Walter Murray Advantage

Walter Murray is a comprehensive collegiate which means our size and facility allows for the broadest range of programming and extra-curricular offerings in Saskatoon. Our school community is noted for its excellence in academics, athletics, fine arts, and technology. Consequently, our students earn valuable scholarships and academic opportunities around the globe, find employment in industry and trades, and become exemplary citizens and leaders in their communities.

Diversity

Walter Murray welcomes all types of learners. Special needs students and those who require enrichment, modification, second language support, or hands on opportunities will find courses and extra-curricular offerings suited to their interests and abilities. Walter Murray students represent more than forty different nationalities and come from all areas of Saskatoon.

Opportunity

Our programming is as diverse as our population. Walter Murray offers a full range of secondary academic classes, French Immersion, SAGE Program, English as an Additional Language, Resource Support, and numerous Practical and Applied Arts courses. Students can take advantage of specialized offerings such as Hockey, Aviation Studies, Dance, Music, Drama, Commercial Cooking, Skilled Trades of Construction (STOC), Graphic Arts, Welding, Mechanics, Photography, Machining, Electronics, as well as Construction and Carpentry.

Community

The staff and students of Walter Murray Collegiate are committed to a school environment that promotes a sense of safety, belonging, and equality where mutual respect and the pursuit of learning are important components of our school community. We work to maintain a safe and inclusive atmosphere and positive relations with our neighbors. Student Services counsellors and our RAP (Restorative Action Program) worker support students in healthy decision-making and conflict resolution.
Grade 9 Program

The main goal of Walter Murray’s Grade 9 program is to support student transition from Grade 8 to 9 using a variation of a middle years model within a high school. We want students to feel connected to our school and their learning. The Grade 9 programming at Walter Murray has been structured so students are not overwhelmed by the physical space of our large collegiate and by the numbers of students and staff. Students are grouped into cohorts based on programming choices. Please note – all Grade 9 program groupings provide the core Grade 9 classes.

The Grade 9 experience at Walter Murray is an interdisciplinary, project-based program that meets Grade 9 curriculum outcomes. Teachers work collaboratively within student groupings to deliver programming that meets individual students academic needs. We have an EAL support teacher, a resource teacher, and a literacy teacher involved in co-teaching and supporting students in our programming cohorts. Within the Grade 9 compulsory courses, there are varying levels of integration with the program groupings. Students who are two or more grade levels below regular math programming may be candidates for Math 9 Plus, a course designed to reinforce foundational concepts while meeting Math 9 outcomes.

<table>
<thead>
<tr>
<th>POD Programming</th>
<th>French Immersion</th>
<th>SAGE Program Application Required</th>
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</thead>
<tbody>
<tr>
<td>English Language Arts A</td>
<td>Français A</td>
<td>SAGE Courses Include:</td>
</tr>
<tr>
<td>English Language Arts B</td>
<td>Français B</td>
<td>English Language Arts A and B</td>
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<tr>
<td>Social Studies</td>
<td>Sciences Humaines</td>
<td>Math</td>
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<tr>
<td>Math</td>
<td>Mathématiques</td>
<td>Science</td>
</tr>
<tr>
<td>Science</td>
<td>Practical and Applied Arts Sciences</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Arts Education</td>
<td>English Language Arts Éducation artistique</td>
<td></td>
</tr>
<tr>
<td>Practical and Applied Arts</td>
<td>Physical Education, Health, and Career</td>
<td>Regular courses:</td>
</tr>
<tr>
<td>Physical Education, Health, and Career</td>
<td></td>
<td>Practical and Applied Arts</td>
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<td>Arts Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical Education, Health, and Career</td>
</tr>
<tr>
<td>Students choose two electives</td>
<td>Students choose one elective</td>
<td>Students choose two electives</td>
</tr>
<tr>
<td></td>
<td>*please note Éducation artistique is integrated with Français A and Français B</td>
<td></td>
</tr>
</tbody>
</table>

Electives:
- Sew and Home
- Grow and Home
- Hockey
- EAL Support
- Choral
- Technology Survey
- Band
- Resource
- Core French
LEVELS OF INSTRUCTION

REGULAR LEVEL courses are designed for students whose achievement and rate of learning in the subject are average. Instruction includes sufficient repetition to ensure mastery. Differentiation and accommodations occur in all regular classrooms to meet the needs of the learners.

MODIFIED LEVEL modified courses are offered for grade 10—12 students whose diverse learning needs may not be best met in a regular class setting. This includes students who may require teaching and learning adaptations as well as course modifications. Students may take modified courses if they are designated for the program based on consultation between the student, parent/guardian and school. Modified courses offered for grade 10—12 students include: English, Mathematics, Science and History.

ASSIGNING / CHOOSING LEVELS
Current students may request a level change after consultation with teachers and appropriate discussion with parents. Parents must sign the level change form. When there are differences between a student’s request and the department’s recommendation, consultations will be arranged between the department, the student and/or parents/guardians.

As all SAGE Program courses are locally modified and Provincial Curricula are in the process of renewal, there may be times where a course cannot be offered as an SAGE Program credit.

The students from the SAGE Program will still be congre-gated together for these classes, and there will be many opportunities for enrichment, but they will not receive a designa-tion from the Ministry of Learning for an advanced cred-it in that particular course.

It is not possible to be registered in the SAGE Program and French Immersion at the same time; nor is it possible to take some SAGE Program classes and not others during an aca-demic year.

Grade Ten:
English Language Arts A and B 10 Advanced, History 10 Advanced, Math Foundation and Pre-calculus 10 Advanced, and Science 10 Advanced. The focus for these courses will be to incorporate a variety of learning strategies such as: problem solving, laboratory work and presentations. Grade ten English will incorporate a creative writing unit. Student research and interviews with local experts are followed by a presentation to the class.

Grade Eleven:
English Language Arts A 20 Advanced, History 20 Advanced, Health Science 20 Advanced and Inquiry 20 Adv. The 20 level will offer a choice of math pathways depending on student priority and preference—MAF20 Math and/or MPC20. The Inquiry 20 course is a semester-long research project focusing on a self-selected topic that is of relevance and interest to the student. Students will collaborate with teachers to design, guide, and grade their projects.

Grade Twelve:
English Language Arts A and B 30 Advanced, History 30 Advanced, Biology 30 Advanced and a minimum of four electives. The Canadian Literature component of English Language Arts B 30 Advanced parallels the Canadian History component of History 30 Advanced where unit themes coincide.

LIFE SKILLS WORK STUDY (LSWS)
*Applicants must be approved by the Special Education Coordinator

The Life Skills Work Study (LSWS) Program is an accredited Alternate Education Program at the secondary level. The staff plan and deliver individualized programs to students, work with other teachers when students are integrated into regular classes and create work education experiences in the community.

The goals of the program are to provide the students with a well rounded education that upon graduation will provide them with the skills to become independent members of the community. Completion of the LSWS program allows the students to participate in the school’s annual graduation ceremonies. They earn an Alternate Grade 12, however, it is not recognized for entrance to most post secondary programs outside of high school. Students are expected to use public transportation.

In grades nine and ten, students complete course work in key academic areas (language arts, math, science, social science,) as well as participate in group work experiences within the school and the community.

In grades 11 and 12, key academic subjects continue to be worked, on, however the emphasis on work education becomes more specific to the individual as students start to plan for future employment and independent living. Students are expected to use public transportation independently. There is a class fee of approximately $10 for Life Skills Work Education 20 / 30.
### Grade 9

**Mandatory:**
- Français A09
- Français B09
- Mathématiques 09
- Sciences 09
- Histoire 09
- Mathématiques Humaines 09
- Sciences Humaines 09
- English Lang. A 09
- English Lang. B 09

**Unspecified Electives:**
1. __________  □
2. __________  □
3. __________  □

*Please note: Éducation artistique is integrated with Français A and Français B*

### Grade 10

**Mandatory:**
- Français 20
- Mathématiques 20
- Sciences 20
- Français Intégré 20
- Health 20
- Mathématiques 20
- English Lang. A10
- English Lang. B10

**Unspecified Electives:**
1. __________  □
2. __________  □
3. __________  □

### Grade 11

**Mandatory:**
- Français 20
- Mathématiques 30
- Sciences Sociales 30
- English Language 20

**At least one of:**
- Computer Science 20
- Environmental Science 20
- Health Science 20
- Physical Science 20
- Science 21

**Unspecified Electives:**
1. __________  □
2. __________  □
3. __________  □
4. __________  □

### Grade 12

**Mandatory:**
- Français 30
- Mathématiques 30
- Sciences Sociales 30
- English Lang. A30
- English Lang. B30

**Unspecified Electives:**
1. __________  □
2. __________  □
3. __________  □
4. __________  □

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**FIA/FIB count as the 2 PAA for French Immersion**

Total of 12 credits (grade 10, 11, 12) must be in French to receive Bilingual status with Saskatchewan Learning.

Total of compulsory and elective courses at grades 10, 11, and 12 must be greater than or equal to 24.

**NOTE:** Meeting minimum requirements does not necessarily satisfy entrance requirements for post-secondary institutions. Please consult with counsellors to confirm appropriate program choices.

Being able to speak many languages promotes understanding, tolerance and an open mind toward other people and cultures. **Students in Grade 12 may wish to take both English classes to meet post-secondary requirements.**
YOUR FOUR YEAR ENGLISH PLAN
FOR
MEETING CORE CURRICULUM REQUIREMENTS
AT
WALTER MURRAY COLLEGIATE

Grade 9
Mandatory:
- English A09
- English B09
- Social Studies 09
- Math 09
- Science 09
- Arts Ed 09
- PAA09
- PE/Health/Career Ed 09

Unspecified Electives:
1. __________
2. __________

Grade 10
Mandatory:
- English A 10 /or A 11
- English B 10 /or B 11
- History 10 /or 11
- Native Studies 10
- Science 10 /or 11
- Wellness 10
- Mathematics MWA10
  ***AND/or
  MFP10
  or
  Mathematics 11

Unspecified Electives:
(minimum of 2)
1. __________
2. __________
3. __________
4. __________

Total Credits

Grade 11
Mandatory:
- English 20/or 21
- At Least one Mathematics
  Mathematics 21
  MAF20
  MWA20
  MPC20
- At least one Natural Science:
  Health Science 20
  Physical Science 20
  Science 21
  Computer Science 20
  Environmental Science 20
- At least one Humanity:
  History 20 /or 21
  Native Studies 20 or 30
  Law 30
  Psychology 20 or 30

Unspecified Electives:
(minimum of 3)
1. __________
2. __________
3. __________
4. __________
5. __________

Total Credits

Grade 12
Mandatory:
- English A30 /or A31
- English B30 /or B31
- History 30 /or 31
  or
  Native Studies 30

Unspecified Electives:

Total Credits

At least two Arts Education or Practical & Applied Arts Electives at the 10, 20, or 30 level.

Total of compulsory and elective courses at the 10, 20 and 30 level must be equal to or greater than 24.

***We recommend grade 10 students take both MWA10 and MFP10.

NOTE:
Meeting minimum requirements does not necessarily satisfy entrance requirements for post-secondary institutions. Please consult with counsellors to confirm appropriate program choices.
<table>
<thead>
<tr>
<th><strong>Course Offerings by Department and Grade</strong></th>
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</thead>
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<tr>
<td><strong>GRADE 09</strong></td>
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<td><strong>Fine Arts</strong></td>
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<td><strong>Languages</strong></td>
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<td><strong>Mathematics</strong></td>
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<td><strong>Physical Education</strong></td>
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<td><strong>Social Sciences</strong></td>
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<tr>
<td><strong>Other Social Sciences</strong></td>
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<tr>
<td><strong>Sciences</strong></td>
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</tbody>
</table>
**Course Offerings by Department and Grade**

<table>
<thead>
<tr>
<th>GRADE 09</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Ed</td>
<td>Accounting 10</td>
<td>Accounting 20</td>
<td>Accounting 30</td>
</tr>
<tr>
<td></td>
<td>Computer Processing 10</td>
<td>Comp. Proc. 20</td>
<td>Comp. Proc. 30</td>
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<tr>
<td></td>
<td>Comm. Media 20</td>
<td>Comm. Media 30</td>
<td>Entrepreneurship 30</td>
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<td>Career Work</td>
<td>Career Work</td>
<td>Career Work Exploration</td>
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<tr>
<td></td>
<td>Exploration 10</td>
<td>Exploration 20</td>
<td>A30 &amp; B30</td>
</tr>
</tbody>
</table>

**Practical & Applied Arts**

PAA09
Grow and Home 09
Survey

Sew and Home 09
Survey

Technology 09 Survey

<table>
<thead>
<tr>
<th>GRADE 09</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foods &amp; More Survey 10</td>
<td>Aviation Studies 20</td>
<td>Interior Design 30</td>
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<tr>
<td></td>
<td>Drafting 10</td>
<td>Drafting 20</td>
<td>Comm. Cooking 30</td>
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<td></td>
<td>Electronics 10</td>
<td>Electronics 20</td>
<td>Aviation Studies 30</td>
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<tr>
<td></td>
<td>Photography 10</td>
<td>Photography 20</td>
<td>Drafting 30</td>
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<tr>
<td></td>
<td>Machining 10</td>
<td>Machining 20</td>
<td>Electronics 30</td>
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<tr>
<td></td>
<td>Mechanics 10</td>
<td>Mechanics &amp; Auto 20</td>
<td>Photography 30</td>
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<td></td>
<td>Welding 10</td>
<td>Welding 20</td>
<td>Graphic Arts 30</td>
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<tr>
<td></td>
<td>Construction/Carpentry 10</td>
<td>Construction/Carpentry 20</td>
<td>Machinery 30</td>
</tr>
<tr>
<td></td>
<td>Yearbook Production 10</td>
<td>Yearbook Production 20</td>
<td>Mechanics 30A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mechanics &amp; Auto 30B</td>
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<td></td>
<td>Welding 30</td>
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<tr>
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<td>Construction/Carpentry 30</td>
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<td></td>
<td>STOC Program 30</td>
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<tr>
<td></td>
<td></td>
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<td>Yearbook Production 30</td>
</tr>
</tbody>
</table>

**Other**

LSWS 09
LSWS 10
LSWS 20
LSWS 30

EAL Support
EAL Support
EAL Support
EAL Support

Resource Support
Resource Support
Resource Support
Resource Support

Driver Education

**RESOURCE PROGRAM:** The resource room program is designed to provide support to students in grades 9—12 to be successful in their core academic classes required for graduation. Exam writing, study methods, and organizational skills are learning strategies taught to enhance a student’s success. The resource room teachers work with classroom teachers to adapt curriculum, and evaluation in order to meet the needs of the individual student.

*Compulsory courses are noted in the planning guide on page 4 & 5 of this booklet. We encourage students to use the planning guide to record and plan their course selections. It is the student’s responsibility to ensure that the provincial graduation requirements have been met. Our counselors are available to assist students if needed.

*University and technical institute entrance requirements differ from the minimum secondary school graduation requirements. Students should be sure to research post-secondary requirements and to seek the early assistance of counselors to ensure that they have the required subjects.*
ENGLISH A 10 (ELA10 / ELA20)
Prerequisite: ELA09 and ELB09
Students will explore two themes: The Challenges of Life and The Mysteries of Life. Students will extend their abilities to view, listen to, read, comprehend, and respond to a variety of contemporary and traditional grade-level-appropriate texts in a variety of forms (oral, print, and other texts) from First nations, Metis, and other cultures for a variety of purposes including for learning, interest, and enjoyment. Students will also extend their abilities to speak, write, and use other forms of representation to explore and present thoughts, feelings, and experiences in a variety of forms for a variety of purposes and audiences. Also, students will assess and reflect on their own language skills; discuss the skills of effective viewers, listeners, readers, representors, speakers, and writers, and set goals for future improvement.

ENGLISH B 10 (ELB10 / ELB11)
Prerequisite: ELA09 and ELB09
Students will explore two themes: Equity and Ethics and The World Around and Within Us. Students will extend their abilities to view, listen to, read, comprehend, and respond to a variety of contemporary and traditional grade-level-appropriate texts in a variety of forms (oral, print, and other texts) from First nations, Metis, and other cultures for a variety of purposes including for learning, interest, and enjoyment. Students will also extend their abilities to speak, write, and use other forms of representation to explore and present thoughts, feelings, and experiences in a variety of forms for a variety of purposes and audiences. Also, students will assess and reflect on their own language skills; discuss the skills of effective viewers, listeners, readers, presenters, speakers, and writers, and set goals for future improvement.

ENGLISH A 20 (ELA20 / ELA21)
Prerequisite: ELA10 and ELB10
Students will explore the themes of Reflections and Anticipations through various writing forms. The development of reading, writing, speaking, listening, representing, and viewing skills are integral parts of the course.

CREATIVE WRITING 20 (ELW20)
Prerequisite: ELA10 and ELB10 or completion of ELA10 and the permission of the teacher
Creative Writing fosters the excitement of writing in a workshop atmosphere where you have numerous opportunities to write in a variety of genres. You will acquire the expertise to generate ideas, develop language precision, edit with understanding and confidently deliver a published work to an audience. Creative Writing develops important life skills such as communication, time management, self-expression and critical and creative thinking.

MEDIA STUDIES 20 (EMC20)
Prerequisite: ELA 10 or ELB 10
In Media Studies 20, students will analyze, critique, and create media and pop culture products. Skills learned in this class will include, presenting, evaluating, analyzing and producing. Course work will be organized around topics such as advertising analysis and construction, television and news critique and creation, and film appreciation and production. Students will explore values and ethics in media and become informed and critical viewers.

ENGLISH A 30 (ELA30 / ELA31)
Prerequisite: ELA20—open to grade 12 only
National issues are addressed as reflected in the traditional and contemporary literature of Canada and its regions. Themes are: Canada’s Regions - The Experience of Place; Canada - The National Identity; and Canada’s Marginalized Voices – First Nations, Immigrants, and Female voices. The development of reading, writing, listening, speaking, representing, and viewing skills are integral parts of the course.

ENGLISH B 30 (ELB30 / ELB31)
Prerequisite: ELA20—open to grade 12 only
Global perspectives are examined using traditional and contemporary world literature. Themes are World Perspectives, Cultural Heroes, The Human Condition, and The Social Experience. The development of reading, writing, speaking, listening, representing, and viewing skills are integral parts of the course.

CREATIVE WRITING 30 (CRW30)
Prerequisite: Students must be in their fourth year of secondary school. Creative Writing 20 is recommended.
Are you passionate about writing? This course will allow you to explore the genre or theme of your choice. You will write daily, developing your craft through assigned exercises and generating and refining your work in a series of portfolios. You will also edit the work of other young writers and explore the published works of significant writers in your genre. We strongly encourage students to complete Creative Writing 20 prior to registering in this class; those who have not done so must seek department coordinator permission prior to registering in CW30. This class is not a substitute for any required English Language class.

JOURNALISM STUDIES 20 (JOU20)
Prerequisite: Students must be in their fourth year of secondary school. Journalism 20 will introduce you to the exciting and rapidly-evolving world of print, broadcast, and electronic journalism. You will learn the fundamentals of news, feature, and editorial writing, as well as writing for radio, television, and interactive technology. You will conduct research and interviews, produce original content, and tell the stories important to you and your school community. Journalism Studies will also examine the history and role of the press, as well as contemporary issues like media bias, ethical responsibility, fake news, clickbait, and the decline of newspapers. This project-based course will cover the principles of journalism, while providing freedom to explore the aspects of the craft most appealing to you (e.g. reporting, writing, editing, mixing, photography, publicity, design, and management).

English Language Arts
ELA09 — ELB09 — ELA10/11 — ELB10/11 — ELA20 — ELA30/31 — ELB30/31 — ELW20 — CRW30 — EMC20
• This class may not be substituted for the compulsory ELA20 or 30 credits. It is advised that students complete one grade level before moving on to the next.
MATHEMATICS

To meet the credit requirements for graduation, students are required to take two mathematics courses at the Secondary Level. These courses must include one course at Grade 10 and one at Grade 11 from one of the three pathways or modified basic math. Grade 12 mathematics courses are not required for graduation, but may be taken as electives, since post-secondary programs may require these classes. Students should be sure to research what is required for a particular program of interest to ensure prerequisites are attained.

<table>
<thead>
<tr>
<th>Compulsory Mathematics Courses</th>
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<tbody>
<tr>
<td><strong>Grade 10</strong></td>
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<tr>
<td>One of:</td>
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<tr>
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<tr>
<td>Locally Developed Courses</td>
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<td>Pathways</td>
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<tr>
<td>Provincial Curriculum</td>
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<tr>
<td>Workplace and Apprenticeship Mathematics 10</td>
</tr>
<tr>
<td>Foundations of Mathematics and Pre-calculus 10</td>
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<tr>
<td>Pre-calculus 20</td>
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</tbody>
</table>

All three pathways and the modified basic math courses are designed to provide students with mathematical understandings and critical thinking skills. It is the choice of topics and instructional approaches through which those skills are developed that varies among the pathways. The common goal is to provide prerequisite skills, knowledge and attitudes necessary for specific career choices while still providing mathematically rigorous courses.

The Ministry of Education recommends that students take both grade 10 courses to give them exposure to both Pathways of mathematics. This will also ease transitions for those students who wish to change pathways during their high school years. Many students find it beneficial to take Foundations 20 prior to Pre-Calculus 20.

Modified Basic Mathematics Courses – Placement of students in these courses is recommended after students’ academic strengths and weaknesses are determined through formal and informal means. The content of these locally developed courses is designed around the themes of Earning and Spending Money, Home, Recreation and Wellness, and Travel. Students will become mathematically literate and numerate to then be able to analyze situations and make life decisions and continue with select post-secondary programs.

MATHEMATICS 11 (MTH11)
Prerequisite: Mathematics 09
Topics: arithmetic operations, logic and reasoning, data collection and analysis, Imperial and metric systems of measurement, angles, proportional reasoning, algebra, wages, salaries.

MATHEMATICS 21 (MTH21)
Prerequisite: Mathematics 11
Topics: preservation of equality, numerical and proportional reasoning, angles, primary trigonometric ratios, budgeting, statistics, logical reasoning, credit.

Workplace and Apprenticeship Mathematics Pathway
This pathway is designed to provide the mathematical understandings and critical-thinking skills needed for students intending to pursue careers in the trades and general workplaces.

WORKPLACE AND APPRENTICESHIP 10 (MWA10)
Prerequisite: Mathematics 09
Topics: Unit Pricing, wages, salaries, deductions, Imperial system of measurement and SI system of measurement, surface area, angles and parallel lines, similar figures, and trigonometry

WORKPLACE AND APPRENTICESHIP 20 (MWA20)
Prerequisite: Workplace and Apprenticeship 10
Topics: slope and rate of change, graphing, surface area, volume, trigonometry, scale representation, and financial servicing – personal loans, line of credit, personal budgeting.

WORKPLACE AND APPRENTICESHIP 30 (MWA30)
Prerequisite: Workplace and Apprenticeship 20
Topics: reasoning, measurement, sine and cosine law, properties of polygons, transformations, finances, linear relations, measures of central tendency, percentiles, and probability.
FOUNDATIONS OF MATHEMATICS AND PRE-CALCULUS 10
Prerequisite: Mathematics 09 (MFP 10)
Topics: linear measurement, systems of measurement, trigonometry, multiplying and factoring polynomials, radicals and powers, relations and functions and systems of linear equations.

FOUNDATIONS OF MATHEMATICS 20
Prerequisite: Foundations of Mathematics and Pre-Calculus 10 (MAF 20)
Topics: inductive and deductive reasoning; properties of angles and triangles, triangle trigonometry, statistical reasoning, systems of linear inequalities, quadratic functions and equations, and proportional reasoning.

FOUNDATIONS OF MATHEMATICS 30
Prerequisite: Foundations of Mathematics 20 (MAF 30)
Topics: finances, reasoning; set theory; odds and probability; permutations and combinations; polynomial, exponential, logarithmic and sinusoidal functions.

Pre-Calculus Pathway
Students in the Pre-Calculus Mathematics pathway will spend more time developing their knowledge of symbol manipulation (Algebra) and the more formal generalizations of mathematical concepts. This pathway is intended for students who may wish to pursue mathematical-related studies at the post-secondary level and prepares students for the study of Calculus 30.

FOUNDATIONS OF MATHEMATICS 10
Prerequisite: Mathematics 09 (MFP 10)
Topics: linear measurement, systems of measurement, trigonometry, multiplying and factoring polynomials, radicals and powers, relations and functions and systems of linear equations.

PRE-CALCULUS 20
Prerequisite: Foundations of Mathematics and Pre-Calculus 10 (MPC20)
Topics: sequences and series, trigonometry, quadratic functions, quadratic equations, radical expressions and equations, absolute value and reciprocal functions, systems of equations, linear and quadratic inequalities.

SCIENCES

SCIENCE 11
Prerequisite: Science 09 and approval of the level change (SCI11)
This course is intended for students who have experienced difficulty in previous science classes and have completed the level change form in student services. This is a modified course.

SCIENCE 21
Prerequisite: Science 10 or Science 11 (SCI21)
This course is intended for those students who have experienced difficulty in previous science classes, completed a level change form in student services, and require a 20-level science course to graduate. This is a modified course.

SCIENCE 10
Prerequisite: Science 09 (SCI10)
Science 10 is a foundational science course, covering the learning outcomes of chemical reactions, force & motion, climate & ecosystems. A student-directed exploration of careers in science is paired with the previously mentioned outcomes to give students the experience and prerequisites necessary to pursue all sciences at the Grade 11 level.

ENVIRONMENTAL SCIENCE 20
Prerequisite: Science 10 (ESC20)
This is not your average science course. Environmental

SCIENCE

Science is an interdisciplinary course that integrates physical and biological sciences into the study of the environment and the solution of environmental problems. This course is taught through experiential learning, independent research, and community action projects. Expect field trips, group projects, and independent reflective assignments that build into a final portfolio of your accomplishment of outcomes.

HEALTH SCIENCE 20
Prerequisite: Science 10 (HSC20)
Health Science 20 is an interdisciplinary science course that integrates physical and biological sciences into the study of human health. Topics may include human anatomy (structure), physiology (function), and various medical diagnostic techniques. A student-directed independent research project is included as a major component of the course and gives students the freedom to learn about something that interests them related to Health Science.

PHYSICAL SCIENCE 20
Prerequisite: Science 10 (final mark of 70%) and a mark of 70% or greater in Math Foundations 10 or Math Workplace 10 is recommended. This course combines elements of Chemistry and Physics in an integrated manner to investigate concepts related to heating and cooling, the foundations of chemistry, including
the mole and quantitative analysis of molecules and chemical reactions, and the characteristics and properties of waves.

**BIOLOGY 30**  
**BIO30**  
Prerequisite: Health Science 20 or Environmental Science 20  
Topics include Life and Evolutionary Change, Diversity of Life (Biochemistry, Cell Biology, Photosynthesis/Cellular Respiration, and Complexity of Organisms), DNA and Proteins, Genetics and Biotechnologies. Various dissections may be included in this course.

**CHEMISTRY 30**  
**CHE30**  
Prerequisite: Physical Science 20 & a mark of 70% or greater in Math Pre-Calculus 20 is recommended.  
The course covers chemical equilibrium, solutions & solubility, acid-base concepts, molecular geometry, introductory organic chemistry, oxidation-reduction reactions and the theory and operation of electrochemical cells.

**COMPUTER SCIENCE 20**  
**CSC20**  
Prerequisite: Science 10  
This course allows students to explore the discipline of computer science, and provides instruction on using computer programming as a problem-solving tool. The also primary language used will be Python, though students will be exposed to Scratch and HTML.CSS. Concepts covered include data types, looping, conditionals, functions, string manipulations, arrays, and file 10. This course serves as a foundation for Computer Science 30 and/ or post-secondary programming course. Students weak in mathematics are recommended to wait until grade 11 to take this course.

**COMPUTER SCIENCE 30**  
**CSC30**  
Prerequisite: Computer Science 20  
This course gives students a chance to delve deeper into problem solving through programming. The language used in CSC 30 is Processing (a dialect of Java). Topics covered include a larger focus on 2D arrays, nested loops, object oriented programming, inheritance, polymorphism, and recursion. Computer Science 30 is an excellent introduction to post-secondary computer science courses, and allows you to confidently skip CMPT 140 at the University of Saskatchewan (can enroll directly in CMPT 141).

**HISTORY 10**  
**HIS10 / HIS11**  
Prerequisite: Social Studies 09  
History 10 deals with the broad concepts of decision making; political, economic, ideological, and within the international community. Historical periods covered range from the French Revolution to the beginning of World War 1.

**HISTORY 20**  
**HIS20 / HIS21**  
Recommended: History 10 or Native Studies 10 and it is encouraged that students take this course in their grade 11 or 12 year.  
This course will focus on the major events of the twentieth century: the impact of World War I, totalitarian dictators against the liberal democracies, World War II, Superpowers and the Cold War, the UN and the Third World and global issues.

**HISTORY 30**  
**HIS30 / HIS31**  
Recommended: History 10 or Native Studies 10—open to grade 12 students only.  
This course gives special attention to the effects of political, geographic, economic, social, and international forces on Canada’s development as a nation. Students also will be expected to follow current events. Some of the major themes will be the Aboriginal world view, Confederation, the Northwest Rebellions, Canada’s wartime roles, Canadian unity, Canada’s changing international relationships, constitutional issues and political development.

**LEADERSHIP 30**  
**LEA30**  
No prerequisite required.  
Leadership 30 allows students to begin learning leadership skills that will continue to grow and develop throughout the rest of their lives. Along with these skills, students will analyze new research in the areas of positive psychology, success, and emotional intelligence. Each student will need to not only learn about leadership, but demonstrate leadership by leading others in activities, and working with others to complete assessments. Students have the potential to become successful leaders through hands on application, mentorship, inquiry, and project-based learning. This course will provide students with a solid foundation for life, work, and citizenship.

**NATIVE STUDIES 10**  
**NAT10**  
Students will examine Aboriginal perspectives on decision-making, equity and equality, leadership, family values, social organization and the environment. Native Studies 10 concentrates on positive images of First Nations, Métis and Inuit peoples. It reinforces and complements the beliefs and values of the peoples, and presents materials in a continuum of traditional, historical and contemporary perspectives. Units of study include; Identity and Worldviews, Community and Kinship, Governance and Economics.

**NATIVE STUDIES 20**  
**NAT20**  
Recommended: History 10 or Native Studies 10 and students are encouraged to take this course in their grade11 or 12 year.  
The aim of Native Studies 20 is to allow students to examine historical and contemporary issues relating to Indigenous people of the world. This course focuses on such themes as; self-determination, self-government, cultural development, socio-economic development, and social injustice.
FINE ARTS

BAND 10
Recommended: Band 09 or permission of the teacher
A variety of concert band repertoire will be studied. The development of instrumental technique and music theory skills continues. Participation at festivals and public concerts is expected from the students. Band 10 is non semestered. There is a class fee TBA.

BAND 20
Recommended: Band 10 or permission from the instructor
Concert Band, which rehearses every other day, is a full year course. Band 20 is an extension of Band 10 by which more challenging music and concepts will be covered. Performances will include a fall, winter and spring concert, music festivals in and out of town and other community performances as they arise. There is a class fee TBA.

BAND 30
Recommended: Band 20 or permission from the instructor
Concert Band, which rehearses every other day, is a full year course. Band 30 is an extension of Band 20 by which more challenging music and concepts will be covered. Performances will include a fall, winter and spring concert, music festivals in and out of town and other community performances as they arise. There is a class fee TBA.

CHORAL 10/20/30
Recommended: Band 09 or permission from the instructor
A variety of concert band repertoire will be studied. The development of instrumental technique and music theory skills continues. Participation at festivals and public concerts is expected from the students. Band 10 is non semestered. There is a class fee TBA.

Recommended: Concert Band or permission from the instructor
Concert Band, which rehearses every other day, is a full year course. Band 20 is an extension of Band 10 by which more challenging music and concepts will be covered. Performances will include a fall, winter and spring concert, music festivals in and out of town and other community performances as they arise. There is a class fee TBA.

Recommended: Concert Band, students who have lessons on guitar, bass or piano may participate subject an audition /interview with the instructor.

This course deals with many current topics such as: perception, memory, language and thinking, human communication, motivation, aggression, addictive behavior, learning, emotion and interpersonal relations. This course deals with many current topics such as: perception, memory, language and thinking, human communication, motivation, aggression, addictive behavior, learning, emotion and interpersonal relations.

PSYCHOLOGY 30
No prerequisite required.
This course is the study of human development across the time spans of human life. Students will learn about human growth and changes in development associated with age, including the various stages of development from conception to old age and will apply such knowledge to investigate issues in their everyday lives.

LIFE TRANSITIONS 20
No prerequisite required.
Today it is essential that young people be able to cope effectively with change. This course helps students to deal with changes throughout their lifetime. Topics include; personal life – self-esteem, communication and personality, relationships, family, dating and marriage, careers and planning, aptitudes, time management, stress, and sexuality in adolescence.

LIFE TRANSITIONS 30
No prerequisite required.
This course deals with major changes encountered throughout one’s life in the family, workplace and healthcare. There will be opportunity to discuss and predict the consequences of changes and formulate strategies to adapt. Topics include; our health care system, conflicts in relationships, sexual and reproductive health, parenting, money management, independent living and career planning.
DANCE 10  (DAN10)
No Prerequisite Required. (Open to grade 10, 11, & 12 students)
In this course, students will explore a wide variety of dance forms in order to develop an increased awareness of the range of dance styles. The students, individually and collectively, will learn about the history, theory, and technique of jazz foundations and other dance disciplines. This is a performance-based class. Basic anatomy, composition, and healthy lifestyles are incorporated into class content. Students will study through practical, visual, and written experiences. This course is for all levels of dancers. The three modules covered will be Dance Manias, Style of Dance, and Change in Dance. There is a class fee of approximately $10.

DANCE 20  (DAN20)
Recommended: Dance 10
In this course, students will explore a variety of dance forms in order to develop an increased awareness of a range of dance styles. Dance 20 consists of three main components: performance, composition, and analysis. Students will study dance composition and work on improving their performance skills and dance technique. Students will study through practical, visual, and written experiences. The modules covered in Dance 20 will be Dance Expressions: Individual and Cultural and Dance in Movies, Film or Video. There is a class fee of approximately $10.

DANCE 30  (DAN30)
Recommended: Dance 20
In this course, students continue to explore a variety of dance forms in order to develop an increased awareness of the range of dance styles. Students will study dance composition and work on improving their performance skills and dance technique. Analysis of students’ work and other professional choreographers is also a focus. Students will study dance through practical, visual and written experiences. In this final year, students will refine their composition skills as they choreograph a group piece that will be presented at the Walter Murray Showcase at the end of the semester. The three modules covered in Dance 30 will be Technology and Dance, Dance as a Part of Life, and Dance and the Other Arts. There is a class fee of approximately $10.

Dance 30 mark may be used for admission or scholarship purposes at the University of Saskatchewan and the University of Regina.

DRAMA 10  (DRA10)
Any grade ten, eleven or twelve student may enroll in this class.
The Drama 10 course is an exciting introduction to the world of drama and theatre. The main focus of this course is on personal development and acting skills. Units of study include mime, improvisation, movement & speech and script study. Students will develop a broad range of acting skills and confidence on and off the stage. Students will conclude the course with a short one-act play performed in front of an audience.

DRAMA 20  (DRA20)
Recommended: Drama 10
Drama 20 is open to grade eleven and twelve students. This course is intended to help you develop motivation, self-discipline and self-confidence. Drama 20 builds on the Drama 10 course and focuses on continued personal development and acting skills. This will be accomplished through group building, speech & movement, character development, improvisation, self-exploration and script studying. There will be monologues and a collective work for an audience to conclude the semester.

DRAMA 30  (DRA30)
Recommended: Drama 20
The emphasis of this course is on performance in both improvised and scripted work. Drama 30 builds on the Drama 10 & 20 courses helping you to develop motivation, self-discipline and self-confidence, focusing on projects in acting, directing, writing and producing. The dramatic components of speech & movement, character development, improvisation and exploration of various theatre styles throughout history will be examined.

VISUAL ART 10  (VAR10)
Prerequisite: None
This studio-based course emphasizes the development of various materials and technical skills. Projects may include drawing, painting, clay, collage, printmaking, sculpture and art history. There is a class fee of approximately $5.

VISUAL ART 20  (VAR20)
Recommended: Visual Art 10
This studio-based course examines various styles of art such as realism and impressionism. Projects may include pencil drawing, ink drawing, watercolour, acrylic painting and clay. Students are encouraged to develop creativity and originality in their artwork. There is a class fee of approximately $5.

VISUAL ART 30  (VAR30)
Recommended: Visual Art 20
This studio-based course emphasizes in-depth work and the creative process. Activities may include pencil drawing, book binding, paper making, watercolour, acrylic painting, sculpture, clay pottery, art history and critiques. Students are encouraged to develop an art portfolio. There is a class fee of approximately $5.

GUITAR 10  (GUI10)
Prerequisite: None
Basic classical guitar technique, note reading, and chording are introduced. It is helpful if students have access to a guitar for home practice.

GUITAR 20(GUI20)
Recommended: Guitar 10
This class is a continuation of Guitar 10. It is helpful if students have access to a guitar for home practice. Students must be able to read and play standard notation.

GUITAR 30  (GUI30)
Recommended: Guitar 20
This class is a continuation of Guitar 20. It is helpful if students have access to a guitar for home practice. Students must be able to read and play standard notation.
SECOND LANGUAGES

FRENCH 10  
Project work is central to this course. Language is presented with a final communication task in mind. Students will use French orally and in writing to express their ideas on topics such as: advertising, driving, the francophone world and friendship.

FRENCH 20  
Prerequisite: French 10  
This course is project-based. Each unit contains both oral and written projects. Areas of study include planning a voyage, lifestyles, careers, and the newspaper. A variety of resource materials will be used. Students at this level have the opportunity to participate in a three month Saskatchewan-Québec exchange.

FRENCH 30  
Prerequisite: French 20  
Refinement of oral and written skills is the focus of this course. Students will prepare written and oral projects in areas including language and culture, the media, personal relationships and current events. Students at this level have the opportunity to participate in a 10 day excursion to France.

GERMAN 10  
Prerequisite: None  
German 10 is an introductory course for students who have no prior knowledge of German. It is project-based and includes the topics “Me and My Family”, “My Hobbies”, “School” and “Travel”. Emphasis is on both oral and written communication. Students interested in participating in the three-month exchange program with Germany must apply when they are in German 10.

GERMAN 20  
Prerequisite: German 10  
German 20 begins with a review of German 10. Topics include food, clothing, music, and a fairytale unit.

GERMAN 30  
Prerequisite: German 20  
Topics of interest in German 30 are based partially on students’ interests, but usually include “Gesundheit”, “Deutsche Geschichte”, “Die Deutschen Bundesländer” and a novel study. Literature, films, videos and other supplementary materials continue to widen students’ vocabulary, grammar and cultural understanding.

JAPANESE 10  
Prerequisite: None  
Japanese 10 is an introduction to the Japanese language. The main focus is on oral and written communication. Listening with understanding is also stressed. One of the Japanese writing systems, Hiragana, will be introduced. Students will also learn some Kanji characters (pictographic, Chinese characters). The vocabulary acquired in the course will be written in Hiragana. The cultural component of the course will deal with everyday social communication and etiquette. Various culturally related activities such as origami, learning songs, cooking, and crafts will be introduced to stimulate an interest in Japanese culture.

JAPANESE 20  
Prerequisite: Japanese 10  
Japanese 20 is the natural extension of Japanese 10. The main focus continues to be oral and written communication and listening with understanding at an intermediate level. The use of Hiragana increases and becomes more complex with the introduction of more complex grammar. Another writing system, Katakana, will be introduced and continued development of Kanji writing will be stressed. The cultural component of the course deals with situations in daily life in Japan. Additional culturally related activities are included in the course.

JAPANESE 30  
Prerequisite: Japanese 20  
Japanese 30 takes oral and written communication to a more advanced level and deals, in particular, with complex everyday expressions. The students will continue to learn more Japanese writing, focusing on the development of their Kanji writing. The cultural component of the course focuses on understanding and developing flexibility and sensitivity in the cultural differences between Canada and Japan.

SPANISH 10  
Prerequisite: None  
Spanish 10 is an introduction to the Spanish language. Throughout the course, students will focus on speaking, writing, and listening skills through a variety of activities and projects, both independently and within a group. This introductory course focuses on building a foundation in everyday communication. Students will also be exposed to a variety of cultural traditions, music, and food from various Spanish-speaking countries from across the globe in order to spark and interest in Spanish and Latin-American culture. No previous experience in the Spanish language is required for this class.

MARAUDER HOCKEY PROGRAM

Education on Ice
The Hockey Program is open to male and female students in grade 9 and 10. Students are typically on the ice twice each week for a one hour session. The Hockey Canada Skills development course provides the curriculum base which allows every student to develop and improve skating, passing, puck handling, and shooting skills, regardless of the student’s initial skill level. The on-ice portion runs from early September through to the end of April. May and June will be dedicated to out-of-season training opportunities that will complement the on-ice instruction. On days that these students are not on the ice, they are scheduled into physical education courses. This provides each student with a well-rounded physical activity opportunity to address his/her health and fitness needs. The annual fee for The Hockey Program is $300.00, which covers ice rentals, some costs for the transportation of students and equipment, a team jersey and hockey socks, and other program expenses. For more information please contact Walter Murray at (306)683-7850 or by email at WalterMurraySchool@spsd.sk.ca
PHYSICAL EDUCATION

WELLNESS 10  (WLF10-girls or WLM10-boys)
Prerequisite: Physical Education 09.
The aim of Wellness 10 is that students will develop behaviours that support life-long health. This will include setting goals for their personal fitness as well as investigating many lifestyle and wellness topics such as nutrition, time and stress management, and leisure opportunities. Students will receive a percentage mark on their report card. Athletic clothing and proper running shoes must be worn.

PHYSICAL EDUCATION 20  (PED20)
Prerequisite: Wellness 10.
The focus of this course is to experience a variety of lifetime recreational activities. Activities may include: mixed martial arts, aquatics, squash, disc golf, broomball, horseshoes, table tennis, five-pin bowling, curling, wall climbing, and fitness classes. Many activities will be held off-campus and therefore a class fee is required to cover the cost of facility, equipment, and instructors. Buses are used to transport students to and from the activity venues. There is a class fee of $80. Students will not receive a credit if they have previously taken PED20E.

HIGH PERFORMANCE SPECIAL PHYSICAL EDUCATION 20  (PED20E)
Prerequisite: Wellness 10.
The purpose of this course is to promote a healthy lifestyle by focusing on the training aspect of sport. Students must be prepared to work and train at a high level. Training sessions include: weight training, tours of fitness facilities, plyometrics, core strength, flexibility training, agility drills, running, biking, and cross training from a number of different sports. There is a class fee of $40. Students will not receive a credit if they have previously taken PED20E.

PHYSICAL EDUCATION 30  (PED30)
Prerequisite: Wellness 10.
This grade 12 program continues to emphasize recreational activities that will give participants basic skill and knowledge in a wide variety of activities. Activities may include; golf, cross-country skiing, bowling, weight training, badminton, broomball, squash, wall-climbing, curling, aquatics, and self defense. Most activities are held outside of the building and therefore buses will be used to transport students to and from venues. There is a class fee of $80.

ACTIVE LIVING & FITNESS LEADERSHIP 20/30  (ALF20/30)
Prerequisite: Wellness 10.
This course includes two components; theory and practical. During the fitness theory component students will learn about areas such as: muscular system, skeletal system, exercise injury management, nutrition, principals of training, and program planning, and leadership skills. For the practical component, students will be given the opportunity to experience various fitness activities such as: yoga, weight training, spin, zumba, aquafit and various other group programs. Through partnership with Saskatchewan Parks and Recreation Association (SPRA) students will be given the opportunity to write the SPRA fitness theory exam free of charge. There is a class fee of $40.

PRACTICAL & APPLIED ARTS

COMMERCE & COMPUTER EDUCATION

ACCOUNTING 10  (ACC10)
Prerequisite: None
Accounting 10 is a computerized (Sage 50) and “hands-on” introductory accounting course. The complete accounting cycle for an entrepreneurial service firm will be covered. Some concepts such as recording in journals, posting to ledgers, practical banking applications (cheques, reconciliation, and statements), and EXCEL spreadsheets will be used in the preparation of financial reports.

ACCOUNTING 20  (ACC20)
Prerequisite: Accounting 10
Focus is on the accounting cycle of a merchandising firm. Specialized accounting such as journalizing into special journals (purchases, sales, cash receipts, cash payments), posting to subsidiary ledgers, payroll, PST and GST are included. Partnership accounting is introduced.

ACCOUNTING 30  (ACC30)
Prerequisite: Accounting 20
This course is an introduction to managerial accounting and will be helpful to students who are considering accounting as a career. Advanced levels of Excel are used for constructing graphs, preparing budgets, variance analysis, comparative income statements and cost-volume-profit analysis.

ENTREPRENEURSHIP 30  (ENT30)
Prerequisite: None
Want to learn how to start your own business? Sign up for Entrepreneurship where students will develop entrepreneurial skills that will enable them to creatively solve problems, identify entrepreneurial opportunities, generate ideas, and develop a successful business plan. Mentors from the community and group activities are an integral part of the course.

COMPUTER / INFORMATION PROCESSING 10  (CPR10)
Prerequisite: None
Microsoft Office—Word, Excel and PowerPoint—what more do you need to truly function efficiently on your computer? Word processing, spreadsheet, and presentations are all aspects of this computer class. Emphasis is on developing proper keyboarding technique, speed, and accuracy.
COMPUTER / INFORMATION PROCESSING 20  (CPR20)
Prerequisite: Computer/Information Processing 10
Microsoft Office—Word and Publisher. Computer use is geared toward business applications and software. Students learn advanced word processing, how to design their computer workplace, and page layout through the use of graphics and information. Students will create their own newsletter and design their own business card. Keyboard speed and accuracy is enhanced using Cortez Peters software.

COMPUTER / INFORMATION PROCESSING 30  (CPR30)
Prerequisite: Computer/Information Processing 10 or 20
Microsoft Office—Word and Access. Computer use is geared toward advanced topics such as database, creating professional documents and ergonomics. Keyboarding speed and accuracy is enhanced using Cortez Peters software.

COMMUNICATIONS MEDIA 20  (CME20)
Prerequisite: None. Grade 10 students are welcome.
If you are interested in creative story telling using audio production and film to tell your stories then this course is for you. Students will learn basic film terminology, camera shots and lighting technique. Hands on lab activities will help you hone your skills before producing a video production. Setting up blog sites and discussing legal and ethical issues related to film and media round out this fascinating course.

COMMUNICATIONS MEDIA 30  (CME30)
Recommended: Communications Media 20
There will be a strong emphasis on all three phases of filmmaking including preproduction, production and postproduction focusing on solid script writing and the ethics of media and how it impacts our world. Students will develop a portfolio of audio & film projects and interactive media.

Junior Achievement and Entrepreneurship 30 Credit
Students must be participating in the JA Company Program (after school program) to register for this credit. Students must formally register in the credit. Students will complete 100 hours over the course of two years through their attendance in Company Program. The final mark will be based on 50% per year. Participation in a Trade Show event is not required. Students registered in this option must register for the credit each year for two consecutive years in order to be eligible to receive the Entrepreneurship 30 credit. The assigned teacher supervisor, Rick Clark, will be responsible to receive the student assessments and attendance (hours completed) from Junior Achievement and assign students a mark based on the assessment policy designated by JA and the assigned teacher supervisor.

HOME ECONOMICS

COMMERCIAL COOKING 10  (COC10)
Prerequisite: None
Food allergies or dietary restrictions may limit a student’s ability to participate in lab based activities. Topics include: Introduction to the Food Industry, Safety and Sanitation, Tools, Equipment, Kitchen organization, Food Preparation, Stocks, Sauces, Soups, Vegetables, Fruits, The Pantry (Salads and Sandwiches), Starches, Baked Goods, Desserts, and Career Opportunities in Commercial Cooking. Students will also have an opportunity to earn a Public Health FoodSafe Level 1 certificate. There is a class fee of approximately $35.

COMMERCIAL COOKING 20  (COC20)
Prerequisite: Commercial Cooking 10
Food allergies or dietary restrictions may limit a student’s ability to participate in lab based activities. This class builds on the skills learned in Commercial Cooking 10. Topics include: Safety and Sanitation, Tools and Equipment, Kitchen organization and Food Preparation, Stocks, Sauces and Soups, Vegetables and Fruits, The Pantry (Appetizers), Starches, Baked Goods and Desserts, Egg Cookery and Breakfast Preparation and a Work Study. Students will plan and prepare foods for various events including the school cafeteria and will also have an opportunity to earn a Public Health FoodSafe Level 1 certificate. There is a class fee of approximately $35.

COMMERCIAL COOKING 30  (COC30)
Prerequisite: Commercial Cooking 20
Food allergies or dietary restrictions may limit a student’s ability to participate in lab based activities. This is an advanced class which builds on skills developed in Commercial Cooking 10 and 20. Modules of study include: Safety and Sanitation, Tools and Equipment, Kitchen organization and Food Preparation, Stocks, Sauces and Soups, Vegetables and Fruits, The Pantry (Buffets), Starches, Baked Goods and Desserts, Meats, Poultry and Seafood, Food Presentation, Garnish and Decoration, and a Work Study. Students will plan and prepare foods for various events including the school cafeteria. There is a class fee of approximately $35.

FOODS AND MORE SURVEY 10  (FOO10)
Food allergies or dietary restrictions may limit a student’s ability to participate in lab based activities. This is a hands on survey class focusing on the areas of FOODS, SEWING and DESIGN. Topics include kitchen and baking basics, design, bake and decorate a 3-tier cake and sew an independent project. Students are responsible for all sewing materials and need to complete all projects during class time. There is a class fee of approximately $35.

INTERIOR DESIGN 30  (INT30)
Prerequisite: None—this class is available to Grades 11 and 12.
Elements and principles of design will be learned and house, furniture selection, colour schemes, wall elevation and interwoven throughout the course: decorating and planning a perspective drawings, traffic patterns, floor plans, lighting and accessories. Students learn though research, presentations, projects and guest speakers. The final for this course takes all the material learned and combines it into a 3-dimensional project.
CLOTHING, TEXTILE, AND FASHION 30 (CLO30)  
Prerequisite: None—This class is available to grade 11 and 12 students.  
This course examines the trends in fashion over the last hundred years up to present day. Students will also learn how to use the sewing machine, serger and other sewing equipment as they first make a class project and then an independent one. All sewing project are to be done solely in class and cannot be taken home to work on. Students are responsible to provide the material used in their larger projects.  
There is a class fee of approximately $15.

TECHNOLOGY

AVIATION STUDIES 20 (AVI20)  
Prerequisite: Imagination and a positive attitude with a genuine interest in discovering the aviation industry, building aircraft and Flying! (An application letter or interview may be required.)  
The Aviation Studies 20/30 is an exciting program that will appeal to students who enjoy a "hands on" learning style. Students registered in this course will be eligible to participate in the world famous EAA Young Eagles program which provides opportunities for flight with experienced pilots. Aviation Studies is intended for students who are interested in how and why an airplane flies and in the career aspects of rapidly growing aviation industry. The course will be an integration of theory and practice. The content of this course includes topics required to write a Transport Canada Private Pilot Examination. Topics include: Mechanics of Flight, Radio Communication, Meteorology, Navigation, and Materials and Fabrication with the use of aviation related tools. Students will also spend time on flight simulators and will have the opportunity to build and fly their own rubber and electric powered radio control flying models.

AVIATION STUDIES 30 (AVI30)  
Prerequisite: Aviation Studies 20  
The Aviation Studies 30 course is a continuation of the Aviation Studies 20 class. The course will be an integration of theory and practice at a more advanced level. This course will appeal to students who enjoy working in cooperation with teachers in a mentorship approach to course planning and career exploration. Mentorship's may be explored with the Hub City Radio Control Club, the Recreational Aircraft Association, Canadian Owners and Pilots Association and SIAST Commercial Pilot program. Topics such as: air law, instruments, airmanship and advanced navigation will be included. The opportunity to further build aircraft will also be part of the "hands on" approach. There will be guest speakers from the industry and field trips to aviation facilities.

DRAFTING 10 (DRF10)  
Prerequisite: None  
The Drafting 10 course is designed to introduce students to the techniques, practices and standards used in Computer Aided Design. Students will learn the basics of drafting including: sketching, working drawings, orthographic drawing, isometric drawing, oblique drawing, sectional views, auxiliary views, pattern developments and basic 3-D modeling.

DRAFTING 20 (DRF20)  
Prerequisite: Drafting 10  
The Drafting 20 course is designed to introduce students to Architectural drafting techniques, practices and standards through the exploration of design in residential construction. Students will follow the building code as they produce a full set of plans for a house and a garage.

DRAFTING 30 (DRF30)  
Prerequisite: Drafting 20  
The Drafting 30 course further explores mechanical drafting through the implementation of common techniques, practices and standards. Using Computer Aided Design, students will work with descriptive geometry, intersections, object revolutions, developments and 3D modeling. In addition, students will develop working drawings for assembled products and explore CNC manufacturing.

ELECTRONICS 10 (EEO10)  
Prerequisite: None  
This is an introductory course in electronics. This course will introduce analog devices, allowing students to build individual projects while exploring fabrication methods. Students will be charged for the projects they take home.  
There is a class fee of approximately $15.

ELECTRONICS 20 (EEO20)  
Prerequisite: Electronics 10  
This course reviews and expands on the basics learned in Electronics 10. Digital devices and programmable microprocessors will be the focus of the course. Robotics is an option in the course. The students will be able to build projects using a variety of fabrication methods. Students will pay for the projects they take home.

ELECTRONICS 30A (EEA30)  
Prerequisite: Electronics 20  
This course reviews and expands on fundamentals covered in grades 10 and 11. Microprocessors will be the focus. Students will have flexibility in the projects they choose to work on. The students will contribute to the process of project design and fabrication. Students will pay for the projects they take home.

ELECTRONICS & ROBOTICS 30B (EEB30)  
Prerequisite: Electronics 30A  
This course reviews and expands on fundamentals covered in electronics 30A. This program is designed to explore electronic principles using control systems and automation or robotics as a theme. The students will be active participants in the design and testing of parts for more complex or larger projects. Use of the CNC Mill or 3D Printer are options.

PHOTOGRAPHY 10 (PHO10)  
No prerequisite  
This is an entry level course in photography and graphic design. Students will learn technical aspects of the camera while following photographic composition guidelines. Students will also use Photoshop to create graphic designs and manipulate their own images. Students will also learn how to create their own silk screen and may even put it on a t-shirt.  
There is a class fee of approximately $25. Access to a digital camera would be an asset.
PHOTOGRAPHY 20  (PHO20)
Recommended: Photography 10
This class builds on photographic skills from the entry level course, knowledge of camera controls and Photoshop is necessary. There will be an in depth look at a digital SLR camera. This course looks at studio lighting, portraits, landscapes, lenses, and filters. Students will learn Photoshop as a photo editing tool. Students must supply a USB/memory stick. There is a class fee of approximately $25. Access to digital camera would be an asset.

GRAPHIC ARTS 20  (GRA20)
Recommendation-Photography 10
Students will learn about the elements and principles of design, along with the Photoshop program. Students will learn how to draw in computer programs with a tablet. The students will manipulate images, and create many projects including a billboard design, posters for the school, magazine ad design and silkscreen design. Students must supply a USB/memory stick. There is a class fee of approximately $20. Access to digital camera would be an asset.

YEARBOOK PRODUCTION 10, 20, 30  (PHO10G / GRA20G / GRA30G)
Prerequisite: Same as Graphic Arts courses
Participating students will develop skills using an on-line production program to create the Yearbook from cover to cover. Digital photography, layout, design and journalism will be the main areas of focus. This is a non-semester course and run every second day during the noon hour. This class requires students to take photographs at some school events which may not occur during the regular school day. A credit will be granted for Photography 10 or Graphic Arts 20 or 30 level depending on the individual student’s grade level and previously acquired Graphic courses.

MACHINING 10  (MAC10)
Prerequisite: None
This course provides students with a hands-on, project based, approach to learning. Students learn to use a variety of machine shop tools and equipment to measure, cut, shape, and fasten metal. Computerized Numerical Control (CNC) milling is introduced. There is a class fee of $15.

MACHINING 20  (MAC20)
Prerequisite: Machining 10
In this course students continue to develop their machining skills through the development of intermediate level projects. CNC milling, programming, and operation is incorporated in components of projects. There is a class fee of $10.

MACHINING 30  (MAC30)
Prerequisite: Machining 20
Students learn to plan and perform advanced machining processes with a high degree of precision. CNC milling is utilized at a higher level. Projects of greater complexity are created. There is a class fee of approximately $10.

MECHANICS 10  (MEC10)
Prerequisite: None
This course is an introduction to mechanics. Students will learn in a number of ways, including theory, presentations, hands on labs, and hands on mechanical repair. Units include measuring, engine disassembly and assembly, carburetion, electrical systems, and ignition. Students will also go through an automotive unit dealing with finding and evaluating a used car, a vehicle inspection lab, and an auto body panel lab. Finally, students work through diagnosing and repairing small engine problems of their choice. Students are expected to work at their own pace, and will be working with safety equipment, hand and power tools, fasteners and gaskets, engines, and oils and fuels.

MECHANIC & AUTOMOTIVE 20  (MEC20)
Prerequisite: Mechanics 10
This course deals with basic automotive mechanics. Students are expected to work at their own pace, and will be working with tires, brakes, engines, cooling systems, exhaust systems, electrical systems and others. They are expected to work with their teacher and other students to diagnose and repair automotive problems using up to date electronic service manuals and diagnosing equipment. Emphasis is placed on providing the student with a wide view of the mechanical field, allowing them to study areas that interest them most.

MECHANICS 30A  (MEA30)
Prerequisite: Mechanics 20
This course deals with some basic automotive systems, as well as some of the advanced systems in automotive mechanics. Students are expected to work at their own pace, and will be working with fuel systems, electricity and electronics, starting and charging systems, ignition systems, and others. Students are encouraged to use electronic service manuals and diagnosing equipment, and to apply their knowledge and skills to a wide range of mechanical systems.

MECHANIC & AUTOMOTIVE 30B  (MEB30)
Prerequisite: Mechanics 30A and permission of the teacher
This is a course for advanced mechanics students. Students are expected to work at their own pace, and will be working with universal joints and drive shafts, clutches, transfer cases, manual and automatic transmissions, and others. Students are expected to be proficient in the use of electronic service manuals and diagnosing equipment, and to apply their knowledge and skills to a wide range of mechanical systems. Students who are intending to enter the mechanics trade will be able to use this and any other mechanics course as part of the required trade time toward their journey status in mechanics.
CAREER AND WORK EXPLORATION

CAREER AND WORK EXPLORATION 10/20  (CWE10 / CWE20)
(2 credits)
This course, available to grade ten and eleven students, provides an opportunity to explore career development as well as do some career planning. A wide range of interactive activities and work experience components facilitate the career planning process. The in-school component emphasizes an understanding of Occupational Health and Safety, Labour Standards Act, WHMIS, portfolios, personal assessment, job search strategies, apprenticeship, entrepreneurship, and employability skills. Students may study up to eight weeks in actual work experience. The on-the-job expectation is that the student complies with the regular afternoon work hours of the cooperating firm. Students are responsible for their own transportation. There is a class fee of approximately $8 per course.

CONSTRUCTION AND CARPENTRY 10  (CAC10)
Prerequisite: None
This Grade 10 course is designed to increase students' skills and knowledge in the use of basic woodworking equipment. Emphasis is on 'learning by doing' through assigned and individual projects. The project component of this course introduces the student to the techniques of joinery used in basic cabinet construction. The safe use and operation of the table saw, radial arm saw, drill press, thickness planer, jointer, router and other power hand tools will be covered. Students will pay for their own projects.

CONSTRUCTION AND CARPENTRY 20  (CAC20)
Prerequisite: Construction and Carpentry 10
This course consists of cabinetry and residential building construction. Topics in cabinet making include joinery, machine operation and finishing techniques. Construction and carpentry 20 involves students with a hands-on experience working on teacher designed and student designed projects. Hand and machine tool operations, use of joints, clamping, finishing materials, and project design are studied. A portion of the course will be devoted to residential building construction, specifically foundations, floor systems and wall systems. Students will pay for their own projects.

CONSTRUCTION AND CARPENTRY 30  (CAC30)
Prerequisite: Construction and Carpentry 20
This course includes cabinet making and building construction. CAC 30 uses teacher and student designed projects to learn more advanced methods of cabinet and furniture making. Specialty joints, fixtures, and methods are studied in a hands-on environment. Residential building construction is reviewed and followed up by building a shed in class. Students will be expected to choose and complete an appropriate cabinetry project (or projects). Students will pay for their own projects.

SKILLED TRADES of CONSTRUCTION  (PAA30 / PAB30)
The STOC program is a two credit course offered in the second semester. Students will earn two Practical and Applied Arts 30 level credits. Students will learn practical and theoretical knowledge in six different construction sub trades including; electrical, plumbing, framing, interior finishing, exterior finishing, concrete forming and finishing. The final class project will involve constructing and finishing a garage on site. Hard hats and safety glasses will be supplied. Students will have to supply their own steel toed boots. There is a $60 fee for fall protection certification.
FRENCH IMMERSION
Programming in Grades 10 to 12

FRANÇAIS 10
Préalable: Français 09(A et B)
Ce cours maintient le développement langagier des élèves selon les quatre savoirs (écouter, parler, lire et écrire) en travaillant trois unités principales: la presse écrite, la nouvelle littéraire et la chanson populaire.

The course maintains the students’ language development in listening, speaking, reading and writing by exploring three main units: print media (newspapers or magazines), the short story and literary songs.

FRANÇAIS 20
Préalable: Français 10
Ce cours accorde plus d’importance à la langue selon des contextes variés. Trois grands thèmes sont à l’étude: le journalisme électronique, le roman et le photo-roman ou la bande dessinée.

This course concentrates on the importance of language in various contexts. The three major themes studied are electronic journalism, novel study and storytelling via photo story or comic strips. “This is a resource-based program.”

FRANÇAIS INTÉGRÉ 20 (A+B)
Préalable: Français 10
Ces deux cours sont offerts au programme d’immersion pour deux crédits. Ils permettent un maximum de flexibilité car ils peuvent être suivis en 11e ou en 12 année. Dans ces cours, l’étude de la langue française est intégrée à quatre disciplines: la cinématographie, la sociologie, la psychologie et l’entrepreneuriat. Seulement deux unités sont présentées dans chaque cours.

The integrated courses are offered for two credits in the immersion program. They allow for maximum flexibility since they can be taken in either grade 11 or grade 12. In these courses, the study of the language is integrated with other disciplines which are not always available to immersion students. The course presents four units: cinematography, sociology, psychology and entrepreneurship. Only two units of study are presented in any one course.

FRANÇAIS 30
Préalable: Français 20
Le but de ce cours est d’amener les élèves à se donner une vision du monde. Ils auront donc l’occasion d’étudier le roman comme instrument de communication d’une vision du monde, le théâtre et la poésie.

The purpose of this course is to help students acquire a world view which will guide them in their adult lives. The three units are: the novel as a means of communicating a world view, theatre and poetry. Refinement of oral and written skills is the focus of this course. Students will prepare written and oral projects in areas including language and culture, the media, personal independence and current events.

HISTOIRE 10
Préalable : Études sociales 09
Ce cours examine la prise de décisions politiques et économiques, les relations internationales (politiques et économiques) et les idéologies principales du 19e siècle. Les événements précis qui sont abordés incluent la Confédération iroquoise, la Révolution française et Napoléon, la Révolution industrielle et les causes de la Première Guerre mondiale.

This course examines political and economic decision-making, international relations (political and economic) and the principal ideologies of the 19th century. Specific events covered include the Iroquois Confederation, the French Revolution and Napoleon, the Industrial Revolution and the causes of the First World War.

HISTOIRE 20
Préalable: Histoire 10
Ce cours porte sur la Première Guerre mondiale, le totalitarisme, la Deuxième Guerre mondiale, la Guerre froide et le monde moderne. Les grands événements de la dernière décennie et leurs causes sont aussi examinés.

This course focuses on the First World War, the rise of totalitarian states, the Second World War, the Cold War and the Modern World. The major events of the last decade and their causes will be also examined.

SCIENCES SOCIALES 30
Préalable: Études sociales 20
Ce cours porte sur l’évolution politique, économique et sociale du Canada. La dualité culturelle et les rapports internationaux du Canada sont aussi considérés.

The Grade 12 course is mainly a study of Canada’s political, social and economic evolution. Cultural duality and Canada’s international relations are other important themes.

FONDEMENTS de MATHÉMATIQUES et PRÉ—CALCUL 10
Préalable : Mathématiques 9
Ce cours fournira aux élèves les habiletés et compétences de mathématiques et de pensée critique pour l’entrée à la plupart des programmes d’études supérieures. Les matières étudiées inclues : la mesure, la trigonométrie, les exposants, les polynômes, la factorisation, les nombres irrationnels, et les relations et les fonctions.

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into post-secondary programs. Topics include: measurement, trigonometry, exponents, polynomials, factoring, irrational numbers, and relations and functions.

FONDEMENTS de MATHÉMATIQUES 20
Préalable: Fondements de Mathématiques 10
Ce cours fournira aux élèves les habiletés et les compétences de mathématiques et de penser critique pour l’entrée aux programmes d’études supérieures qui n’ont pas besoin d’étude de calcul théorique. Les matières étudiées inclues :
le raisonnement logique, le raisonnement proportionnel, la géométrie, la trigonométrie, l’algèbre, la probabilité et les statistiques.

This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. Topics include: logical reasoning, proportional reasoning, geometry, trigonometry, algebra, statistics and probability.

FONDÉMENTS de MATHÉMATIQUES 30 (MAF30F)
Préalable: Fondements de Mathématiques 20
Ce cours aide les élèves à approfondir les connaissances mathématiques et le raisonnement critique nécessaire pour les études postsecondaires qui ne nécessitent pas les calculs théoriques. Les thèmes incluent la comptabilité, le raisonnement, les principes de dénombrement, la probabilité et les fonctions (polynomial, periodical, logarithmic and exponential).

**ENGLISH AS AN ADDITIONAL LANGUAGE**

**ENGLISH AS AN ADDITIONAL / SECOND LANGUAGE—BEGINNER’S CLASS** (EAB10A)
Recommended for Proficiency Benchmarks A1.1—A1.2.
At Walter Murray, we offer support to students who are learning English. Support to learn English may be provided in three ways: direct instruction classes, sheltered classes and EAL support classes. Specific course offerings will depend on enrolment and student need. The speed at which a student learns a language is affected by many factors. Students should consult with the guidance counselor and/or EAL teacher to choose their classes.

**ENGLISH AS AN ADDITIONAL / SECOND LANGUAGE—INTERMEDIATE CLASS** (EAA20 / EAB20)
Recommended Proficiency Benchmarks for EAA20 is A2.1—A2.2 and EAA20 B1.1.
These classes are designed for students who have studied English and need to strengthen their skills to prepare for a regular English course. Two levels are offered: low intermediate and high intermediate.

**ENGLISH LANGUAGE ARTS A10 AND B10—SHELTERED** (ELA10S / ELB10S)
Recommended Proficiency Benchmark B1.1.
These courses have the same objectives and themes as the regular ELA10 and ELB10 courses. However, only English as an additional language students will be in the class, allowing the teacher to use teaching and assessment strategies most appropriate for the English language learner. Students enrolling in this course are expected to be at an intermediate level of speaking, reading, and writing in English. **Students earn a regular credit for each course upon successful completion.**

**ENGLISH AS AN ADDITIONAL LANGUAGE—SUPPORT CLASSES** (ES1X / ES2X)
Recommended Proficiency Benchmark A1.1—B1.2

**SCIENCE 10F**
Préalable: Sciences 09F

A laboratory, hand-on approach is used in the course to cover a variety of science topics in biology, chemistry, physics, and general science. Topics include chemical reactions, motion, weather, and ecosystems.

**MATHÉMATIQUES PRÉ CALCUL 20** (MPC20F)
est disponible par le Centre d’apprentissage en ligne.

Is available through the Online Learning Centre.

French Immersion Students in Grade 12 may wish to take both thirty level English classes to meet certain post secondary requirements.
different cultures. The emphasis of this class will be on creativity and communication. Students will express themselves through the arts and use the arts as social commentary.

**GUITAR 10 SHELTERED**

This course is offered to students who have limited English language skills. Basic Classical guitar technique, note reading and chording are introduced. Guitars will be provided, no experience is required.

** DRIVER EDUCATION 10**

(no credit)  

This course is offered in both semesters. Students must meet the age requirement of 15 years prior to requesting this course. Priority is given to older students for the initial registration. Anyone during the year may add their name to the wait list in Student Services and these students will be placed into classes on a first come first serve basis. A letter will be hand delivered to the student during school time. Please follow the instructions noted in the letter. Students cannot be in Special Physical Education, the Musical, and Driver’s Education in the same semester. Students involved in the musical must reschedule for semester 2. It is the decision of the Driver Education Department under the umbrella of Saskatoon Public Schools that a “student who has attended Driver Education in the current school year and has dropped out on their own accord or has been removed due to poor attendance will be financially responsible to take a Driver Education Program privately in order to obtain a Driver Education Certificate.” Further information may be obtained from the Driver Education Manager at the Saskatoon Public School Division office (306-683-8268).

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**Online Learning Centre**

Join the hundreds of students who are enjoying the wide variety of full-credit Grade 10-12 internet-based courses...

- Continuous intake
- Teacher-directed
- Independent study
- Over 35 courses available
- Easy access to your teacher by phone, e-mail, or in person.

*Please visit our website for more information: [http://olc.spd.sks.ca](http://olc.spd.sks.ca)*

**2017-2018 Online Courses:**

- **English -** ELA A10, B10, 20, A30, B30; Creative Writing 20, 30
- **Math -** Mathematics Foundations & Pre-Calculus 10; Foundations 20, 30; Workplace & Apprentice 20, 30; Mathématiques Pré-Cal 20 (French); Pre-Calculus 20, 30; Calculus 30
- **Social Science -** History 30; Native Studies 30
- **Science -** Biology 30; Chemistry 30; Computer Science 20, 30; Physical Science 20; Physics 30
- **Electives -** Accounting 10, 20, 30; Communications Media 20, 30; Communications Media (French) 20, 30; Geography 30; Journalism 20; Law 30; Photography 20; German 10, 20, 30; Psychology 30

As a Saskatoon Public School student, you are welcome to meet with a guidance counsellor at your home school to discuss including an online class to your timetable!

*Proudly offered by Saskatoon Public Schools*

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Information related to Career, Volunteer Opportunities and Post Secondary Education is available in Student Services. Stop in and book an appointment with a counsellor.