Advisory Group

Advisory is non-credit class that meets once a week on Thursday. Advisory is an effort to foster a strong sense of community at Walter Murray Collegiate. Through Advisory, students will develop positive and healthy relationships with school, teachers, and each other. Students and teachers decide upon the activities depending on the students' wants and needs. Students will have the same Advisory teacher throughout their time at Walter Murray Collegiate.

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 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

Creating a smooth transition from Grade 8 to high school is the main goal of Walter Murray’s new Grade 9 program (named/titled “#engage9wmci”). #engage9wmci has been designed to welcome all learners to Walter Murray by creating a sense of belonging to our school. Most importantly, #engage9wmci endeavors to maximize student engagement in their learning.

The Grade 9 experience at Walter Murray is an interdisciplinary, holistic, project-based program that meets Grade 9 curricular outcomes. Teachers work collaboratively to deliver programming that addresses the needs of all students. Possible supports include an EAL support teacher, a resource teacher, a mathematics teacher, and a literacy teacher who are involved in co-teaching and supporting students within their programming cohorts.

#engage9wmci is structured for students to be provided the opportunity to experience many of the unique programs that Walter Murray has to offer. From core components in numeracy and literacy, to a survey of tech options including, among others, construction, dance, and commercial cooking. Walter Murray grade 9 students are also provided the opportunity to choose an elective from an extensive list of courses, including band, a second language, another practical and applied arts course, and more! #engage9wmci has it all!

<table>
<thead>
<tr>
<th>Grade 9 Programming</th>
<th>French Immersion</th>
<th>SAGE Program</th>
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<tbody>
<tr>
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<td>Math</td>
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<td>Science</td>
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<td>Arts Education</td>
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<td>Practical and Applied Arts</td>
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<tr>
<td>Physical Education, Health, and Career</td>
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<tr>
<td>Students choose one elective</td>
<td>Physical Education, Health, and Career</td>
<td>Arts Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical Education, Health, and Career</td>
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<tr>
<td></td>
<td>Students choose one elective</td>
<td>Students choose two electives</td>
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<td></td>
<td>*please note Éducation artistique is integrated with Français A and Français B</td>
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</tbody>
</table>

Electives:

- Band
- Choral
- Core French
- EAL Support
- Foods
- Resource
- Technology Survey
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 be congregated together for these classes, and there will be many opportunities for enrichment, but they will not receive a designation from the Ministry of Learning for an advanced credit 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 academic 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.

Alternate Education—Life Skills Work Study (LSWS)
The Life Skills Work Study (LSWS) program is an accredited Alternate Education Program designed to meet the individualized needs of students who require intensive supports. The goal of the program is to prepare students to live and work as independently as possible within the community.

Students in grade nine complete course work in key academic areas (language arts, math, science, social studies, health, and physical education) and may choose Practical and Applied Arts classes based on ability and interest. Students are introduced to the world of work through small group work experiences within the school and surrounding community. Following grade nine, students progressively earn credits at the 18, 28, and 38 level in both academic and elective courses. Students continue to develop work readiness skills with gradual integration towards individual community based work placements.

Upon obtaining a minimum of 24 required credits, students graduate with an Alternate Grade 12 standing. However, Alternate Education credits are not recognized for entrance to most post-secondary programs.

Resource support is a non-credit class that is designed to provide support to students in grades 9 to 12 to be successful in their core academic classes required for graduation. Students receive individual or small group assistance with homework completion, organizational strategies, exam writing and study skills. Curriculum concepts may be retaught as required. The resource room teachers work with classroom teachers to adapt curriculum, and evaluation in order to meet the needs of the individual student.
### Grade 9
**Mandatory:**
- Français A09
- Français B09
- Sciences Humaines 09
- Mathématiques 09
- Sciences 09
- English Lang. A 09

- Éducation artistique 09
- PE/Health/Career Ed 09
- PAA09

**Unspecified Elective:**
1. ____________

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

### Grade 10
**Mandatory:**
- Histoire 10
- Mathématiques 10
- Sciences 10
- Français 10
- Wellness 10
- Mathématiques 20
- English Lang. B10
- English Lang. A10

**Unspecified Electives:**
1. ____________
2. ____________
3. ____________

### Grade 11
**Mandatory:**
- Français 20
- Français IntégréA20
- Histoire 20
- Mathématiques 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
- Français IntégréB20
- Sciences Sociales 30
- English Lang. A30 or
- English Lang. B30

**Unspecified Electives:**
1. ____________
2. ____________
3. ____________
4. ____________

### Total Credits

---

**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.

**Students in Grade 12 may wish to take both English classes to meet post-secondary requirements and out of province university admissions.**
**Grade 9**

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

**Unspecified Elective:**
1. __________

**Grade 10**

**Mandatory:**
- English A10 /or A 11
- English B 10 /or B 11
- History 10 /or 11
- Indigenous Studies 10
- Science 10 /or 11
- Wellness 10
- Mathematics
- MWA10
  - **AND/or**
- MFP10
  - or
- Mathematics

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

**Grade 11**

**Mandatory:**
- English 20/21
- 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
- Indigenous Studies 20 or 30
- Law 30
- Psychology 20 or 30

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

**Grade 12**

**Mandatory:**
- English A30 /or A31
- English B30 /or B31
- History 30 /or 31
- Indigenous Studies 30

**Unspecified Electives:**
1. __________
2. __________
3. __________
4. __________
5. __________
6. __________

**Total Credits**

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**TOTAL CLASSES:**
- Grade 10 = Grade 11 + Grade 12 = a minimum of 24
- Successfully complete at least five subjects numbered “30”
- Minimum of 9 electives, at least 6 in Grades 11 or 12
- Please see a Counsellor to discuss any Post-Secondary requirements

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**ARTS ELECTIVES:** Band, Choral


* 11, 21, 31 denotes Modified credits  * 18, 28, 38 denotes Alternate credits
## Course Offerings by Department and Grade

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<th>GRADE 12</th>
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<tr>
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<td>English Language B 10/11</td>
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<td>English Language B 30/31</td>
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<td>Media Studies 20</td>
<td>Creative Writing 30</td>
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<td><strong>Fine Arts</strong></td>
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<td>Choral 09</td>
<td>Choral 10</td>
<td>Choral 20</td>
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<td>Art Ed 09</td>
<td>Dance 10</td>
<td>Dance 20</td>
<td>Dance 30</td>
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<td>Drama 10</td>
<td>Drama 20</td>
<td>Drama 30</td>
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<td>Guitar 10</td>
<td>Guitar 20</td>
<td>Guitar 30</td>
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<td>Music 10</td>
<td>Music 20</td>
<td>Music 30</td>
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<td>Visual Art 10</td>
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<td>Visual Art 30</td>
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<td>Instrumental Jazz 10</td>
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<td><strong>Languages</strong></td>
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<td>French 30</td>
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<td>German 30</td>
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<td>Français B 09</td>
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<td>Japanese 30</td>
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<td>Français 10</td>
<td>Français 20</td>
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<td>Apprenticeship Math 20</td>
<td>Apprenticeship Math 30</td>
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<td>Fondements et pré-calcul 10</td>
<td>Pre-Calculus 20</td>
<td>Pre-Calculus 30</td>
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<td>Math 11</td>
<td>Math Fondements 20</td>
<td>Calculus 30</td>
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<td>Math Fondements 30</td>
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<tr>
<td>Education</td>
<td>PE/Health/Career Ed. 09</td>
<td>Wellness 10</td>
<td>Physical Education 20</td>
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<tr>
<td>Sciences</td>
<td>Social Studies 09</td>
<td>History 10 / 11</td>
<td>History 20 / 21</td>
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<tr>
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<td>Sciences Humaines 09</td>
<td>History 10</td>
<td>History 30 / 31</td>
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<td>Histoire 10</td>
<td>Sciences Sociales 30</td>
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<td>Indigenous Studies 10/11</td>
<td>Indigenous Studies 30/31</td>
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<td>Law 30</td>
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<tr>
<td><strong>Other Social</strong></td>
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<tr>
<td>Sciences</td>
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<td>Life Transitions 20</td>
<td>Life Transitions 30</td>
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<tr>
<td>Science 09</td>
<td>Science 10 /11</td>
<td>Science 21</td>
<td>Biology 30</td>
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<td>Health Science 20</td>
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<td>Computer Science 20</td>
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</tbody>
</table>
# Course Offerings by Department and Grade

## GRADE 09
- **Business Ed**
  - Accounting 10
  - Computer Processing 10
  - Career Work Exploration 10

- **Practical & Applied Arts**
  - Clothing, Textile & Fashion 10
  - Comm. Cooking 10
  - Drafting 10
  - Electronics 10
  - Photography 10
  - Machining 10
  - Mechanics 10
  - Visual Art 10
  - Welding 10
  - Construction/Carpentry 10
  - Yearbook Production 10

- **Technology 09 Survey**
  - Survey Drafting 10

- **Foods 09**
  - Foods 10

- **Other**
  - EAL Support
  - Resource Support
  - Driver Education

## GRADE 10
- Accounting 20
- Comp. Proc. 20
- Comm. Media 20
- Career Work Exploration 20
- Comm. Cooking 20
- Aviation Studies 20
- Electronics 20
- Photography 20
- Machining 20
- Mechanics & Auto 20
- Visual Art 20
- Welding 20
- Construction/Carpentry 20
- Yearbook Production 20

## GRADE 11
- Accounting 30
- Comp. Proc. 30
- Comm. Media 30
- Debate & Public Speaking 30
- Career Work Exploration A30 & B30
- Comm. Cooking 30
- Aviation Studies 30
- Electronics/Robotics 20
- Graphic Arts 20
- Machining 30
- Mechanics 30A
- Mechanics & Auto 30B
- Visual Art 30
- Welding 30
- Construction/Carpentry 30
- STOC Program 30
- Français Intégré A20
- Français Intégré B20

## GRADE 12
- Accounting 30
- Comp. Proc. 30
- Comm. Media 30
- Debate & Public Speaking 30
- Career Work Exploration A30 & B30
- Comm. Cooking 30
- Aviation Studies 30
- Electronics/Robotics 30A&B
- Graphic Arts 30
- Machining 30
- Mechanics 30A
- Mechanics & Auto 30B
- Visual Art 30
- Welding 30
- Construction/Carpentry 30
- STOC Program 30
- Français Intégré A20
- Français Intégré B20

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**For mandatory subject requirements (i.e. English, Math and Science), students are strongly encouraged to follow teacher recommendations when choosing classes. Grade 9 teachers will record grade level recommendation on the student report card.**

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*Mandatory courses are noted in the above planning guide. 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 counsellors 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 counsellors to ensure that they have the required subjects.*
ENGLISH A 10  (ELA10 / ELA11)
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, presenters, 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, representors, 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  (ELM20)
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.

ENGLISH LANGUAGE ARTS 30 AND HISTORY 30: AN INTEGRATED APPROACH (ELA30-G & HIS30-G)
English Language Arts A30 (ELA30) meets History 30 (HIS30) in an integrated approach. History 30 provides the framework, a chronology of our nation’s political and social history. ELA30 is interested in the voices of Canadians, those who experienced the past as well as those who live in the present. This approach sets these voices, contained in Canadian literature, against the historical events that have shaped our nation. The union of these two courses provides a comprehensive sense of who we were, are, and wish to be. Students electing to take these two compulsory courses in this unique way will be scheduled in a two-hour time block for one semester. The approach fosters and prizes creativity, adaptability, critical reasoning, and collaboration. Students who enjoy experience-based learning as well as drawing connections and moving fluidly between academic disciplines should consider this exciting two-credit offering.

English Language Arts
ELA09 — ELB09 — ELA10/11 — ELB10/11 — ELA20/21 — ELA30/31 — ELB30/31 — ELW20 — CRW30 — ELM20
• 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.

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<th>Compulsory Mathematics Courses</th>
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<td>One of:</td>
<td>One of:</td>
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<tr>
<td>Modified Basic Math</td>
<td>Workplace and Apprenticeship Mathematics 10</td>
<td>Workplace and Apprenticeship Mathematics 20</td>
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*THE MINISTRY RECOMMENDS THAT STUDENTS TAKE BOTH MWA10 & MFP10. STUDENTS ARE STRONGLY ENCOURAGED TO FOLLOW TEACHER RECOMMENDATIONS. GRADE 9 MATH TEACHERS WILL MAKE A MATH LEVEL RECOMMENDATION ON REPORT CARD.*

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.

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, and 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.
MATHEMATICS (continued)

Foundations of Mathematics Pathway
This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of calculus.

FOUNDATIONS OF MATH & PRE-CALC 10  (MFP 10)
Prerequisite: Math 09  A final mark of 70% or better is strongly recommended.
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  (MAF 20)
Prerequisite: Foundations of Mathematics and Pre-Calculus 10
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  (MAF 30)
Prerequisite: Foundations of Mathematics 20
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 AND PRE-CALC 10  (MFP 10)
Prerequisite: Math 09
A final mark of 70% or better is strongly recommended.
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  (MPC20)
Prerequisite: Foundations of Mathematics and Pre-Calculus 10
It is strongly recommended that Foundations 20 be taken before this class.
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.

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SCIENCE

HEALTH SCIENCE 21  (HSC21)
Prerequisite: Science 10 or Science 11
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  (SCI10)
Prerequisite: Science 09
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.

SCIENCE 11  (SCI11)
Prerequisite: Science 09 and approval of the level change
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.

ENVIRONMENTAL SCIENCE 20  (ESC20)
Prerequisite: Science 10
This is not your average science course. Environmental 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  (HSC20)
Prerequisite: Science 10
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 (PSC20)
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 primary language used will be Python, though students will also be exposed to Scratch and HTML/CSS. Concepts covered include data types, looping, conditionals, functions, string manipulations, and arrays. 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 explores problem solving through programming using the JavaScript language. Major topics include two dimensional arrays, associative arrays, file I/O, object oriented programming, and recursion. Computer Science 30 is an excellent introduction to post-secondary computer science courses, and successful completion allows you to confidently skip CMPT 140 at the University of Saskatchewan (can enroll directly in CMPT 141).

PHYSICS 30 (PHY30)
Prerequisite: Physical Science 20. A mark of 70% or above in Math Pre-Calculus 20 is recommended since there is a heavy emphasis in mathematical problem solving. Since the course is very challenging, students who are not in grade 12 are discouraged from taking physics 30. The major topics of study are motion, forces, magnetic, electric and gravitational fields, momentum and energy, modern physics and nuclear processes. Science projects, demonstrations and labs are used to encourage explaining phenomena scientifically.

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 is essentially a global history course that examines the major issues and events from the start of the 20th century to the present. Focus will be on causes and effects of WWI and WWII, the rise of totalitarian dictators versus liberal democracies, superpowers and the Cold War, and finally, the key institutions, issues, conflicts and successes of the more recent past.

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.

ENGLISH LANGUAGE ARTS 30 AND HISTORY 30: AN INTEGRATED APPROACH (ELA30-G & HIS30-G)
English Language Arts 30 (ELA30) meets History 30 (HIS30) in an integrated approach. History 30 provides the framework, a chronology of our nation’s political and social history. ELA30 is interested in the voices of Canadians, those who experienced the past as well as those who live in the present. This approach sets these voices, contained in Canadian literature, against the historical events that have shaped our nation. The union of these two courses provides a comprehensive sense of who we were, are, and wish to be. Students electing to take these two compulsory courses in this unique way will be scheduled in a two-hour time block for one semester. The approach fosters creativity, adaptability, critical reasoning, and collaboration. Students who enjoy experience-based learning as well as drawing connections and moving fluidly between academic disciplines should consider this exciting two-credit offering.
INDIGENOUS STUDIES 10/11 (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.

Recommended: Band 20 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. Performance demands are greater than previous levels. Participation at festivals and concerts is expected. This class meets a class fee of approximately $5 for sectionals.

INDIGENOUS STUDIES 20 (NAT20)
Recommended: History 10 or Native Studies 10 and students are encouraged to take this course in their grade 11 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.

INDIGENOUS STUDIES 30 (NAT30)
Recommended: History 10 or Native Studies 10. Open to Grade 12 only.
This is a course that examines Canadian Aboriginal Issues. There are 5 major units including; Aboriginal and Treaty Rights, Aboriginal People and the Justice system, Economic and Social Development of Aboriginal Communities, Governance, Land Claims and Treaty Land Entitlement.

LIFE TRANSITIONS 20 (LIF20)
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 (LIF30)
No prerequisite required.
This course deals with major changes encountered throughout one’s life in the family, work place and health care. 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.

PSYCHOLOGY 20 (PSY20)
No prerequisite required.
The program aim is to develop students’ understanding and appreciation for psychology as a field of scientific knowledge, and give students a frame of reference for understanding themselves, others and social relationships. 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 (PSY30)
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.

FINE ARTS

BAND 10 (BAN10-N)
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 (BAN20-N)
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 (BAN30-N)
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 (CHO10-N / CHO20-N / CHO30-N)
(Choral 10: No previous experience required)
(Choral 20: Completion of Choral 10 and/ or have the ability to sing independent parts)
(Choral 30: Completion of Choral 20 and/ or have the ability to harmonize with other singers)
Students will develop their vocal technique and learn choral repertoire from a variety of musical periods and styles. Participation at festivals and concerts is expected. This class meets before school and therefore may be taken as an eleventh class. Performance demands are greater than previous levels. There is a class fee of approximately $5 for sectionals.

INSTRUMENTAL JAZZ 10 (JAZZ 10)
Co-requisite: concert band or permission from the instructor
Jazz studies 10 is designed for students to explore the craft of improvisation, which is at the heart of jazz. The course will focus on listening to works of the masters, chord/scale study, and improvising on a variety of pieces central to the jazz repertoire. An emphasis will be placed on developing aural skills. By the end of this course students should have a basic understanding of jazz and direction for life-long learning. This course is open to grade 10, 11, and 12 students who are currently enrolled in band. In addition to those who have taken concert band, students who have lessons on guitar, bass or piano may participate subject to an audition/ interview with the instructor.
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 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. There is a class fee of approximately $25.

DANCE 20  (DAN20)
Recommended: Dance 10
In this course, students will explore a variety of dance forms to develop an increased awareness of the 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. There is a class fee of approximately $25.

DANCE 30  (DAN30)
Recommended: Dance 20
In this course, students continue to explore a variety of dance forms 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. Part of this class will also be spent promoting dance through community partnerships. There is a class fee of approximately $25.

Drama 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 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.

MUSIC 10  (MUS10)
Basic classical guitar technique, note reading, and chording are introduced. It is helpful if students have access to a guitar for home practice.

MUSIC 20  (MUS20)
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 treble clef and music notation.

MUSIC 30  (MUS30)
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.

VISUAL ART 10  (VAR10)
This studio based course emphasizes being able to see as an artist while exploring various materials. Projects may include drawing, painting, clay, collage, printmaking, and copper work. Students will learn about art history through an artist study and participate in art critiques. Students are required to purchase a 9 x 12 sketchbook, drawing pencils, metal sharpener, erasers and paintbrushes, including a fine detail brush. There is a class fee of $10.

VISUAL ART 20  (VAR20)
Recommended: Art 10
This course builds on the skills developed in Visual Art 10. This studio based course emphasizes in depth work and the creative process. Projects may include pencil drawing, ink drawing, oil pastel portraits, acrylic, watercolour, and clay. Students will learn about other artists through an Artist study. Students are encouraged to develop creativity and originality in their work. Students are required to purchase a 9 x 12 sketchbook, drawing pencils, metal sharpener, erasers, paintbrushes, including a fine detail brush. There is a class fee of $10.

VISUAL ART 30  (VAR30)
Recommended: Art 20
This course builds on the skills developed in Visual Art 20 and the artist becomes more self-directed. This studio based course emphasizes in depth work and the creative process. Projects may include metal work, plaster, collage, acrylic, watercolour, ink, pencil, clay, chalk and oil pastels. Students will complete a Canadian artist study. Students are encouraged to develop creativity and originality in their work. Students are required to purchase a 9 x 12 sketchbook, drawing pencils, metal sharpener, erasers, paintbrushes, including a fine detail brush. There is a class fee of $10.
SECOND LANGUAGES

FRENCH 10 (FRE10)
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 (FRE20)
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 (FRE30)
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 (GER10)
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” and board games in German. 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 (GER20)
Prerequisite: German 10
German 20 begins with a review of German 10. Topics include food, clothing, music, and playing board games in German.

GERMAN 30 (GER30)
Prerequisite: German 20
Topics of interest in German 30 are based partially on students’ interests, mostly focuses on extended conversations. Literature, films, videos and other supplementary materials continue to widen students’ vocabulary, grammar and cultural understanding.

JAPANESE 10 (JAP10)
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 (JAP20)
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 (JAP30)
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 (SPA10)
Prerequisite: None
¡Hola! Spanish 10 is an introduction to the Spanish language, so no previous experience is required for this class. Students will be introduced to a variety of cultural traditions, music, and food from various Spanish-speaking countries from across the globe in order to spark an interest in Spanish and Latin-American culture. This introductory course focuses on building a foundation in everyday communication with units that focus on these topics: greetings and goodbyes, the classroom and school life, and family. Throughout the course, students will focus on speaking, listening, reading, and writing skills through a variety of activities and projects, both independently and within a group.

SPANISH 20 (SPA20)
Prerequisite: Spanish 10
¡Vámonos! Students will begin this course with a fun, interactive project to review the major learning components of Spanish 10. This course will immerse students in the Spanish language as they continue to build on the communication skills they learnt in Spanish 10. Through a variety of activities and projects, students will read, write, speak, and listen as they explore the following topics: pastimes and sports, travel and vacation, and clothing and shopping. Students will continue to be exposed to Spanish and Latin-American culture, such as sports, music, art, and film.

SPANISH 30 “NEW COURSE” See next page....
SECOND LANGUAGES (continued)

SPANISH 30 (SPA30)
Prerequisite: Spanish 10 and Spanish 20
¿Te gusta el español? In Spanish 30, you will get to continue to strengthen the already solid foundation you have built with Sra. Laverty in Spanish 10 and 20. There will be a strong focus on communication skills, as most instruction and classroom communication in this course will be in Spanish. The units of Spanish 30 will focus on vocabulary and grammar that will help students communicate about their daily routines, food, traditional parties and celebrations, and personal relationships. Not only will students continue to develop their speaking, listening, and reading skills, but this course will also challenge students to create a variety of written compositions in Spanish. A cultural component will be included in the course with a focus on traditional food and celebrations, as well as music, film, art, and literature.

WELLNESS 10 (WLF10-girls or WLM10-boys) (PED20)
Prerequisite: Physical Education 09.
The aim of Wellness 10 is that students will develop behaviours that support life-long health. This will include daily physical activity, setting goals for their personal fitness as well as investigating many lifestyle and wellness topics such as nutrition, time and stress management, mental health education, and leisure opportunities. Students will receive a percentage mark on their report card. Athletic clothing and proper running shoes must be worn.

PHYSICAL EDUCATION

PHYSICAL EDUCATION 20 (PED20)
Wellness 10 Recommended. The focus of this course is to experience a variety of lifetime recreational activities. Activities may include: mixed martial arts, squash, disc golf, broomball, horseshoes, table tennis, 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.
When registering for this course you may select semestered co-ed, female only or non-semestered SPED/Band. *There is a class fee of $80. Students will not receive a credit if they have previously taken PED20.

PHYSICAL EDUCATION 30 (PED30)
Wellness 10 Recommended. 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 mixed martial arts. Most activities are held outside of the building and therefore buses will be used to transport students to and from venues. When registering for this course you may select semestered co-ed, female only or non-semestered SPED/Band. *There is a class fee of $80.

ACTIVE LIVING & FITNESS LEADERSHIP 20/30 (ALF20/30)
Wellness 10 Recommended.
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, principles of training, 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, 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.

HIGH PERFORMANCE SPECIAL PHYSICAL EDUCATION 20 Wellness 10 Recommended.
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. *There is a class fee of $40. Students will not receive a credit if they have previously taken PED20.

Information related to career, volunteer opportunities and Post Secondary Education is available in Student Services.
Stop in and book an appointment with a counsellor.
PRACTICAL & APPLIED ARTS

BUSINESS EDUCATION

ACCOUNTING 10 (ACC10)
Accounting 10 is a computerized and “hands-on” introductory accounting course. The complete accounting cycle for an entrepreneurial service firm will be covered. This class introduces the principles and process involved in double-entry accounting systems. Some concepts such as analyzing debits and credits, recording in journals, posting to ledgers, work-sheets, practical banking applications (cheques, reconciliation of bank statements), and EXCEL spreadsheets will be used in the preparation of financial reports. This class is recommended for anyone interested in pursuing a career in business and/or accounting. Learning can be transferred to apply to personal situations in everyday life including topics such as chequeing accounts, expenses, income, profit and net loss.

ACCOUNTING 20 (ACC20)
Accounting 10 recommended.
Accounting 20 is a second-year computerized and “hands on” accounting course designed to reinforce and enhance accounting principles and concepts of a merchandising firm. Specialized accounting such as journalizing into special journals (cash receipts, cash payments, purchases, and sales) accounts receivable, accounting payable, posting to subsidiary ledgers, inventory, payroll, PST and GST are included. They will learn about risks related to credit sales and about collection of debts. Partnership accounting is introduced. Several manual and computerized simulations will also be covered emphasizing individualized and cooperative learning among students.

ACCOUNTING 30 (ACC30)
Accounting 10 and Accounting 20 recommended.
Accounting 30 is a third-year accounting course designed to reinforce and enhance accounting principles and concepts introduced in the previous accounting courses. 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 is used for constructing graphs, preparing schedules of cost of goods manufactured, budgets, variance analysis, comparative income statements, cost-volume-profit analysis.

COMMUNICATIONS MEDIA 20 (CME20)
Recommendations: 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.

ACCOUNTING 30 (ACC30)
Accounting 10 and Accounting 20 recommended.
Accounting 30 is a third-year accounting course designed to reinforce and enhance accounting principles and concepts introduced in the previous accounting courses. 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 is used for constructing graphs, preparing schedules of cost of goods manufactured, budgets, variance analysis, comparative income statements, cost-volume-profit analysis.

COMPUTER/INFORMATION PROCESSING 10 (CPR10)
This course will help you to process information effectively and efficiently; making sound decisions about life choices and careers; and, understand the interrelationship among individuals, the business world, and government. Computer/Information Processing 10 has a “Personal Use” focus. Microsoft Office—Word, Excel and PowerPoint—what more do you need to truly function efficiently on your computer? Word processing, resumes, cover letters, spreadsheets, and presentations are all aspects of this computer class. Emphasis is on developing proper keyboarding technique, speed, and accuracy.

COMPUTER/INFORMATION PROCESSING 20 (CPR20)
Computer/Information 10 recommended.
Computer/Information Processing 20 has a Business focus. This course provides students with the opportunity to develop further the information technology knowledge and skills needed in the business world. Microsoft Office—Word, Access, and Publisher are explored in depth as students develop advanced word processing and spreadsheet techniques, how to design their computer workplace, and page layout through the use of graphics and information. Students will create and design their own business card. Keyboard speed and accuracy is enhanced using Cortez Peters software.

COMPUTER/INFORMATION PROCESSING 30 (CPR30)
Computer/Information 20 recommended.
Computer/Information Processing 30 has a Managerial focus. This course provides students with the opportunity to develop and improve their essential skills in information technology needed in the workplace. They will develop their understanding of electronic business environments, improve their skills in electronic research and in using business application software in the preparation of business documents and manage information. Computer use is geared toward advanced topics in Word, Excel, and Access database, spreadsheets, creating professional documents and ergonomics. Keyboard speed and accuracy is enhanced using Cortez Peters software.

Debate and Public Speaking 30 (DPS30)
Recommendations: None.
Through debate and public speaking, students extend their abilities to decode and analyze essential arguments at the heart of democracy. In the age of “fake news”, this course seeks to prepare students to question assumptions, and learn to value diverse positions by being asked to speak on both sides of contentious current events issues. This course will focus on teaching skills in argument construction and deconstruction, research, logic and rhetoric, and persuasive speaking through debate and public speaking activities.

*Please note: Debate and Public Speaking 30 is an English 30 course elective. Due to space constraint, we have listed it in this section.
CLOTHING, TEXTILE, AND FASHION 10, 30  (CLO30)
Are you a trendy individual who is interested in sewing, designing and/or making your own clothing and accessories? Do you have a passion for fashion? Whether you already have a sewing background, or are new to using the machines, this fun-filled class will spark your creativity and amplify your abilities! Everyone is welcome as we examine the past and present of fashion around the world and use our knowledge to inspire our own individual projects. Please note that students are responsible for purchasing/providing the materials needed to complete their individual assignments.

There is a class fee of approximately $15.

COMMERCIAL COOKING 10  (COC10)
Food allergies or dietary restrictions may limit a student’s ability to participate in lab-based activities.
Join us as we explore the culinary arts! This is a hands-on beginner class (no experience required) designed to foster a love of cooking and develop basic skills in a fun-filled and supportive atmosphere. All are welcome as, together, we explore the history of the food industry and make everything from appetizers to desserts! Students will also have the opportunity to earn a Public Health FoodSafe Level 1 certificate. See you soon!

There is a class fee of approximately $35.

COMMERCIAL COOKING 20  (COC20)
Recommended: Commercial Cooking 10
For safety reasons, Public Health FoodSafe Level 1 certificate is required for this course. Food allergies or dietary restrictions may limit a student’s ability to participate in lab-based activities.
Welcome to our new fun-filled and fast-paced intermediate cooking class! Together we will build on the skills developed in Commercial Cooking 10 as we cook, bake and serve our way through a modern menu. The Appetizer and Breakfast units are typical highlights of the course, along with the popular WMCI Cafeteria component all students are welcome to be a part of! Come and join our team.

There is a class fee of approximately $35.

COMMERCIAL COOKING 30  (COC30)
Recommended: Commercial Cooking 20
For safety reasons, Public Health FoodSafe Level 1 certificate is required for this course. Food allergies or dietary restrictions may limit a student’s ability to participate in lab-based activities.
Building on our skills in Commercial Cooking 10 and 20, this advanced class is almost entirely composed of hands-on skill building and cooking in both the lab and cafeteria! If you have a passion for food this is the place for you!

There is a class fee of approximately $35.

FOODS 10, 30  (FOO10)
Food allergies or dietary restrictions may limit a student’s ability to participate in lab-based activities.
Come and join us in this hands-on beginner class! All are welcome as we cook, bake and decorate our way through a variety of introductory modules. Delicious, healthy and easy-to-make meals are always on the menu before we begin to tackle cake design in the second half of the semester. If a project-based, relaxing atmosphere is what you need, this is the class for you!

There is a class fee of approximately $35.

INTERIOR DESIGN 30  (INT30)
If you love design, and have a flair for the artistic, this is the class for you! Throughout the year, you will explore numerous areas of design related to furniture selection, colour schemes, traffic patterns, floor plans, lighting and accessories. This course offers an artistic look at interior design through research, projects, guest speakers and field trips! Come and explore the wonders of Interior Design 30.

There is a class fee of approximately $15.

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 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.
ENGLISH AS AN ADDITIONAL 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.

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.

SUPPORT CLASSES (ES1X / ES2X)
Recommended Proficiency Benchmark A1.1—B1.2
These classes are designed for English language learners who require additional support in their subject area courses. These classes support English language learners by providing students with extra time to focus on their studies, learn new subject-area concepts in English, and receive support, one-on-one or in small groups, with assignments, homework and test preparation. Students may take one or two hours of EAL support each semester. These courses are not for credit.

ENGLISH AS AN ADDITIONAL / SECOND LANGUAGE—
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 spend 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.

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 spend 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.

CAREER AND WORK EXPLORATION A30 & B30 (CWA30 / CWB30)
(2 credits)
This program is available to grade 12 students. These courses maximize opportunities for students to access the workplace. The instructional in-school component is complemented by appropriate practical work experiences in the local business community. The classroom component concentrates on personal career preparation relative to student interests, abilities and economic reality. The domains of interpersonal and communication skills are highlighted relative to creative job search techniques and career preparation models. Students may spend up to nine 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. The course follows the learning-by-doing approach. The activities provide many new experiences that help students make career choices and improve their skills to find, obtain and keep a job. There is a class fee of approximately $8 per course.

FOODS 10—SHELTERED (FOO10S)
This course is offered to students who have limited English language skills. Students will study the English language and all are welcome as we cook, bake and decorate our way through a variety of introductory modules. Delicious, healthy and easy-to-make meals are often on the menu as we focus on skills building and terminology. Come and join the fun!

SCIENCE 10 SHELTERED (SCI10S)
Recommended Proficiency Benchmark B1.1+
Sheltered Science 10 is only available to English Language Learners and focuses on developing academic language with the same themes, concepts and objectives as regular Science 10 students. Registration in this class is open to students assessed at an intermediate English proficiency level of reading, speaking and writing. Successful completion will earn students a regular Science 10 credit.

HISTORY 10 SHELTERED (HIS10S)
Recommended Proficiency Benchmark B1.1+
Sheltered History 10 is only available to English Language Learners and focuses on developing academic language with the same themes, concepts and objectives as regular History 10 students. Registration in this class is open to students assessed at an intermediate English proficiency level of reading, speaking and writing. Successful completion will earn students a regular History 10 credit.

ARTS ED 10—SHELTERED (ARE10S)
Arts Education (Visual Arts focus). This course is offered to students who have limited English language skills. Students will study the English language through art and use of a variety of art materials and techniques. Students will explore cultural influences of the arts and how all of the strands of the arts (music, movement, drama and art) are expressed in Foods 10-sheltered.

MUSIC 10 SHELTERED (MUS10S)
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.
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)
Recommended: 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.

DRAFTING 10 (DRF10)
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)
Recommended: 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. They will also expand from the basics, practicing advance dimensions, techniques, and auxiliary views. As well, students will draw a variety of fasteners and joints.

DRAFTING 30 (DRF30)
Recommended: Drafting 20
The Drafting 30 course further explores mechanical drafting through the implementation of common techniques, practices and standards. Students will create presentation floor plans and elevations, a house model, and 3D modeling. In addition, students will develop working drawings for assembled products.

ELECTRONICS 10 (EEO10)
Recommended: Electronics 10
This course is an introduction to Electronics and Robotics. Students will explore several outcomes including: electrical safety, how to read schematic diagrams, breadboard, solder, and printed circuit board fabrication. The lab activities will explore a variety of analog devices and integrated circuits. The activities are very hands on and the students will be able to build projects they can take home. **There is a class fee of $15 that covers their first set of projects. The students will pay for any additional projects they take home.**

ELECTRONICS/ROBOTICS 20 (EEO20)
Recommended: Electronics 10
This intermediate level course builds on outcomes covered in Electronics 10. To be prepared to take this course, the students will need to be able to read schematic diagrams, breadboard, troubleshoot, identify devices and use Ohm’s Law. Digital devices including programmable microprocessors will be introduced. The students will work mainly with the Arduino and interfacing devices. The students have the option to make Robotics their course focus. The activities are very hands on and the students will be able to build projects they can take home. **The students will pay for any projects they take home.**

ELECTRONICS/ROBOTICS 30A (EEA30)
Recommended: Electronics 20
This course builds on outcomes covered in Electronics/Robotics 10 and 20. The students will need to be able to read complex schematic diagrams, program using the Arduino IDE as well as work through challenges using a variety of sources. The students are self-directed, working to integrate course specific objectives into their project(s). **The students will pay for any projects they take home.**

ELECTRONICS/ROBOTICS 30B (EEB30)
Recommended: Electronics 30A
This is an advanced course meant to explore their interests based on course themes. The projects challenge multiple course outcomes and could include a design element. The students can use this course to build the project they explored and prototyped in the ELECTRONICS/ROBOTICS 30A. **The students will pay for any projects they take home.**

PHOTOGRAPHY 10 (PHO10)
Recommended: Electronics 10
This is an introductory course into the world of photography and graphic design. You will explore both technical and aesthetic aspects of photography compositional guidelines, reading light and an introduction to Photoshop as a powerful tool to enhance and create exciting and dynamic images. Students will create a variety of original images in digital and analogue formats. **There is a class fee of approximately $25. Access to a digital camera would be an asset.**

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PHOTOGRAPHY 20 (PHO20)
Recommended: Photography 10 or permission from teacher
This class builds on the foundational objectives of Photography 10. Knowledge of camera controls and some Photoshop skills are necessary. We will explore lenses, filters, studio lighting and further exploration of film and darkroom techniques. Participants will build a portfolio or original work including portraiture, studio lighting, landscapes and special effects. Further understanding of how aesthetic and technical choices will affect the final image. There is a class fee of approximately $25. Access to a digital camera would be an asset.

PHOTOGRAPHY 30 (PHO30)
Recommended: Photography 20 or permission from teacher
Further exploration of dynamic image making! In Photo 30 the participants will expand their technical skills while exploring commercial, artistic and experimental avenues of the photographic world. There is increased emphasis on individual interests and choice as students create a portfolio of their own work. There is a class fee of approximately $25. Access to a digital camera would be an asset.

GRAPHIC ARTS 20 (GRA20)
Recommended: Photo 10
We will explore the design process and understand what makes a good design. Projects such as logos, billboard design, 3-D packaging and effective poster layout encourage participants to apply the elements and principles of design. Photoshop as well as an introduction to the Illustrator program provides the students with powerful tools to bring their ideas to life. There is a class fee of approximately $20.

GRAPHIC ARTS 30 (GRA30)
Recommended: Graphics Arts 20
Participants will further their development of technique and style in Graphic Arts 30. Building confidence with the Illustrator program and a digital tablet will coincide with more traditional methods to give the students a solid foundation should they decide to pursue a career in design. Book cover, illustration, advertising and brand promotion are a few of the areas we will explore. There is a class fee of approximately $20.

YEARBOOK PRODUCTION 10, 20, 30 (PHO10G / GRA20G / GRA30G)
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-semestered course and runs 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)
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, mill, and fasten metal. Computerized Numerical Control (CNC) milling is introduced. A variety of student projects are created. There is a class fee of $15.

MACHINING 20 (MAC20)
Recommended: Machining 10
In this course students build on the outcomes from the 10 level, developing their machining skills through the creation of intermediate level projects. CNC milling, programming, and operation is incorporated in components of projects. For safety concerns Machining 10 is required to be taken before Machining 20. There is a class fee of $10.

MACHINING 30 (MAC30)
Recommended: 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. Personal projects of greater complexity are created. For safety concerns Machining 20 is required to be taken before Machining 30. There is a class fee of approximately $10.

MECHANICS 10 (MEC10)
This course is an introduction to mechanics, so previous mechanics experience is not necessary to be successful in this course. 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.

MECHANICS 20 (MEC20)
Recommended: Mechanics 10
This course deals with some basic automotive systems, as well as some of the advanced systems in automotive mechanics. It builds on experience from mechanics 10, including safety, shop procedures, tools, and system operation. Students are expected to have completed the mechanics 10 courses before taking this course. They are expected to work at their own pace, and will be working with tires, brakes, engines, cooling systems, exhaust systems, electrical systems and others. Students 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)
Recommended: Mechanics 20
This course deals with some basic automotive systems, as well as some of the advanced systems in automotive mechanics. It builds on experience from mechanics 20, including safety, advanced shop procedures, tools, and system operation. Students are expected to have completed the mechanics 20 outcomes before taking this course. They are expected to work at their own place, 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.
**TECHNOLOGY (continued)**

**WELDING 10 (WLD10)**
Students learn to weld utilizing Oxy-Acetylene welding and cutting, Plasma cutting, Shielded Metal Arc Welding (SMAW), and Gas Metal Arc Welding (GMAW) processes. Students learn safety and the proper use of hand tools and equipment prior to the commencement of welding. Students perform a variety of welds and cutting operations meeting the outcomes of the curriculum. Upon completion of the compulsory welds, a variety of teacher directed projects are created. **Students will pay for their own projects in addition to a class fee of $15.**

**WELDING 20 (WLD20)**
**Recommended: Welding 10**
Students develop an intermediate level of competence in Oxy-Acetylene welding and cutting, Plasma cutting, Shielded Metal Arc Welding (SMAW), and Gas Metal Arc Welding (GMAW). Students are introduced to Tungsten Inert Gas welding (TIG). Students perform a variety of welding and cutting operations meeting the outcomes of the curriculum. Upon completion of the compulsory welds, teacher directed and student designed projects are created. For safety concerns Welding 10 is required to be taken before Welding 20. **There is a class fee of $15. Students are required to pay for personal projects.**

**WELDING 30 (WLD30)**
**Recommended: Welding 20**
Students develop an advanced level of competence in Oxy-Acetylene welding and cutting, Plasma cutting, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), and Tungsten Inert Gas welding (TIG). Upon completion of the compulsory welds, students design and create a personal project(s). For safety concerns Welding 20 is required to be taken before Welding 30. **There is a class fee of $15. Students are required to pay for personal projects.**

**CONSTRUCTION AND CARPENTRY 10 (CAC10)**
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, mitre 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)**
**Recommended: 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 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. For safety concerns Construction and Carpentry 10 is required to be taken before Construction and Carpentry 20. **Students will pay for their own projects.**

**CONSTRUCTION AND CARPENTRY 30 (CAC30)**
**Recommended: 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). For safety concerns Construction and Carpentry 20 is required to be taken before Construction and Carpentry 30. **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 sub trades, including; electrical, framing, interior finishing, exterior finishing, concrete forming and finishing, and brick laying. The final class project will involve constructing and finishing a garage on site. Students are required to supply their own steel toed books. **There is a $75 fee for fall protection certification.**

**DRIVER EDUCATION 10 (DRI10-N)**
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 semes-
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.
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 (polynomiales, périodiques, logarithmiques et exponentielles).

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: financial decision making, logical reasoning, counting principles, probability, polynomial functions, periodic functions, and logarithmic and exponential functions.

SCIENCES 10F (SCI10F)
Préalable: Sciences 09F
Ce cours entame la chimie des mélanges et des solutions, l’inscription des formules, le climat, la dynamique des écosystèmes, le movement et la force dans notre monde. Les concepts ci-dessus sont appliqués dans des activités pragmatiques et de laboratoire.

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.

French Immersion Students in Grade 12 may wish to take both thirty level English classes to meet certain post secondary requirements.

2019-2020 Online Courses:

- **English** - ELA A10, B10, 20, A30, B30; Creative Writing 20, 30
- **Math** - Foundations & Pre-Calculus 10; Foundations 20, 30; Workplace & Apprentice 10, 20, 30; Mathématiques Pré-Calc 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!

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