatest chance for success, now and in the future.

After you graduate, you may wish to go to university, college, or become an apprentice etc.
Some programs that you may want to apply for have certain prerequisites. Please check web sites for the mathematic and science prerequisites for entry into various programs or speak with someone in Student services.

## GRADE ELEVEN APPLIED MATHEMATICS (30S) 1 credit

PREREQUISITE: Introduction to Applied and Pre-Calculus 20 (70\% recommended)
Topics include: Statistics, Geometry, Relations and Functions, Logical Reasoning, Research Project, and Measurement. REQUIRED EQUIPMENT/PERSONAL SUPPLIES:
All students are required to have a 3-ring binder, pencil, eraser, mandatory Ti83Plus or Ti84Plus graphing calculator (approximate cost $\$ 140.00$ ) and ruler.
SPECIAL NOTES:
It should be noted that this course may be taken in addition to MA30S Pre-Calculus if scheduling permits.

## GRADE ELEVEN ESSENTIAL MATHEMATICS (30S) 1 credit

PREREQUISITE: Essential 20S or Introduction to Applied and Pre-Calculus 20S
This course is intended for students whose post-secondary planning includes everything except a focus on mathematics and/or science-related fields. Essential Mathematics emphasizes consumer applications, problem-solving, decision making, as well as number sense and number use. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in a technological society.
Topics include: Problem Analysis, Analysis of Games and Numbers, Interest and Credit, Managing Money, Relations and Patterns, 3-D Geometry, Design Modeling, and Statistics.
EQUIPMENT/PERSONAL SUPPLIES:
All students are required to have a 3 -ring binder, pencil, eraser, and scientific calculator (showing trigonometry functions - sin, cos, tan) and ruler.

SPECIAL NOTES:
Essential Mathematics is accepted by MOST faculties at University, and Post-Secondary Institutions. Check with a counselor to ensure that Essential Mathematics is a viable option for your chosen career path.

GRADE ELEVEN PRE-CALCULUS MATHEMATICS (30S) 1 credit
PREREQUISITE: Introduction to Applied and Pre-Calculus 20S (75\% recommended) and teacher recommendation
This course is part of the new curriculum and is highly theoretical. Students who take this course should be skilled in algebraic computation.
Topics include: Algebra and Number, Relations and Functions, and Trigonometry.
EQUIPMENT/PERSONAL SUPPLIES: Students are required to have a 3 -ring binder, pencil, eraser, and a scientific calculator.
SPECIAL NOTES:
A mark of at least 65\% in Pre-Calculus 30S is recommended to enroll in Pre-Calculus 40S.

## GRADE TWELVE APPLIED MATHEMATICS 40S 1 credit

PREREQUISITE: Math 30S Applied (70\% recommended) and teacher recommendation
Topics include: Probability, Variability and Statistical Analysis, Matrix Modeling, Vectors, Application of Periodic Functions, Sequences, Personal Finance, and Design and Measurement.

## REQUIRED EQUIPMENT/PERSONAL SUPPLIES:

All students are required to have a 3-ring binder, pencil, eraser, mandatory Ti83Plus or Ti84Plus graphing calculator (approximate cost $\$ 140.00$ ) and ruler.

## GRADE TWELVE ESSENTIAL MATHEMATICS 40S 1 credit

PREREQUISITE: Math 30S Pre-Calculus or Math 30S Applied or Essential Math 30S
Grade 12 essential Mathematics (40S) is intended for students whose post-secondary planning includes everything except a focus on mathematics and science-related fields. Grade 12 essential Mathematics (40S) is a one-credit course emphasizing consumer applications, problem solving, decision making, and spatial sense. Topics include: analysis of Games and Numbers, vehicle finance, home finance, statistics, geometry and trigonometry, precision measurement, business finance and career life.
EQUIPMENT / PERSONAL SUPPLIES: All students are required to have a 3 -ring binder, pencil, eraser, scientific calculator (showing trigonometry functions - sin, cos, tan) and ruler.
SPECIAL NOTES:
Essential Mathematics is accepted by MOST faculties at university, and post-secondary institutions. Check with a counselor or a math teacher to ensure that Essential Mathematics is a viable option for your chosen career path.

GRADE TWELVE PRE-CALCULUS MATHEMATICS 40S 1 credit
PREREQUSITE: Math 30S Pre-Calculus (75\% recommended)
This course is a continuation of Math 30 S Pre-Calculus.
Topics include: Circular Functions, Transformations, Trigonometric Identities, Exponents and Logarithms, Perms, Coms, and Binomial Theorem, Conics, Probability, and Geometric Sequences
EQUIPMENT/PERSONAL SUPPLIES: All students are required to have a 3 -ring binder, pencil, eraser, scientific calculator (use of graphing calculator encouraged), and ruler.
SPECIAL NOTES:
A mark of at least $75 \%$ in Pre-Calculus 30 s is recommended to do Pre-Calculus 40s. Students who experience difficulty in mathematics would benefit from having this course in the first semester. If you are scheduled in second semester, make an appointment with Student Services during the last week of August and every attempt will be made to switch it to first semester.

## Compulsory Courses: Social Studies:



HISTORY OF CANADA 30F 1 credit
PREREQUISITE: Geography 20F
The Grade 11 History of Canada curriculum supports citizenship as a core concept and engages students in historical inquiry. Guided by Essential Questions, students focus on the history of Canada from pre-contact times to the present. Through this process students think historically and acquire Enduring Understandings related to the following five themes in Canadian history:

1. First Nations, Métis, and Inuit Peoples
2. French-English Duality
3. Identity, Diversity, and Citizenship
4. Governance and Economics
5. Canada and the World

## Compulsory Courses: Physical and Health Education:

## Physical and Health Education Flow Chart:


*Students may now choose a female only fitness class or a male only fitness class.

## EQUIPMENT I PERSONAL SUPPLIES FOR ALL PHYSICAL EDUCATION COURSES

For safe and effective participation, students are expected to change into appropriate gym clothes for each class. Appropriate gym clothing includes a T-shirt, running shoes and gym shorts or track pants. A notebook and pen will be needed and a towel is recommended.

## GRADE ELEVEN PHYSICAL EDUCATION 30F (REGULAR) 1 credit

PREREQUISITE: Physical Education and Health 20F
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 to 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 introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen.
The in-class component will focus on issues such as biological, socio-cultural, psychological, historical, and political process that shape and define men's/women's health and personal wellness activities. These concepts will be delivered in a theoretical and experiential fashion.

## GRADE ELEVEN PHYSICAL EDUCATION 30F - OUTDOOR EDUCATION 1 credit <br> PREREQUISITE: Physical Education and Health 20F

This 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 to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development.

The emphasis of this course will be on planning for safe and enjoyable participation in popular outdoor recreational pursuits. Activities will include hiking, cross country skiing, cycle touring, backpacking, snowshoeing, mountain biking and rock climbing. Other related activities will include wilderness survival techniques, backcountry cooking and camping techniques, wilderness navigation, wildlife observation and wilderness first aid.

## EQUIPMENT / SUPPLIES

For safe and effective participation, students are expected to change into appropriate outdoor, active clothing for practical classes. A notebook, journal and pen will be needed for each class. Students must have access to a large volume backpack, a warm sleeping bag and a mountain bike.

## SPECIAL NOTES

A lab fee is charged to cover the costs of transportation, supplies, permits, etc. for field trips such as cross country skiing, snowshoeing, mountain biking, wilderness survival, rock climbing and wilderness navigation.

## GRADE ELEVEN PHYSICAL EDUCATION - FEMALE FITNESS 30F 1 credit <br> PREREQUISITE: Physical Education and Health 20F

This course focuses on topics, issues and concerns relevant to young women's lives relating to personal health, wellness and fitness. Students will take part in a wide variety of activities that will help them take greater ownership of their personal physical fitness development. It will also encourage the discovery of new physical activities suited to their personal interests and promote an active, healthy lifestyle and overall personal wellness. This course may have fees which are required to cover costs of facilities and guest instructors. The students will work towards the learning outcomes through a variety of activities which might include:
Personal Fitness Management: yoga, tai chi, cardio dance, pilates, circuit training, resistance training, power walking, low organized games, cycle fitness (spin)
Lifetime Activities: self-defense, outdoor cross training, racquet sports, wall climbing, badminton, golf, community facility awareness
Classroom Activities: mental health, personal and social development, healthy relationships, body image, nutrition
SPECIAL NOTES
An activity fee of $\$ 40.00$ will be charged for all students enrolled in Female Fitness to cover extra costs.

## GRADE ELEVEN PHYSICAL EDUCATION - SPORTS ACADEMY 30F 1 credit <br> PREREQUISITE: Physical Education and Health 20F

This course focuses on topics, issues and concerns relevant to young men's lives relating to personal health, wellness and fitness. Students will take part in a wide variety of activities that will help them take greater ownership of their personal physical fitness development. It will also encourage the discovery of new physical activities suited to their personal interests and promote an active, healthy lifestyle and overall personal wellness. This course may have fees which are required to cover costs of facilities and guest instructors. The students will work towards the learning outcomes through a variety of activities which might include:
Personal Fitness Management: Cross Fit, tai chi, pilates, circuit training, resistance training, power walking, low organized games, cycle fitness (spin), team sports
Lifetime Activities: marathon running, outdoor cross training, racquet sports, wall climbing, badminton, golf, community facility awareness
Classroom Activities: mental health, personal and social development, healthy relationships, body image, nutrition
SPECIAL NOTES: There may be a fee charged to participants in this class.

## GRADE TWELVE PHYSICAL EDUCATION 40F (REGULAR) 1 credit <br> PREREQUISITE: Active Healthy Lifestyles 30F

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 to engage in active lifestyles into their futures. 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.

As part of earning a credit for this course, students will be required to submit a personal fitness portfolio containing elements such as a fitness plan, physical activity log, or journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation.

## GRADE TWELVE PHYSICAL EDUCATION - OUTDOOR EDUCATION 40F 1 credit <br> PREREQUISITE: Active Healthy Lifestyles 30F

This 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 to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development.

The emphasis of this course will be on planning for safe and enjoyable participation in popular outdoor recreational pursuits. Activities will include hiking, cross country skiing, cycle touring, backpacking, snowshoeing, mountain biking and rock climbing. Other related activities will include wilderness survival techniques, backcountry cooking and camping techniques, wilderness navigation, wildlife observation and wilderness first aid.

EQUIPMENT / SUPPLIES: For safe and effective participation, students are expected to change into appropriate outdoor, active clothing practical classes. A notebook, journal and pen will be needed for each class. Students must have access to a large volume backpack, a warm sleeping bag and a mountain bike.
SPECIAL NOTES: A lab fee is charged to cover the costs of transportation, supplies, permits, etc. for field trips such as cross country skiing, snowshoeing, mountain biking, wilderness survival, rock climbing and wilderness navigation.

## GRADE TWELVE PHYSICAL EDUCATION - FEMALE FITNESS 40F 1 credit PREREQUISITE: Active Healthy Lifestyles 30F

This course focuses on topics, issues and concerns relevant to young women's lives relating to personal health, wellness and fitness. Students will take part in a wide variety of activities that will help them take greater ownership of their personal physical fitness development. It will also encourage the discovery of new physical activities suited to their personal interests and promote an active, healthy lifestyle and overall personal wellness. This course may have fees which are required to cover costs of facilities and guest instructors. The students will work towards the learning outcomes through a variety of activities which might include:
Personal Fitness Management: yoga, tai chi, cardio dance, pilates, circuit training, resistance training, power walking, low organized games, cycle fitness (spin)
Lifetime Activities: self-defense, outdoor cross training, racquet sports, wall climbing, badminton, golf, community facility awareness
Classroom Activities: mental health, personal and social development, healthy relationships, body image, nutrition
SPECIAL NOTES
An activity fee of $\$ 40.00$ will be charged for all students enrolled in Female Fitness to cover extra costs.

## GRADE TWELVE PHYSICAL EDUCATION - SPORTS ACADEMY 40F 1 credit PREREQUISITE: Active Healthy Lifestyles 30F

This course focuses on topics, issues and concerns relevant to young men's lives relating to personal health, wellness and fitness. Students will take part in a wide variety of activities that will help them take greater ownership of their personal physical fitness development. It will also encourage the discovery of new physical activities suited to their personal interests and promote an active, healthy lifestyle and overall personal wellness. This course may have fees which are required to cover costs of facilities and guest instructors. The students will work towards the learning outcomes through a variety of activities which might include:
Personal Fitness Management: Cross Fit, tai chi, pilates, circuit training, resistance training, power walking, low organized games, cycle fitness (spin), team sports
Lifetime Activities: marathon running, outdoor cross training, racquet sports, wall climbing, badminton, golf, community facility awareness
Classroom Activities: mental health, personal and social development, healthy relationships, body image, nutrition
SPECIAL NOTES: There may be a fee charged to participants in this class.

## Compulsory Courses: Science:

## Science Flow Chart: Grade 9 <br> Science 10F <br> Grade 10 <br> Science 20F

## Grade 11

Although there are no compulsory courses in Science in grade 11 and 12, students are encouraged to pursue courses in Chemistry, Biology and/or Physics.

## Grade 12

Students
interested in
going to a university, college or other school after they graduate should make sure that they have the needed grade 11 and/or 12 electives.

Grade 11 and 12 Science Options are in the option courses section.

[^0]
## GRADE 11 \& 12 OPTIONAL COURSES:

## MATH AND SCIENCES

## ADVANCED PLACEMENT CALCULUS 42S AB (ONLINE) PREREQUISITE: Pre-Calculus 30S (80\% final grade recommended and currently enrolled in Pre-Calculus 40S.) <br> Content: Advanced Placement Calculus AB is a university level course and it is primarily concerned with the development of students' understanding of the concepts in Calculus and to provide experience with its methods and applications. This introductory calculus course covers the topics of (I) Functions, Graphs, and Limits (II) Derivatives and (III) Integrals. The course emphasizes a multi-presentation approach to calculus with concepts, results and problems being expressed graphically, numerically, analytically and verbally.

Additional Information: This Course begins in November 2013 and ends in May 2014. All students are required to have a T1-83 or T1-84 graphing calculator.

Students interested in writing the optional Advanced Placement (AP) College Board exam must pay a fee of approximately $\$ 100$. The exam is written in May, but the mark is not received until July. The exam mark is not used to calculate a student's final grade. As such, an in-school final exam is written at the completion of the course in May. Both exams will be written at the Arts and Technology Centre.

University Credit: Taking the AP exam is not compulsory, but students who successfully challenge the examination and receive a mark of 4 or 5 (out of 5) may earn a University Credit or an Advanced Standing at numerous universities and colleges across Canada and the United States. Universities grant credits for AP courses based on the universities' local mark requirement on the AP exam.

## BIOLOGY 30S 1 credit

## PREREQUISITE: Science 20F

Wellness is a major theme in the Biology 30S course. The intent is to have students learn more about their medical histories (e.g. medical chart), and how their body works; to collect data on how their body is performing (e.g. heart rates); to analyze how well they are taking care of themselves (e.g. checklist) and to make decisions about their own lifestyle to promote their wellness (e.g. life goals). Students explore this theme in the creation of a wellness portfolio. By completing their portfolios, students personalize the human body content in the Biology 30S program. Micro themes will be used. Micro themes are writing assignments designed to help students learn the material by looking at it in a different way (Martin, 1989). They involve more than simply reading the textbook or memorizing notes. Students must examine a particular case study about human biology and interpret what is going on. Afterwards, they express their ideas in a short, written work. The body systems studied will include Digestion and Nutrition, Transportation and Respiration, Excretion and Waste Management, Protection and Control, Wellness and Homeostatic Changes.
SPECIAL NOTES:
This is a course for students interested in continuing the "Study of Life". Biology would be of interest to students entering Physical Education, Recreation, and Nursing etc. at the post-secondary level.

## BIOLOGY 40S 1 credit

## PREREQUISITE: Science 20F

Topics revolve around the many areas of plant, animal and human diversity. The areas of emphasis include the following:

- Understanding Biological Inheritance; students who are very interested in the study of genetics will enjoy this portion of the course.
- Evolutionary Theory and Biodiversity: Evolution is the theme that unifies all of the different fields of biology. Biodiversity and how it relates to ecosystem, species and genetic diversity is an area of interest to many students.
- Discussion of a variety of reasons for maintaining biodiversity including, maintaining a diverse gene pool, economic value, and the sustainability of an ecosystem.
- In this science we look at diversity in the world around us. Including classifying organisms and discussing their evolutionary past.
Prerequisites for entering the Faculty of Science and many other related faculties at the post-secondary level have changed. High school biology is no longer recommended for some university courses, it is required.


## CHEMISTRY 30S 1 credit

PREREQUISITE: Science 20F and Introduction to Applied Math and Pre-Calculus Math 20 (Essential Math 20S (minimum 70\%) can be used as a prerequisite for Chemistry 30S but if the student wishes to continue to Chemistry 40S, Pre-Calculus or Applied Math is required in grade 11).
This course builds on what was learned in the chemistry unit of Science 20F. The course focuses on theoretical and mathematical aspects of the interactions of matter. Students will also use experiments to further their understanding of the topics. The units include:
Physical Properties of Matter - explains how matter behaves during physical changes.
Gases and the Atmosphere - explains how gases behave during temperature and pressure changes.
Chemical Reactions - quantitatively explores chemical reactions.
Solutions - deals with solubility and concentration.
Organic Chemistry - deals with naming and reactions of organic molecules.
EQUIPMENT
The student will be required to have a scientific calculator.

## CHEMISTRY 40S 1 credit

PREREQUISITE: Chemistry 30S, Pre-Calculus 30S OR Applied Math 30S
The course further explores how and why reactions occur and are affected by various conditions. The units covered include:
Aqueous reactions - deals with reactions that occur in water.
Kinetics - qualitative and quantitative properties that affect the speed of reactions.
Chemical equilibrium - qualitatively and quantitatively determine how reactions behave and change under various conditions.
Acids and Bases -deals with the strength of Acids and Bases and quantifies pH .
Electrochemistry - batteries and reactions that create or use electricity.
Atomic structure - further explores the Quantum model of the atom and light spectra.
EQUIPMENT
The student will be required to have a scientific calculator.

## PHYSICS 30S 1 credit

PREREQUISITE: Science 20F, Introduction to Applied Math and Pre-Calculus Math 20S
This course is designed for students with stronger math skills. Many topics deal with problem solving with mathematical formulas as well as theoretical explanations. The units include:
Waves-includes sound and mechanical waves.
The Nature of Light - deals with electromagnetic waves.
Mechanics - further explores how and why objects move using graphs and equations.
Fields - deals with gravitational, electric, and magnetic fields quantitatively and qualitatively.
EQUIPMENT / PERSONAL SUPPLIES
Students will be required to have a scientific calculator, a geometry set and graph paper.
SPECIAL NOTES
Physics 30 is a demanding course and requires a strong mathematical background. Physics is required for students who intend to enroll in the faculties of Engineering and Dentistry and is strongly recommended for entrance into the faculties of Computer Science and Medicine.

## PHYSICS 40S 1 credit

PREREQUISITE: Physics 30S, Pre-Calculus 30S OR Applied Math 30S
The course continues the topics introduced in Physics 30S. The focus in this course is to build upon and explore in more depth the concepts previously learned. The units covered include:
Mechanics - introduces how an object moves in two dimensions using vectors.
Fields - further explores the interaction of the various fields (electric, magnetic, electromagnetic, and gravitational).
Electricity - deals with electric circuits.
Medical Physics - introduces types of radiation and radioactive decay.
EQUIPMENT
Students will be required to have a scientific calculator.

## COMPUTER SCIENCE 30S 1 credit

PREREQUISITE: Desire to learn a programming language, creativity and patience.
This introductory course in computer science is of interest to a broad audience. As Steve Jobs said "I think everybody in this country should learn how to program a computer because it teaches you how to think." Students will develop knowledge, skills, and attitudes applicable to situations beyond computer science. Students will learn how to work both independently and collaboratively in order to complete a series of projects and rich tasks. Students will use interactive programming software such as scratch, alice, greenfoot and stencyl to produce original games and interactive stories that can be shared with a global audience. Students will also write programs in Java and/or C++ covering topics such as - documentation, variables and data types, input/output, debugging, multiple branching, looping, subprograms with parameters, strings, onedimensional arrays and simple sorting algorithms. Although no prerequisite is required this course does move at a faster pace than Introduction to Programming I. For more information on why you should take computer science visit http://code.org.

## COMPUTER SCIENCE 40S 1 credit

PREREQUISITE: Introduction to Programming I or II or a recommendation from your math teacher This course is of interest to students who would like to pursue further studies in computer science. Students will develop knowledge, skills, and attitudes applicable to situations beyond computer science. Students will learn how to work both independently and collaboratively in order to complete a series of projects and rich tasks. Students will use interactive programming software such as scratch, alice, greenfoot and stencyl to produce original games and interactive stories that can be shared with a global audience. In addition, students will promote computer science by doing outreach to grade 9s and feeder school. Students will also write programs in Java and/or C++ covering topics such as - sequential and random access files, object-oriented programming, recursion, two-dimensional arrays, analyzing algorithms, and sorting and searching. Students must also learn a new programming language independently.

## INFORMATION COMMUNICATION TECHNOLOGY

## DIGITAL PICTURES 25S AND DESKTOP PUBLISHING 35S 1 credit PREREQUISITE: None

The purpose of this course is to provide students with the skills and knowledge to convey a message through an original image. Students will learn how to capture and manipulate a still image. Topics will include; Digital camera and how to use it, Adobe Photoshop and Picture manipulation. The focus will be on the yearbook and other school print media. The desktop publishing component of this course allows students to plan and create a variety of published documents. Students will learn about, plan and produce print documents conforming to recognized standards. Topics will include; layout and design, photos and artwork, and print media.
EQUIPMENT / PERSONAL SUPPLIES
Students may supply and use their own digital camera.
SPECIAL NOTES: These two courses must be combined together as one credit.

## INTERACTIVE MEDIA 35S and DIGITAL FILM MAKING 25S 1 credit

## PREQUESITE: None

The purpose of this course is to provide students with the skills and knowledge to tell stories by combining sound, still images, moving image, text, graphics and animation into a video product. Students will also be provided with the opportunity to create new media products that combine video, audio, and interactive components. Students will learn how to capture and manipulate a video and create various media to produce an interactive DVD-Rom. The focus of this course will be on using a digital video camera, video editing and DVD menu creation.
EQUIPMENT/PERSONAL SUPPLIES
Students may supply and use their own digital camera.
SPECIAL NOTES:
These two courses must be combined together as one credit.

## YEARBOOK

## COMMUNITY SERVICE - YEARBOOK CS31G-Y 1 credit

PREREQUISITE: None, it is recommended that students take Digital Pictures prior to enrolment.
The purpose of this course is to provide students with an opportunity to volunteer their time to take photographs during school events. This course has been developed for students who are seriously interested in photography as a hobby or career; previous experience in photography is not essential but desirable. Photography 31G will cover all main aspects of photography including composition, lighting, camera handling techniques, special effects as well as processing techniques. Students will learn how to operate a digital SLR camera including aperture and time value modes. The course will also include shooting assignments on location. The practicum projects consist of the class working together to publish the school yearbook. COMMUNITY SERVICE/PHOTOGRAPHY 31G will appear on the official transcript.
EQUIPMENT / PERSONAL SUPPLIES
Students may supply and use their own digital SLR camera.
SPECIAL NOTES: This course is scheduled outside the regular timetable and runs from September to June.

APPLIED TECHNOLOGY - YEARBOOK AT40S-Y 1 credit<br>PREREQUISITE: Students must take either Desktop Publishing 35S or Photography 31G prior to enrolment.<br>Applied Technology - Yearbook Production allows students to take on an editorial or leadership role. In this course, returning members are expected to lead team meetings and help with software and equipment training and are also eligible to run a department (ex: editor, design editor, copy editor). Students enrolled in will be expected to develop and demonstrate strong leadership skills. Yearbook provides students with the opportunity to develop skills in a variety of areas including: photography, writing and desktop publishing. The course will consist of both theory and application projects where students will apply their skills to design/publish print documents. The practicum projects consist of the class working together to publish the school yearbook. APPLIED TECHNOLOGY - YEARBOOK PRODUCTION 40S will appear on the official school transcript.<br>EQUIPMENT / PERSONAL SUPPLIES<br>Students may supply and use their own digital SLR camera.<br>SPECIAL NOTES: This course is scheduled outside the regular timetable and runs from September to June.

## CONCERT BAND 30S 1 credit

## PREREQUISITE: none

Concert Band is a performance-based course, with a focus on the skills required for making music as part of an ensemble. Instruction in theory, instrumental technique, improvisation, composition, and application of skills in the lifelong appreciation of music will also be given. Students at this level are expected to exhibit a considerable degree of musical independence, and focus on increasingly finer aspects of their playing. The Windsor Park Concert Band performs a diverse range of historical and contemporary music across a wide variety of genres. The band is highlighted by many performances throughout the year at special events, festivals, feeder school visits, evening concerts and on the spring music trip.

## EQUIPMENT / PERSONAL SUPPLIES

Students using division-owned instruments will be charged a course fee of $\$ 120.00$ to defray the cost of maintenance, cleaning, repairs and supplies. Students may instead rent or purchase their own instrument, if desired. All related supplies (reeds, valve oil, etc.) will be provided by the school as available, but are ultimately the student's responsibility.
SPECIAL NOTES
Students are expected to participate in all scheduled rehearsals, sectionals, concerts and performances. Independent preparation of individual musical parts is expected and required. Students should note that Concert Band 40S can be used as a university entrance credit. Concert Band is a full-year course.

## CONCERT BAND 40S 1 credit <br> PREREQUISITE: none

Concert Band is a performance-based course, with a focus on the skills required for making music as part of an ensemble. Instruction in theory, instrumental technique, improvisation, composition, and application of skills in the lifelong appreciation of music will also be given. Students at this level have the opportunity to become leaders in their sections, and undertake a great deal of responsibility for the band's performance. The Windsor Park Concert Band performs a diverse range of historical and contemporary music across a wide variety of genres. The band is highlighted by many performances throughout the year at special events, festivals, feeder school visits, evening concerts and on the spring music trip.
EQUIPMENT / PERSONAL SUPPLIES
Students using division-owned instruments will be charged a course fee of $\$ 120.00$ to defray the cost of maintenance, cleaning, repairs and supplies. Students may instead rent or purchase their own instrument, if desired. All related supplies (reeds, valve oil, etc.) will be provided by the school as available, but are ultimately the student's responsibility.
SPECIAL NOTES:
Students are expected to participate in all scheduled rehearsals, sectionals, concerts and performances. Independent preparation of individual musical parts is expected and required. Students should note that Concert Band 40S can be used as a university entrance credit. Concert Band is a full-year course.

## GUITAR 30S 1 credit

PREREQUISITE: Music Guitar 20s or permission from instructor.
This is a performance oriented course. Students will perform as part of the full Guitar Ensemble, in smaller groups and in solo presentations. More emphasis will be placed on small group work. Students will expand their familiarity with the entire fret board. An increasingly divergent range of styles and playing techniques will be studied.
EQUIPMENT / PERSONAL SUPPLIES
A course fee of $\$ 20.00$ applies to all Guitar students. Method books and music sheets will be supplied by the school at no cost to the student. Also students require a uniform / sweater which can be purchased at the beginning of the school year. SPECIAL NOTES
The study of a music instrument is a lifelong endeavor which can provide hours of enjoyment during leisure time. The dedicated musician may further their study at the undergraduate level or pursue a variety of professional careers in music.

## GUITAR 40S 1 credit

PREREQUISITE: Music Guitar 30S or permission from instructor.
This is a performance oriented course. Students will perform as part of the full Guitar Ensemble, in smaller groups and in solo presentations. More emphasis will be placed on small group work. Students will expand their familiarity with the entire fret board. An increasingly divergent range of styles and playing techniques will be studied.
EQUIPMENT / PERSONAL SUPPLIES
A course fee of $\$ 20.00$ applies to all Guitar students. Method books and music sheets will be supplied by the school at no cost to the student. Also students require a uniform / sweater which can be purchased at the beginning of the school year. SPECIAL NOTES
The study of a music instrument is a lifelong endeavor which can provide hours of enjoyment during leisure time. The dedicated musician may further their study at the undergraduate level or pursue a variety of professional careers in music.

## JAZZ BAND 30S 1 credit

## PREREQUISITE: Registration in Concert Band

Jazz Band is a performance-based course, with a focus on the skills required for playing jazz as part of an ensemble. Instrumentation includes trumpets, trombones, saxophones, guitar, piano, bass and drums. Band members will be given instruction in theory, instrumental technique, improvisation, and composition. Students at this level are expected to exhibit a considerable degree of musical independence, and focus on increasingly finer aspects of their ensemble playing, soloing and improvisation. The Windsor Park Jazz Band performs a diverse range of historical and contemporary music across a wide variety of genres. The band is highlighted by many performances throughout the year at special events, festivals, feeder school visits, evening concerts and on the spring music trip.

## EQUIPMENT / PERSONAL SUPPLIES

Students registered in Concert Band will not be charged for using a division-owned instrument in Jazz Band. Students may instead rent or purchase their own instrument, if desired. All related supplies (reeds, valve oil, etc.) will be provided by the school as available, but are ultimately the student's responsibility.
SPECIAL NOTES:
Students are expected to participate in all scheduled rehearsals, sectionals, concerts and performances. Independent preparation of individual musical parts is expected and required. Students should note that Jazz Band 40S can be used as a university entrance credit. Jazz Band is a full-year course.

## JAZZ BAND 40S 1 credit

## PREREQUISITE: Registration in Concert Band

Jazz Band is a performance-based course, with a focus on the skills required for playing jazz as part of an ensemble. Instrumentation includes trumpets, trombones, saxophones, guitar, piano, bass and drums. Band members will be given instruction in theory, instrumental technique, improvisation, and composition. Students at this level have the opportunity to become leaders, soloists, and feature players in their sections, and undertake a great deal of responsibility for the band's performance. The Windsor Park Jazz Band performs a diverse range of historical and contemporary music across a wide variety of genres. The band is highlighted by many performances throughout the year at special events, festivals, feeder school visits, evening concerts and on the spring music trip.
EQUIPMENT / PERSONAL SUPPLIES
Students registered in Concert Band will not be charged for using a division-owned instrument in Jazz Band. Students may instead rent or purchase their own instrument, if desired. All related supplies (reeds, valve oil, etc.) will be provided by the school as available, but are ultimately the student's responsibility.

## SPECIAL NOTES:

Students are expected to participate in all scheduled rehearsals, sectionals, concerts and performances. Independent preparation of individual musical parts is expected and required. Students should note that Jazz Band 40S can be used as a university entrance credit. Jazz Band is a full-year course.

## JAZZ GUITAR 30S 1 credit

PREREQUISITE: Music Guitar 20 S
The aim of this course is to cultivate an understanding of the elements and structures of Jazz music as it relates to the guitar. The improvisation component of jazz provides an excellent outlet for creativity and self-expression. The curriculum will focus on Jazz theory and history, with an emphasis on performance.

## EQUIPMENT / PERSONAL SUPPLIES

A course fee of $\$ 20.00$ applies to all Guitar students. Method books and music sheets will be supplied by the school at no cost to the student. Also students require a uniform / sweater which can be purchased the the beginning of the school year. SPECIAL NOTES
The study of a music instrument is a lifelong endeavor which can provide hours of enjoyment during leisure time. The dedicated musician may further their study at the undergraduate level or pursue a variety of professional careers in music.

## JAZZ GUITAR 40S 1 credit

PREREQUISITE: Music Guitar 30S
This course is designed for the dedicated guitar student interested in the electric guitar and Plectrum technique. Students will explore the Jazz idiom through standards, Rock-fusion and Latin styles. The focus of the course will be on performance, technique, improvisation, and jazz rudiments.
EQUIPMENT / PERSONAL SUPPLIES
A course fee of $\$ 20.00$ applies to all Guitar students. Method books and music sheets will be supplied by the school at no cost to the student. Also students require a uniform / sweater which can be purchased the beginning of the school year. SPECIAL NOTES
Students participating in the Jazz Guitar Ensemble are expected to have access to an electric guitar and amplifier.

## VISUAL ARTS 30S 1 credit

## PREREQUISITE: Art 10F/20F or permission from the instructor

Art students will gradually encounter higher levels of artistic challenge and expectations. This course will focus on the essential learning areas as stated in the art curriculum: Art Language and Tools, Creative Expression in Art, Understanding Art in Context and Valuing Artistic Expression. Students will also be introduced to more artworks from various times, places, and cultures. Students will be encouraged to generate creative ideas, as well as be able to assess their own art and artwork from other sources. As part of the exploration of art history,
students research and recognized various artists and their specific styles. Some of the media used is this course are: acrylic and watercolour paint, ink, sculpture-including plaster cast, clay and various drawing media.
EQUIPMENT / PERSONAL SUPPLIES
Students will be required to bring their own sketchbook, drawing pencils, eraser and pencil sharpener to the class.

## VISUAL ARTS 40 S 1 credit

## PREREQUISITE: Art 30S or permission from the instructor

Art students will gradually encounter higher levels of artistic challenge and expectations. This course will focus on the essential learning areas as stated in the art curriculum: Art Language and Tools, Creative Expression in Art, Understanding Art in Context and Valuing Artistic Expression. Students will also be introduced to more artworks from various times, places, and cultures. Students will be encouraged to generate creative ideas, as well as be able to assess their own art and artwork from other sources. As part of preparation for postsecondary, students will write an art analysis paper to explore artists in different historical contexts.

## FRENCH

## FRENCH 30S 1 credit

## PREREQUISITE: French 20F

This course is designed to provide students with a working knowledge of French, and advanced study of grammatical structures and sentences patterns, and various articles taken from journals.
EQUIPMENT / PERSONAL SUPPLIES
French/English dictionary, 3 Ring binder with loose-leaf, highlighter and pen.

## FRENCH 40S 1 credit

## PREREQUISITE: French 30S

This course is designed to provide students with a working knowledge of French, and advanced study of grammatical structures and sentences patterns, and an introduction to French Canadian literature both in songs, in short stories and poetry.
EQUIPMENT / PESONAL SUPPLIES
3 Ring binder with loose-leaf, highlighter and pen.

## HUMAN ECOLOGY

## GENERAL INFORMATION

A) All Home Economics courses are worth 1 credit.
B) The Provincial curriculum allows for much flexibility and is designed to be co-educational and nonsequential therefore there are no prerequisites. All courses are open to any grades 10,11 and 12 students.
C) Family Studies 40S and Foods and Nutrition 40S are approved admission courses at the University of Manitoba. Family Studies 40S is an approved admission course at the University of Winnipeg.
D) In order to offer as many choices to students throughout their years at WPC, we may be offering courses on a rotational basis from year to year.

## CLOTHING, HOUSING \& DESIGN 30G 1 credit <br> PREREQUISITE: It is recommended that students take Home Ec. 10 G or Clothing / Housing Design 20G <br> Students will develop their construction skills in using fabric and accessories when constructing their practical projects. Fiber properties, manufacturing, and care of textile projects will be explored. Students will identify the significance of modern technology on the clothing and textiles industry and apply consumer knowledge when selecting fabric products. Special clothing needs will also be researched. <br> EQUIPMENT / PERSONAL SUPPLIES <br> Students will be expected to purchase their own patterns, fabric and corresponding notions. Thread and other small equipment will be supplied.

## CLOTHING, HOUSING \& DESIGN 40G 1 credit

PREREQUISITE: It is recommended that students have at least 2 years of clothing /textiles courses. Students will create a sample portfolio of advanced techniques and will construct a number of garments/projects using commercial patterns and applying textile design elements.

## FAMILY STUDIES 30G 1 credit

## PREREQUISITE: None

This course involves the study of the physical, social, emotional and intellectual development of an individual from toddler through to preschool and the factors that influence this development.
Specific topics include: Role of parenting and care-giving, Toilet training, Toys and play, Language and development, Feeding, Health and safety, Independence, Guiding Behavior, Day Care, Home Routines, Children with Special Needs, Child Abuse, Sex Roles and Sibling Relationships.

## FAMILY STUDIES 40G, 40S 1 credit PREREQUISITE: None

This Family Studies course gives students the opportunity to discover how individuals, families and society are interconnected in the lives of all people. Students will explore who they are as individuals and who they want to become by understanding their personal values and goals. Emphasis will be placed on communication skills, values clarification and self-exploration. Also, students will study families and their changing structures and functions. They will acquire skills and knowledge necessary to strengthen bonds through their lives.
*NOTE: Students who chose the 40 S option will be required to do extra course work and write a final exam. This 40S credit is accepted by both the University of Manitoba and University of Winnipeg.

## FOODS AND NUTRITION 30G 1 credit

## PREREQUISITE: None

This course promotes the development of personal health by exploring the psychology of food choices and provides the opportunity for self-assessment of eating habits. Current food trends are explored and analyzed as well as diet related concerns such as fad diets and sports nutrition. We celebrate cultural diversity by examining the culinary regions of Canada, and focus on the food industry unique to Manitoba.
The highlight of this course is the food labs, which offer a unique opportunity for hands-on application of course material. We create a wide variety of healthy dishes which challenge students' abilities and expand their repertoire.
EQUIPMENT / PERSONAL SUPPLIES
Students require a binder and pen for each class. All other necessary equipment for practical labs is supplied.

## FOODS AND NUTRITION 40G/40S 1 credit

## PREREQUISITE: None

Students are challenged with the current issues of hunger, both locally and globally and study the global food supply. That leads into the study of international foods and research on a country of choice kicks off the presentation of "Food Folklorama". We explore the latest in food technology: irradiated foods, genetically modified foods and organic food. And finally, concentrate on developing life skills by planning nutritious meals within a limited budget.
The focus in the food labs is more experimental and challenging, but will also be practical so as to offer a healthy repertoire of recipes for future independent living.
EQUIPMENT / PERSONAL SUPPLIES
Students require a binder and pen for each class. All other necessary equipment for practical labs is supplied.
SPECIAL NOTES: Foods 40S is an approved admission course at the University of MB and involves extra coursework.

## HUMANITIES

## CINEMA AS A WITNESS TO MODERN HISTORY 40S 1 credit

PREREQUISITE: History 30F
This course considers cinema as a source of information - or misinformation - about the past, and as a springboard for critical reflection about diverse interpretations of history. Students will engage in a variety of learning strategies in this course as they

- study films from various genres and periods
- explore the historical and social context in which the films were created
- deconstruct the techniques used to convey the filmmakers' messages
- pose questions about the influence of cinema on their understanding of the past
- conduct inquiry into major themes in world history
- develop critical media literacy
- engage in historical thinking

Each film, including documentary and dramatic selections from Canadian, American, and international cinema, is viewed and analyzed as a product of its historical period and as an interpretive representation of the past.
The course deals with historical developments and themes that have influenced world history since the beginning of the 20th century, including

- ideology and revolution
- war and peace
- power and propaganda
- oppression and resistance
- imperialism and decolonization
- environmental impact
- social transformation
- technological change


## CURRENT TOPICS IN FIRST NATIONS, METIS AND INUIT STUDIES 40S 1 credit Prerequisite: None

This course focuses on current issues that face aboriginal citizens of Canada in recent and current history. Students will develop an understanding and appreciation of the culture and reality of First Nations, Metis and Inuit people of Manitoba and Canada. This course is structured around four thematic units: Image \& Identity, Relations with Government, Social Justice Issues, \& Indigenous Peoples and the World. This is a highly interactive class with readings, guest speakers, panel discussions and field trips. Assessment: 70\% term work \& participation, 30\% final project.

## ENGLISH LANGUAGE ARTS LITERARY FORMS 40S 1 credit (Second English Credit)

This course emphasizes the study of literature including novels, plays and poetry. Activities in this course include literary discussions, analytical writing about literature and individual and group projects and presentations. In place of a final exam, there will be a major project worth $20 \%$ of the final grade.
NOTE: Any student considering university should enrol in this course

## GLOBAL ISSUES: CITIZENSHIP AND SUSTAINABILITY 40S 1 credit

## Prerequisite: History 30F

NOTE: We recommend that students pursuing post-secondary college or university studies consider this 40S course with its emphasis on oral and writing skills for an academic audience.
Students conduct inquiry into the social, political, environmental and economic impact of a variety of contemporary and emerging issues in the world. Through their inquiry they focus on questions of quality of life locally, nationally and globally. This course is based on the principles of active democratic citizenship, ecological literacy, critical media literacy, and ethical decision-making, and consolidates learning across the disciplines to empower students as agents of change for a sustainable and equitable future. A component of the course is the planning and implementation of a community-based action-research project.
Topics include:

- Media
- Consumerism
- The environment
- Wealth and power
- Indigenous peoples
- Peace and conflict
- Oppression and genocide
- Health and biotechnology
- Gender and identity
- Social justice and human rights


## HISTORY OF ROCK AND ROLL 31G 1 credit PREREQUISITE: None

History of Rock and Roll is a course designed to familiarize the student with the history of popular music and provides a survey of rock music starting with the roots and birth of Rock and Roll to the British Invasion, Motown, Hard Rock, Progressive Rock, Disco, Heavy Metal, Grunge, Rap, Hip-Hop, and Post-rock.
Prominent players and groups of each era will be covered, as well as sociological, economic and cultural factors that shaped the many styles of Rock music. Classroom activities will include listening, analyzing, writing, class discussions, research, and presentations.

## LAW 40S 1 credit

PREREQUISITE: None
This course provides an excellent opportunity for students to acquire knowledge of basic legal principles and practices, and to make them aware of their legal rights and responsibilities as they arise in everyday life.
UNITS OF STUDY INCLUDE:

- Foundations of our Legal System
- Criminal Law
- Civil Law
- Contract Law
- Other topics of interest may be covered as time permits
*Active participation, including debates, case studies, weekly newspaper readings and mock trials are included as part of this course.


## PSYCHOLOGY 40S 1 credit

PREREQUISITE: None
Psychology is the study of behaviour and mental processes. Studying psychology gives students lifelong skills such as dealing with issues proactively, solving problems, learning, and nurturing healthy relationships. Psychology 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 drug dependency, aggression, and discrimination.
This course exposes students to the major topics found in the field of psychology. It also emphasizes the issues that are of particular direct interest and relevance to students completing high school. Students explore the scientific methods upon which psychology is based. They can then apply what they learned to their daily lives.
SPECIAL NOTES:
This course is an approved course for admission into most universities.

## SOCIOLOGY 31G 1 credit

## PREREQUISITE: None

This course introduces the theories, questions, and issues that are the major concerns of sociology. Students will develop an understanding of the way social scientists approach the topics they study and the research methods they use. Various social structures shape the people of different societies through interaction, socialization and groupings. A study of culture and how it affects social growth will also be studied. Social institutions such as religion, family and education and how they are changing will also be considered.

## ADVANCED PLACEMENT WORLD HISTORY (ONLINE) 42S

## 1 credit

Prerequisite: History 30F

## Course content

Advanced Placement World History is a university-level survey course with an emphasis on Asian, African, European, and American history. The focus will be on the big picture, using a global perspective to analyze the ways in which people and societies have been connected through time.

AP World History follows a chronological approach in covering the history of civilization from prehistoric times through the twenty-first century in five units of study:

- Technological and Environmental Foundation, to 600 B.C.E (3 weeks)
- Organizations and Reorganization of Human Societies, 600 B.C.E-600 C.E (3 weeks)
- Regional and Trans regional Interactions, 600 C.E-1450 (7 weeks)
- Global Interactions, 1450-1750 (6 weeks)
- Industrialization and Global Integration, 1750-1900 (6 weeks)
- Accelerating Global Change and Realignments, 1900-Present (6 weeks)


## University Credit

Each university/college makes its own decision regarding granting of credits to students writing the AP exam. Universities grant credits for AP courses based on their local mark requirements on the AP exam.

## University of Manitoba AP Policies on History

- Students must earn a grade of 4.0 or 5.0 on the AP exam.
- Successful students earn a transfer of 1 full University credit (6 hours)
- Students cannot receive university credit for both AP World History and AP European History.


## University of Winnipeg AP Policies on History

- Students must earn a grade of 4.0 or 5.0 on the AP exam.
- Successful students earn a transfer of 1 full University credit (6 hours)
- Students cannot receive university credit for both AP World History and AP European History.
- Students interested in writing the optional Advanced Placement (AP) exam must pay a fee of approximately $\$ 100.00$.
The exam is written in May but the grade is not received until July. This mark is not used to calculate a student's final grade. As such, an in-school final exam is written at the completion of the course in May.
Please note that both the school exam and the AP Exam will both be written at the Arts and Technology Centre.


## INDUSTRIAL ARTS

## METALWORK TECHNOLOGY 30G 1 credit

PREREQUISITE: Metalwork Technology 10G or 20G recommended
This course covers advanced machining techniques, using the turpet milling machine and engine lathes as well as advanced welding (MIG/TIG/GAS). The students will be working on a wide variety of projects ranging from engine building and machining, foundry and parts casting, art metal and Auto CAD. This course would be an asset to any student considering a career in Engineering, Aviation, Machinists, Tool and Die, Automotive, Welding, Smelting Industry or Auto body restoration.
EQUIPMENT / PERSONAL SUPPLIES
Students are expected to come to class prepared to work, with a 3 -ring binder, a pencil and an eraser.
SPECIAL NOTES
Due to safety concerns, there is a dress code in effect while attending Tech. Ed programs. Safety glasses are to be worn at all times.

## METALWORK TECHNOLOGY 40G 1 credit

PREREQUISITE: Metalwork Technology 10G, 20G or 30G
This course will include advanced MACHINING, MILLING, PLASMA CUTTING, OXY, ARC, MIG and to include TIG WELDING. Students will become proficient in lab safety and in machine maintenance and repair. A power mechanic component will include small engine teardown, trouble-shooting and repair. Any student considering a career in the areas of Engineer, Aviation, Tool and Die, Automotive, Welding, Auto body or Sheet Metal Fabrication would do well to sign up for this program. To help prepare our future trades people, technical literacy will be reinforced. If you're looking for a fast paced, high energy course with potential in a post-secondary career, this is it.
EQUIPMENT / PERSONAL SUPPLIES
Students are expected to come to class prepared to work, with a 3-ring binder, a pencil and an eraser.
SPECIAL NOTES
Due to safety concerns, there is a dress code in effect while attending Tech. Ed programs. Safety glasses are to be worn at all times.

PREREQUISITE: Woodwork Technology 20G recommended
This program will be an extension of the Woodwork 20G program. It will include further skill development in woodworking such as more complex use of the router, table saw, radial arm saw, etc. Project work will be of a more difficult nature. One third of class time will be related theory and drafting.
EQUIPMENT / PERSONAL SUPPLIES
Students are expected to come to class prepared to work, with a 3 -ring binder, a pencil and an eraser.
SPECIAL NOTES
Due to safety concerns, there is a dress code in effect while attending Tech. Ed programs. Safety glasses are to be worn at all times.

## WOODWORK TECHNOLOGY (FURNITURE DESIGN) 40S 1 credit

## PREREQUISITE: Woodwork Technology 20G or 30G recommended

This course is designed to provide the fundamental and technical skills in furniture design and manufacturing. Unleash your creative woodworking potential by applying new technologies in the fabrication of jigs and fixtures to create beautiful and practical projects. Student projects range from tables, using new and time honored techniques to creative wood turnings, intarsia and finishing.
EQUIPMENT / PERSONAL SUPPLIES
Students are expected to come to class prepared to work, with a 3 -ring binder, a pencil and an eraser.
SPECIAL NOTES
Due to safety concerns, there is a dress code in effect while attending Tech. Ed programs. Safety glasses are to be worn at all times.

## GRAPHIC COMMUNICATION TECHNOLOGY 30S 1 credit

PREREQUISITE: Graphics Communication Technology 20S or approval by instructor
This area of study deals with the blending of technology and processes used in the graphics program. It builds on the skills developed in the 20G program and allows students the flexibility to exercise time management, quality control, and teamwork.

Some areas of study are:

- Image Generation
- Architecture Design
- Process Photography
- B/W Darkroom Processes and Photo Manipulation
- Photo Composition
- Airbrushing

Special Notes:
This course stresses the importance of all forms of communication. Evaluation will include: individual assignments and projects, group assignments and projects, and class evaluation.
There are compulsory assignments and optional projects that will allow students to specialize in an area of interest.

## GRAPHIC COMMUNICATION TECHNOLOGY 40S 1 credit

PREREQUISITE: Graphics Communication Technology 30S or approval of instructor
This course has a compulsory component and an independent work component.
Some areas of study are:
~Offset Lithography
$\sim$ Media Production
~Photo Journalism ~Photo Composition
~Airbrushing
~Architecture Design
~Video Advertising
~Digital Photography

Special Notes:
Students will design their own program goals for the remainder of the course. They will be able to choose topics such as, drafting and architecture, architectural model building, photography, video production, and numerous other topics. Independent project work should be geared toward post-secondary career choices such as Drafting, Graphic Design, Commercial Art, Interior Design, Fine Arts, Photography or related fields.

## WPC Special Programs: Online Program

All high school students in the LRSD are eligible for these courses with the approval of their high school administration. Various circumstances can make online courses an appropriate option for some students:

- course conflict
- full schedule
- course not offered at their home school
- school absence due to illness/surgery, elite athletics, etc.
- the need to change or add a course once the term has started


## What to Expect

Taking a course online is challenging and requires students to be willing to commit the same amount of time as they typically would in a face-to-face classroom environment. Past experience indicates that interested students should possess the following characteristics:
o capable of an appropriate level of independent learning
o excellent time management skills
o a willingness to contribute to discussions and to share problems and opinions online
An online course delivery tool called WebCT is used to deliver course content. Teachers provide students with course outlines, assignments, tests and feedback using this system and e-mail. Course content is available on the Internet at all times.

The following courses will be offered in 2014-2015

| Accounting 30S | Essential Mathematics 30S |
| :--- | :--- |
| AP Calculus 42S (all year) | Essential Mathematics 40S |
| AP World History 42S (all year) | History 30S |
| Applied Mathematics 30S | Physical Education 30S (English/French) |
| Applied Mathematics 40S | Physical Education 40S (English/French) |
| Biology 30S (first semester) | Physics 30S (first semester) |
| English Comprehensive Focus 30S | Physics 40S (first semester) |
| English Comprehensive Focus 40S | Pre-Calculus 40S (second semester) |
| English Transactional Focus 40S |  |

## Candidates for the Program

Ideally, students interested in registering for an online course should be self-motivated, capable of independent learning and have excellent time management skills. Students will be responsible for meeting deadlines, completing assignments and contributing to online discussions while working in the online environment. Students will have a school contact teacher to facilitate communication and provide additional support.

Application forms can be obtained from the Students Service Department.

## 2014/2015

The Arts \& Technology Centre is an extension of the Louis Riel School Division high schools for grade 11 \& 12 students. Students who choose ATC as part of their high school studies take the majority of their grade $11 \& 12$ elective courses at ATC and their compulsory courses at their home school. Students typically attend ATC for one semester in grade 11 for Part 1 of a program and then may return for another semester, in grade 12, to take Part 2 of their program. Talk to your counsellor about other possible patterns.

Students register at their home school, allowing them to participate in school events and extra-curricular activities including sports, music, and student government. Students graduate with their classmates at their home school. In addition to their regular high school diploma and an ATC certificate, students in most programs earn a Technology Education high school diploma. Students may also choose to complete all or part of a program following high school graduation (no tuition fees for the first 4 credits after graduation).

ATC students who hold evening or summer jobs may be eligible to obtain high school credits towards graduation and time credit towards continued apprenticeship training by applying for the High School Apprenticeship Program.

Students are encouraged to bring and use their own electronic devices. Students are encouraged to participate in intramural activities available at lunch time through our open gym program as well as the student advisory committee (student government).

See your guidance counsellor to include ATC courses as part of your grade $\mathbf{1 1}$ and $\mathbf{1 2}$ or post-secondary plans.

## ATC PROGRAMS

Academic Courses To assist with scheduling, ATC students can enrol in an online academic course while at ATC. There are five class periods in a day at ATC and most programs require four periods with the exception of the following programs: Building Trades, Hairstyling, and Part 2 of Esthetics. Academic courses are scheduled into the remaining period and include:

- English Comprehensive

Focus 30S/40S

- English Transactional Focus 40S
- History 30F
- Accounting 30S
- Physics 30S/40S
- Essential Mathematics 30S/40S
- Applied Mathematics 30S/40S
- Pre-Calculus 30S
- Calculus 42S \& World History 42S (AP)
- Physical Education 30F/40F

Administrative Assistant Designed for students with strong personal interest in Microsoft Office applications and office practices and to prepare students for employment in clerical and administrative assistant positions.

- Skills - accounting, word processing, spreadsheets, databases, multimedia presentations, management fundamentals and office procedures \& protocols
- Features - most current office software \& technology, Accounting 30S \& 40S credits fulfill high school math requirement, work practicum in an office (6 weeks)
- Part 1-4 credits, offered in semester 1
(part 1 must be taken before part 2)
- Part 2-4 credits, offered in semester 2
- External Industry Certification - can take any one of the Microsoft Office Specialist exams in Word, Excel, Access or PowerPoint (extra fees apply)

Automotive Technology Designed for students with strong personal interest in automotive technology and to prepare students for employment or further education in the automotive industry.

- Skills - diagnosis and repair related to basic service, mig \& gas welding, brakes, engine fundamentals \& performance applications, fuel systems, chassis \& drive train and electronics
- Features - theory (1 period/day), practical lab work (1 period/day), on-the-job training on customer vehicles in a well-equipped 12 bay shop ( 2 periods/day) and industry work practicum (4 weeks) matched to student's interests
- Part 1 - 4 credits, offered in semester 1 (students normally take part 1 before part 2 - exceptions based on Industrial Arts or past experience)
- Part 2-4 credits, offered in semester 2
- Apprenticeship Manitoba - can receive credit for Level 1 inschool technical training for the trade of Automotive Service Technician
- Red River College - can receive credit in the Automotive Technician Certificate Program

[^1]Baking \& Pastry Arts Designed for students with strong personal interest in pastry and baking and to prepare students for employment in the food services industry, retail and commercial bakeries and in pastry shops, specialty shops, corporate and health care cafeterias, cruise ships and international resorts and hotels.

- Skills - Sanitation and safety procedures, bakery management, quick breads \& cookies, yeast goods, wedding \& occasional cake production and decorating, special pastries, chocolate, artistic show pieces
- Features - theory (1 period/day), on-the-job training in well-equipped bakery (3 periods/day)
- Part 1-4 credits, offered in semester 1

Part 2 - 4 credits, offered in semester 2
(part 2 may be taken before part 1)

- Apprenticeship Manitoba - opportunities are available

Building Trades Designed to provide students (minimum 16 years old) with valuable on-the-job experience in one or more building construction trade(s) of personal interest such as carpentry, concrete, bricklaying, framing, heating, plumbing, painting and cabinet-making in preparation for employment, apprenticeship or further education.

- Skills - theory and demonstrations focus on all aspects of residential construction including blueprints, concrete, framing, exterior coverings \& roofing, interior millwork \& finishing, cabinets \& finish coatings, electrical, heating \& airconditioning and renovations. On-the-job skills training will vary depending on the trade chosen for industry work practicum.
- Features - theory \& demonstrations (Mondays at ATC) and industry work practicum (Tuesday - Friday on job sites). Students are required to travel to job sites and may work in adverse conditions.
- Part 1-4 credits, offered in semester 1
- Part 2-4 credits, offered in semester 2
(part 2 may be taken before part 1)
- Apprenticeship Manitoba - opportunities are available

Culinary Arts This program is designed for students with strong personal interest in culinary arts and to prepare students for employment locally, nationally or internationally or for further education in the food services industry.

- $\quad$ Skills - preparation of fruits \& vegetables, stocks, soups \& sauces, meats, poultry, fish \& seafood, baking \& pastry, nutrition, garde manger, management, purchasing, costing, catering and entrepreneurship
- Features - theory (1 period/day), on-the-job training in well-equipped commercial kitchen (3 periods/day), on-site and off-site catering, industry work practicum (4 weeks), culinary competitions.
- Part 1-4 credits, offered in semesters $1 \& 2$
(part 1 must be taken before part 2)
- Part 2-4 credits, offered in semesters 1 \& 2
- Manitoba Apprenticeship - can receive credit for Level 1 inschool technical training for the trade of Cook
- Red River College - can receive credit in the Culinary Arts Program

Early Childhood Educator Designed for students with strong personal interest in early childhood education and to prepare students for employment in child care centres. This program provides a strong foundation and a head start for students considering further post-secondary education leading to Early Childhood Educator II (ECE II) designation.

- $\quad$ Skills - development of self-regulation through guided practice, planning play-based experiences and interacting with children through play, providing nurturing care, cultural diversity and family dynamics, human development, infancy \& toddlerhood, and communication.
- Features - comprehensive child development theory delivered in a teacher-led classroom environment, weekly work practicum in a child care facility
- Part 1-4 credits, offered in semester 1
- Part 2-4 credits, offered in semester 2 (part 2 may be taken before part 1)
- Red River College - students who complete the ATC program with a grade of $65 \%$ or greater in each course can apply to enter directly into Term 2 of the four-term Early Childhood Education program. RRC Early Childhood Education graduates earn credit toward degree programs at several universities; please see RRC website for details.

Electrical Trades Designed for students with strong interest in electrical trades. A pre-employment program for individuals who have good mathematical capabilities and are seeking apprenticeship opportunities in electrical trades or considering a career in electrical engineering.

- Skills - principles of electronics including relevant mathematics and physics, Canadian Electrical Code, AC/DC Circuits, residential and industrial wiring, conduit bending, armoured cable applications, blueprint reading, installation of complete systems.
- Features - Theory in a teacher-led classroom environment, hands-on practical work in a lab facility
- Part 1-4 credits, offered in semester 1
(part 1 must be taken before part 2)
- Part 2-4 credits, offered in semester 2
- Apprenticeship Manitoba - students may challenge the Level 1 theory exam administered by Apprenticeship Manitoba. To be eligible, students must gain employment under the supervision of a Journey person Electrician and register as apprentices. Students may begin Apprenticeship while in school.

Esthetics This program is designed for students with strong personal interest in nail and skin care and to prepare students for employment as estheticians or nail technicians in a salon or spa.

- Skills - manicures, pedicures, nail extensions, nail art \& nail treatments, skin treatments, make-up application and hair removal
- Features - theory, practice on mannequins, on-the-job training on clients in a well-equipped salon facility, competitions
- Part 1 (Nail Technology) - 4 credits, offered in semester $1 \& 2$ (part 1 must be taken before part 2; students must maintain a $70 \%$ average and complete required hours throughout part 1 to be eligible to proceed to part 2)
- Part 2 (Skin Care Technology) - 5 credits, offered in semester 1 \& 2
- Apprenticeship Manitoba - students who successfully complete Part 1 (Nail Technology) and obtain a grade of $70 \%$ or higher on each component of the practical exam administered by Apprenticeship Manitoba will be eligible to enter a one-year apprenticeship in a salon, which will lead to journeyman status as a Nail Technician. Students who successfully complete Parts 1 \& 2 (Nail Technology \& Skin Care Technology) and pass the practical exam administered by Apprenticeship Manitoba will be eligible to enter a twoyear apprenticeship, which will lead to journeyman status as an Esthetician.

Hairstyling This program is designed for students with strong personal interest in hairstyling and to prepare students for employment as a hairstylist for both men and women.

- Skills - safety \& sanitation, hair analysis, shampooing \& hair cutting, waving \& straightening, permanents, bleaching, conditioning, hairstyling, hair coloring, beauty treatments on face and neck, wig \& hairpiece service, trimming beards \& mustaches, makeup, eyebrow \& eyelash treatments, manicures on natural nails and salon management
- Features - theory, practice on mannequins, on-the-job training on clients in a well-equipped salon facility, industry work practicum (1 week), hairstyling competitions
- Part 1-5 credits, offered in semesters 1 \& 2
(part 1 must be taken before part 2)
- Part 2 - 5 credits, offered in semesters $1 \& 2$
(part 2 must be taken before part 3)
- Part 3-2 credits, offered in semesters 1 \& 2
- Apprenticeship Manitoba - successful students will be eligible to enter a two-year apprenticeship in a salon, which will lead to red seal journeyman status as a Hairstylist. Students may be eligible to begin a paid apprenticeship while enrolled in the program.

Information Systems Architect Designed for students with strong personal interest in computer repair and networking and to prepare students for employment in the installation and maintenance of computer hardware, software and network infrastructure. ATC is part of the Cisco Academy Program.

- Skills - software, hardware and networking fundamentals and troubleshooting, security and forensic techniques, network gaming and optimization, router programming, home and small business networking solutions.
- Features - theory, on-the-job training on clients' computers, industry work practicum ( 5 weeks)
- Part 1-4 credits, offered in semester 1. (Students normally take Part 1 before Part 2 - exceptions based on experience)
- Part 2-4 credits, offered in semester 2.
- Red River College - can receive credit in the following programs: Electronic \& Network Technician, Electronic \& Network Technician, Electrical/Electronic Engineering Technology, Network Technology (CCNA).
- External Industry Certification - Students completing Part 1 can write the CompTIA A + Computer Repair Technician exam. In Part 2, students may also choose to write the CompTIA Net+ Network Technician exam. Upon completion of first two courses of the Cisco Discovery curriculum, students may be eligible to write the Cisco CCENT Cisco Certified Entry Network Technician exam (extra fees apply).

New Media Design This course will expose students to different aspects of the New Media Industry through participation in the work flow of designing and developing an online presence. This program provides a solid foundation for students considering a career in website development, computer programming, digital media design, game design and development or other information technology fields whether through direct employment, self-employment or further study at university or Red River College.

- Skills - HTML, CSS, Java Script, PHP, website creation and maintenance using Dreamweaver, web layouts and graphics using Photoshop and Fireworks, Flash Games \& Action Script, database concepts, business concepts including SEO and Social Media, project management.
- Features - web project for a business client(4 months), online portfolio development
- Part 1-4 credits, offered in semester 1
(part 1 must be taken before part 2)
- Part 2-4 credits, offered in semester 2
- Red River College - can receive credit in the following programs: Digital Media Design and Business Information Technology

[^2]
## High School Apprenticeship Program (HSAP) Available in LRSD High Schools

HSAP allows Louis Riel School Division students, while attending their home high school or ATC, to earn up to eight grade 12 credits and up to 880 hours of on-the-job training towards continued apprenticeship training after graduation. Depending on school timetable, students may be able to do paid work during the day, evening, or weekend. Summer work can count too. Students must work a minimum of 110 hours towards apprenticeship in any of the designated trades and obtain a grade of $70 \%$ or higher on their evaluation to be eligible to receive one credit. ATC students who register for HSAP can combine their on-the-job hours earned in an ATC program with hours earned through HSAP for a significant start on apprenticeship.

- Skills - on-the-job skills in over 40 trades consistent with Apprenticeship Manitoba guidelines for training
- Features - a way to make your part-time job count and earn grade 12 credits towards graduation, allows you to begin apprenticeship while in school, you get paid to learn
- Prerequisites - high school students must have a complete Grade 10, students must be at least 16 years old.
- Student's Responsibilities - to gain entry into the HSAP program the student:
- finds an employer willing and able to train an apprentice
- contacts the LRSD apprenticeship teacher
- works with school to ensure an appropriate timetable is possible.

Once accepted into the HSAP program, the student:

- arranges travel to and from work
- maintains all in-school studies and a $70 \%$ mark in on-the-job training
- informs the employer of any absences
- reports regularly all hours worked to the LRSD apprenticeship teacher
- How to Register - students may see Mr. Darry Stevens, Louis Riel School Division HSAP Teacher, at their home school or contact him by phone at 204-792-4816. More information about HSAP is available online at http://www.Irsd.net/schools/atc
- Qualifying Trades


## INDUSTRIAL

- Boilermaker
- Electric Motor System Technician
- Industrial Electrician
- Industrial Instrument Mechanic
- Industrial Mechanic (millwright)
- Machinist
- Power Electrician
- Steel Fabricator
- Tool and Die Maker
- Welder


## TRANSPORTATION

- Agricultural Equipment Technician
- Aircraft Maintenance Journeyperson
- Automotive Service Technician
- Diesel Engine Mechanic
- Gas Turbine and Overhaul Technician
- Heavy Duty Equipment Mechanic
- Marine \& Outdoor Power Equipment Technician
- Motor Vehicle Body Painter
- Motor Vehicle Body Repairer
- Railway Car Technician
- Recreational Vehicle Service Technician
- Transport Trailer Technician
- Truck \& Transport Mechanic


## CONSTRUCTION

- Bricklayer
- Cabinetmaker
- Carpenter
- Concrete Finisher
- Construction Craft Worker (Labourer)
- Construction Electrician
- Crane \& Hoist Equipment Operator
- Glazier
- Mobile Crane Operator
- Boom Truck Hoist Operator
- Tower Crane Operator
- Power Generation and Transmission Boom Truck Hoist Operator
- Gasfitter
- Domestic Gasfitter
- Insulator (Heat \& Frost)
- Ironworker
- Lather (Interior Systems Mechanic)
- Painter \& Decorator
- Plumber
- Refrigeration \& Air

Conditioning Mechanic

- Rig Technician
- Roofer
- Sheet Metal Worker
- Sprinkler System Installer
- Steamfitter-Pipefitter
- Water and Wastewater Technician


## Post-Secondary Education Information

Graduating from high school does not automatically qualify students to attend university and/or college. Each Post-Secondary Institution has its own set of entrance requirements and criteria. Visit the websites for the most up to date information on program entrance requirements. If you are unsure, about your course selection, make an appointment in the Academic Centre to go over your choices.

A general rule for schools in Manitoba - you will need 5, grade 12 level courses - not including Phys. Ed.

University of Manitoba - www.umanitoba.ca - click on Future Students on the Home page.

University of Winnipeg - www.uwinnipeg.ca - click on Future Students on the Home page.

Red River College - www.rrc.mb.ca - click on Programs \& Courses on the Home page

Louis Riel Art and Technology Centre \& Winnipeg Tech Centre: Resources are available in the Academic Centre.


[^0]:    Important Note:
    After you graduate, you may wish to go to university, college, or become an apprentice etc. Some programs that you may want to take have prerequisites. If you have not taken these particular credits in high school they will not let you into the program.

    This means that some of the science courses that are chosen, or not, in grade 11 may have an affect on whether or not a student can take the program that they want after they graduate.

[^1]:    For more detailed information about specific programs, see your counsellor for a brochure or call 2042378951. website: www.lrsd.net/schools/atc facebook: www.facebook.com/atcLRSD twitter: @ArtsTechCentre

[^2]:    For more detailed information about specific programs, see your counsellor for a brochure or call 2042378951. website: www.lrsd.net/schools/atc facebook: www.facebook.com/atcLRSD twitter: @ArtsTechCentre

