

NOTRE DAME HIGH SCHOOL

Grades 11 & 12 Course Selection Guide

2020



2021

Champions of Faith and Respect

Table of Contents

PRINCIPAL’S MESSAGE	3
ALBERTA HIGH SCHOOL DIPLOMA REQUIREMENTS.....	4
MINISTRY COMPONENT.....	4
ALBERTA HIGH SCHOOL CERTIFICATE REQUIREMENTS.....	4
WHAT’S NEW!	5
REGISTRATION	5
TECHNOLOGY	5
GRADE 11 & 12 COURSE SELECTION GUIDE	6
RELIGIOUS STUDIES.....	6
CALM	6
ENGLISH LANGUAGE LEARNERS.....	7
ENGLISH LANGUAGE ARTS.....	7
SOCIAL STUDIES	9
MATHEMATICS.....	10
SCIENCE.....	12
PHYSICAL EDUCATION.....	14
SOCIAL SCIENCES.....	15
INTERNATIONAL LANGUAGES.....	15
FINE ARTS.....	16
CAREER AND TECHNOLOGY STUDIES (CTS).....	19
CAREER AND TECHNOLOGY STUDIES – ADDITIONAL COURSES.....	24
NEW OFF-CAMPUS EDUCATION	1
RUTHERFORD SCHOLARSHIP.....	2

PRINCIPAL'S MESSAGE

Welcome to Notre Dame High School for the 2020-2021 school year! As the principal of your school, I want you to know how excited I am that you have chosen Notre Dame for your high school learning journey.

The school motto, "Champions of Faith and Respect", focuses on attributes and values that I want all Notre Dame students to pursue and exemplify in their daily lives.

There are numerous opportunities for you to showcase and extend your talents, skills, hobbies, and expertise at our school. It is important for you to become an active participant and leader in our many diverse clubs, athletic teams, fine arts ensembles, or extra-curricular events while still maintaining your academic studies. Plan this year to join a new activity to expand your friendships and develop new relationships that are so critical to a positive high school experience.

Notre Dame is also recognized for its superior academic standards. The staff has a strong tradition of excellence in all areas of learning and they are committed to nurturing your faith journey as well as your academic and social development. Notre Dame is proud to be an active member of the Catholic Community of Caring. In our school community you will find the dignity and worth of all individuals is of fundamental importance.

I wish you a positive and productive year. I am sincerely looking forward to meeting you personally sometime in the new school year!

With every best wish,

Frank Durante
Principal

ALBERTA HIGH SCHOOL DIPLOMA REQUIREMENTS

English Language Arts 30-1 or 30-2
Social Studies 30-1 or 30-2
Any 20 level Mathematics class
Any 20 level Science class
Physical Education 10
Career & Life Management
10 credits in Career & Technology Studies or Fine Arts or International Languages or Physical Education 20, 30
10 credits in 30 level courses in addition to English Language Arts 30-1 or 30-2 and Social Studies 30-1 or 30-2
Other credits including 9 credits in Religious Studies
TOTAL CREDITS – MINIMUM 100

MINISTRY COMPONENT

To be involved in Graduation ceremonies, students must have successfully completed RS Roman Catholic 15, 25 (or Religions of the World 35), and 35. Some exceptions are made for students who have come from outside Calgary Catholic School District for their Grade 11 or Grade 12 year. Also, students must have successfully completed the Ministry Component (minimum 25 hours over three years at Notre Dame High School). Some exceptions are made for students who have come from outside Calgary Catholic School District for their Grade 12 year.

ALBERTA HIGH SCHOOL CERTIFICATE REQUIREMENTS

Minimum of one K&E Course
English Language Arts 20-2 or 30-4
Social Studies 10-2 or 20-4
Mathematics 10-3 or 20-4
Science 14 or 20-4
Physical Education 10
Career & Life Management
5 credits in 30-level occupational and 5 credits in 30-level practicum
Other credits including 9 credits in Religious Studies

WHAT'S NEW!

In this section you'll discover the new additions to the course selection guide. These courses offer students an exciting new opportunity to learn about different subjects. In some cases, the courses themselves are not new however they may incorporate up-to-date learning best-practices or may have changed names. The full course descriptions can be found in the course selection guide section under the specific subject.

1. RS Roman Catholic 15/25/35 (Formerly Religious Education) pg. 6
2. Aboriginal Studies 30 pg. 8
3. English 20-1 CC pg. 9
4. Design Thinking for Innovation 15/25/35 (Formerly known as Pre-engineering) pg. 17

REGISTRATION

Calgary Catholic is proud to provide a complete range of programs, services and exciting learning opportunities to enhance the knowledge, talents and abilities of your child.

Please contact the registrar at Notre Dame High School at 403-500-2109 for more information on the registration process.

TECHNOLOGY

Students at Notre Dame High School will have the opportunity to learn while using technology. If a child is interested in using their own device for their learning they should consult with the classroom teacher to determine how they can be supported.

GRADE 11 & 12 COURSE SELECTION GUIDE

RELIGIOUS STUDIES

Religions of the World 35 (Gr. 11 course) – This course is an alternate RE 25 course for students who will look at world religions from a Catholic perspective. Students will explore beliefs and practices of Christian and non-Christian religions both as an independent belief system and as a religion in dialogue with Catholicism. Students will deepen their sense of self-identity within their own faith tradition and come to respect the diverse perspectives held by others.

Pre-requisite: 50%+ in Religious Education 15 (3 credits)

*****NEW***RS Roman Catholic 15 – Christ and Culture** – The principal aim of *Christ and Culture* is to assist students, with the help of the Gospel, to participate as Christians in the shaping of our culture. The program explores major cultural issues from a Christological perspective. Beginning with their own life experiences, students acquire a deeper and more systematic knowledge of themselves, Christ's message, and the Church. Connections between the Church and contemporary culture are explored in terms of what it means to be a responsible adolescent developing as a member of a Catholic, Christian community while living within the context of a broader culture. (3 credits)

*****NEW***RS Roman Catholic 25 – Jesus Christ: God's Gift of Salvation** – Jesus Christ: God's Gift of Salvation invites students to deepen their relationship with Jesus through a prayerful study of Scripture. Students will explore the Jewish historical, religious, and cultural world into which the Messiah was born and the Old Testament covenant fulfilled. Using the Gospels as primary sources, the course explores Jesus' birth, early life, and ministry; his preaching of the Kingdom of God; his special teachings, particularly the parables; and his miracles. It then focuses on the scriptural accounts of his death and Resurrection, the Ascension, and their central significance for the Church's understanding of Jesus as Christ, the Son of God. **Pre-requisite: 50%+ in RS Roman Catholic 15** (3 credits)

*****NEW***RS Roman Catholic 35 – In Search of the Good** – In Search of the Good challenges students to understand themselves as moral persons called to discipleship by living the way of Christ. Through an examination of ethical theories, the revelation of Sacred Scripture, and the lived experience and teaching of the Catholic Church, this course invites students to mature as active participants in their faith. At the heart of catechesis is the human search for happiness as the completion of the superabundant love of God. The same tension which exists between the revelation of God's love and the explorations of human reason are worked out in the areas of freedom, justice, human relations, ecology, reconciliation, life in community, and political life. **Pre-requisite: 50%+ in RS Roman Catholic 25 or Religions of the World 35** (3 credits)

CALM

Career and Life Management (CALM) – This online course enables students to make well informed, considered decisions and choices in all aspects of their lives to develop behaviors and attitudes that contribute to the well-being and respect of self and others now and in the future. This course is a graduation requirement for an Alberta High School Diploma and Certificate. (3 credits)

ENGLISH LANGUAGE LEARNERS

ESL Introduction to Mathematics 15 – The goal of this course is to support students in acquiring academic language skills while mastering the key foundational mathematical ideas and basic math content necessary for entry into grade-level mathematics classes. This course is appropriate for those English language learners who enter high school without the pre-requisite skills necessary for entry into Math 10C or 10-3. (5 credits)

ESL Introduction to Science 15 – This course is designed to provide the necessary pre-requisite skills to assist with transition to grade level science classes. This course is appropriate for those English language learners who enter high school without the pre-requisite skills necessary for entry into Science 10 or 14. (5 credits)

ESL SI - Level 2 – The Level 2 course is primarily designed to assist students who have little or no formal experience with English. The focus of this course is to help students develop basic communication skills in spoken and written English. Students will work toward developing their English language skills in listening, speaking, reading and writing in a variety of contexts. As learning a new language takes time, students may need to take this course more than once. (5 credits)

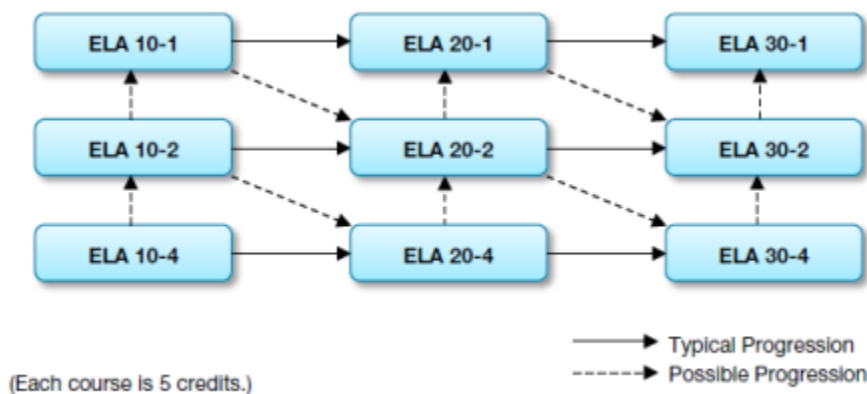
ESL SI - Level 3 – The Level 3 course is primarily designed for students who have basic English language competency and conversation skills. This course emphasizes language development for academic learning. Students receive instruction and practice the language skills necessary to further their learning in a variety of subject areas. As learning a new language takes time, students may need to take this course more than once. **Pre-requisite: 50%+ in ELL Level 2.** (5 credits)

ESL SI - Level 4 – The Level 4 course is primarily designed for students who can comprehend instruction in most senior high courses, but require support in areas including reading strategies, writing skills, vocabulary development, and background knowledge. This course emphasizes language development for academic learning. As learning a new language takes time, students may need to take this course more than once. **Pre-requisite: 50%+ in ELL Level 3.** (5 credits)

ESL Introduction to Canadian Studies 15 – This course is for level 1 and 2 students to develop social studies vocabulary while supporting English language learning and to gain background knowledge of Canada. Students will work on language development in conjunction with subject specific vocabulary and content. (5 credits)

ESL Introduction to Canadian Studies 25 – This course is appropriate for level 3 and 4 students who have more English language proficiency to develop the necessary skills and to address explicit and implicit cultural values of the Alberta Social Studies Program of Studies for students to be able to enter Social Studies 10-1 or 10-2 in the second semester. This class is recommended for ELL level 3's who have attended junior high in Canada who have not been recommended to enter Social Studies 10-1 or -2 by the junior high teacher, and/or level 4 newcomers. **Intro to Canadian Studies 15 is not a pre-requisite for this class.** (5 credits)

ENGLISH LANGUAGE ARTS



English Language Arts 10-1 – This course focuses on critical analytical reading and writing skills. Students will explore the outcomes of the program of studies through a number of theme and genre related units to develop, practice, and define their communication skills and to promote lifelong learning and enjoyment of literature. **Recommended: 65%+ in Grade 9 English Language Arts** (5 credits)

English Language Arts 10-1 Honours – This course is an enriched English Language Arts 10-1 program that incorporates many elements of regular ELA courses with some study of more sophisticated literature and assessments requiring student presentations and comparative responses. This course prepares students to enter English Language Arts 20-1 AP. **Pre-requisite: 80%+ in Grade 9 English Language Arts** (5 credits)

English Language Arts 10-2 – Students who enroll in this course will benefit from additional exposure to reading comprehension and writing strategies that are designed to strengthen their use of language and their understanding of texts. **Recommended: 65% or less in Grade 9 English Language Arts** (5 credits)

English Language Arts 20-1 – This course is designed to continue the development of the students' skills from English Language Arts 10-1. **Pre-requisite: English Language Arts 10-1 or English Language Arts 20-2; Recommended: 65%+ in English Language Arts 10-1** (5 credits)

English Language Arts 20-1 AP – The primary focus of this course combines the Advanced Placement and Alberta Education programs to prepare students for both the Alberta Education Diploma Exam and the English Literature AP examination. **Pre-requisite: 75%+ in English Language Arts 10-1 Honours or 75%+ English Language Arts 10-1** (5 credits)

*****NEW*** English 20-1 CC** – The Cross-Curricular class will meet the outcomes of English 20-1, RE35 & Religions of the World 35, it will provide the students the opportunity to study English texts while discussing the religious themes, ideas and topics that are found within them. The class will be discussing a wide variety of topics including our Catholic faith, ethics, morality, conscience, scripture as well as the religions of Buddhism, Sikhism, Islam, Judaism, Hinduism and Indigenous Spirituality through a Catholic perspective. The students would be meeting the outcomes of three classes in this process, thereby gaining a total of 11 credits for both English (5 credits) and Religion (6 credits). **Pre-requisite: 70%+ in English Language Arts 10-1 and 70%+ in RS Roman Catholic 15** (11 credits)

English Language Arts 20-2 – Assessment will follow the criteria for the English Language Arts 20-2 curriculum and students will then enter the English Language Arts 30-2 program in their final year of high school. **Pre-requisite: 50%+ in English Language Arts 10-2** (5 credits)

English Language Arts 30-1 – This course is designed to continue the development of the students' skills from English Language Arts 20-1 and will prepare students for the Alberta Education Diploma Exam. **Pre-requisite: English Language Arts 20-1 or English Language Arts 30-2; Recommended: 65%+ in English Language Arts 20-1** (5 credits)

English Language Arts 30-1 AP – The primary focus of this course combines the Advanced Placement and Alberta Education programs to prepare students for both the Alberta Education Diploma Exam and the English Literature AP examination. AP students may challenge the English Literature examination in May. **Pre-requisite: 75%+ in English Language Arts 20-1 AP or 75%+ in English Language Arts 20-1** (5 credits)

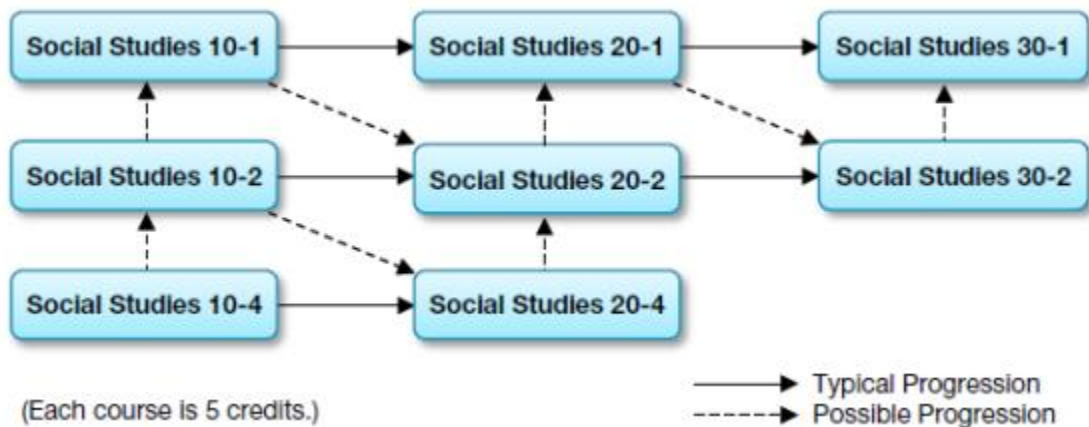
English Language Arts 30-2 – This course will continue the development of skills acquired in grade 10 and 11 English. It will also prepare students for the Alberta Education Diploma Exam. **Pre-requisite: 50%+ in English Language Arts 20-2 or 40%+ in English Language Arts 20-1** (5 credits)

English Language Arts 10-4 K&E – This Grade 10 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in English Language Arts classes throughout their schooling. (5-credits)

English Language Arts 20-4 K&E – This Grade 11 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in English Language Arts classes throughout their schooling. **Pre-requisite: 50%+ in ELA 10-4 or below 50% in ELA 10-2** (5 credits)

English Language Arts 30-4 K&E – This Grade 12 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in English Language Arts throughout their schooling. This is the final level of English required for the K & E certificate and is also a transition point for ELA 30-2 in the high school diploma route. **Pre-requisite: 50%+ in English Language Arts 20-4 or below 50% in English Language Arts 20-2** (5 credits)

SOCIAL STUDIES



*****NEW*** Aboriginal Studies 30** – This course is intended to provide a framework for all learners to enhance understanding of the wealth and diversity of Indigenous cultures within their region, Canada, and the world. Aboriginal 30 reflects a perspective that encompasses and integrates the past, present, and future of Indigenous peoples. It can also serve to enlighten and contribute to discussion and analysis of Indigenous issues. **Pre-requisite 50%+ in Social Studies 20-1 or 20-2.** (5 credits)

Social Studies 10-1 – Perspectives on Globalization – Students will explore multiple perspectives on the impact of globalization in today's world. A focus is placed on the relationships between globalization, the meaning of citizenship, and Canadian identity in a globalizing world. **Recommended: 65%+ in Grade 9 Social Studies** (5 credits)

Social Studies 10-1 Honours – Students will explore an enriched approach to multiple perspectives on the impact of globalization and the relationships between globalization and American identity in a globalizing world. Classes will focus on the development of skills needed to proceed in the AP Program. **Pre-requisite: 75%+ in Grade 9 Social Studies** (5 credits)

Social Studies 10-2 – Understandings of Globalization – This course is a basic exploration of the impact of globalization on Canada using multiple perspectives. Students will take a basic look at how cultures, human rights, citizenship, and identity are affected by a global world. **Recommended: 65% or less in Grade 9 Social Studies** (5 credits)

Social Studies 10-4 K&E – This Grade 10 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in Social Studies classes throughout their schooling. (5-credits)

Social Studies 20-1 – Perspectives on Nationalism - This course focuses on the historic and contemporary understanding of nationalism in the context of Canada as well as on an international level. **Pre-requisites: Social Studies 10-1 or Social 20-2; Recommended: 65%+ in Social Studies 10-1** (5 credits)

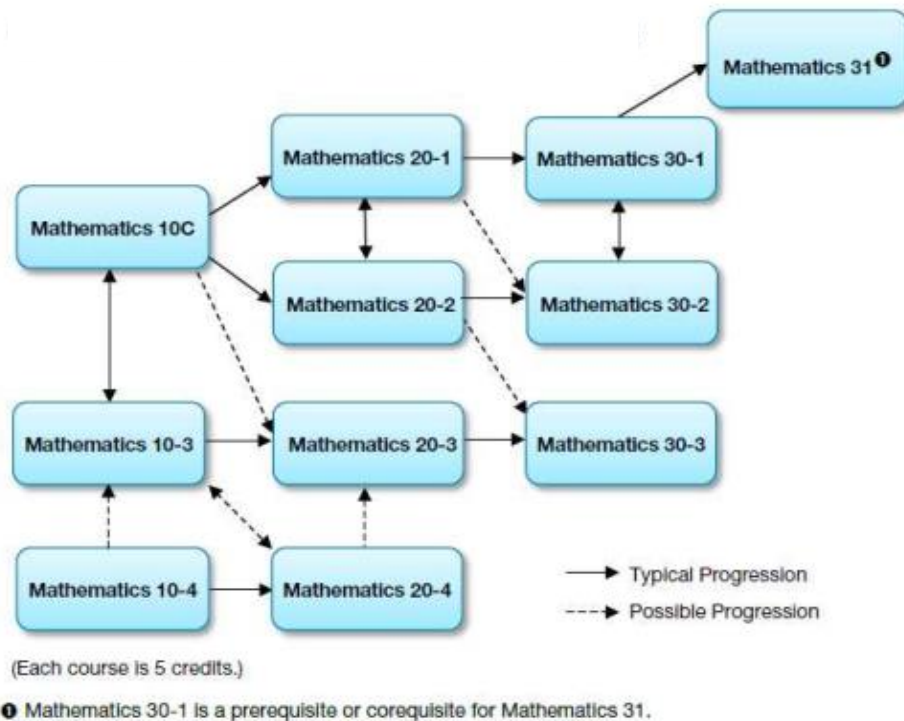
Social Studies 20-2 – Understandings of Nationalism - This course will take a basic examination of historical and contemporary issues related to nationalism in Canada and around the world. **Pre-requisite: 50%+ in Social Studies 10-2 or 40%+ in Social Studies 10-1** (5 credits)

Social Studies 20-4 K&E – This Grade 11 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in Social Studies throughout their schooling. This is the final level of Social required for the K & E certificate and is also a transition point for Social 20-2 in the high school diploma route. **Pre-requisite: 50%+ in Social 10-4 or below 50% in Social Studies 10-2** (5 credits)

Social Studies 30-1 – Perspectives on Ideology – Students will explore the origins and complexities of ideologies and examine multiple perspectives regarding the principles of classical and modern liberalism. **Pre-requisite: Social Studies 20-1 or Social Studies 30-2; Recommended: 65%+ in Social Studies 20-1** (5 credits)

Social Studies 30-2 – Understandings of Ideology – Students will examine the origins, values, and components of competing ideologies and explore multiple perspectives regarding relationships among individualism, liberalism, common good, and collectivism. **Pre-requisite: 50%+ in Social Studies 20-2 or 40%+ in Social Studies 20-1** (5 credits)

MATHEMATICS



Competencies in Mathematics 15 – This course aims to build the mathematical skills and confidence necessary for students to be successful in future high school mathematics courses. This course will provide learning opportunities that will develop students’ critical thinking, problem solving, and communication skills while focusing on the core mathematical concepts required for success in Math 10C and beyond. (5 credits)

Note: Competencies in Math 15 is a Locally Developed Course. It counts as a 5-credit option towards the required 100 graduation credits, but does not count as 5 credits in mathematics. Students will still need to complete 10 credits in mathematics courses after the completion of this course.

Mathematics 10-3 – This course covers measurement, geometry, numbers, and algebra. This course is for students who do not pass Grade 9 Mathematics and/or who plan to pursue a trade or the workforce following graduation. (5 credits)

Mathematics 10C – This course covers measurement, algebra, numbers, relations, and functions. This course prepares students for either Math 20-1 or Math 20-2 in Grade 11. Students must have a passing mark in Grade 9 Mathematics or Mathematics 10-3 to participate in Mathematics 10C. **Pre-requisite: 50%+ in Grade 9 Mathematics or 50%+ in Mathematics 10-3** (5 credits)

Mathematics 10C Honours – This course covers measurement, algebra, numbers, relations, and functions. In addition, students will begin to focus on certain skills needed to be successful in the Advanced Placement Program. **Pre-requisite: 75%+ in Grade 9 Mathematics** (5 credits)

Mathematics 20-1 – This course is a continuation of Mathematics 10C where students achieved success in the units of factoring, powers and roots, linear functions, and systems of equations. Mathematics 20-1 covers trigonometry, quadratics, functions, and sequences. **Pre-requisite: Mathematics 10C or Mathematics 20-2. Recommended: 60%+ in Mathematics 10C or 75%+ and teacher’s recommendation in Mathematics 20-2** (5 credits)

Mathematics 20-1 AP – This course is a continuation of Mathematics 10C Honours where students achieved success in the units of factoring, powers and roots, linear functions, and systems of equations. Mathematics 20-1 AP covers trigonometry, quadratics, functions, and sequences. **Recommended: 75%+ in Mathematics 10C Honours or 75%+ in Mathematics 10C** (5 credits)

Mathematics 20-2 – This course is a continuation of Mathematics 10C, covering measurements, trigonometry, reasoning, statistics, and quadratics. **Pre-requisite: 50%+ in Mathematics 10C** (5 credits)

Mathematics 20-3 – This course is a continuation of Mathematics 10-3, covering measurements, geometry, finance and graphs. **Pre-requisite: 50%+ in Mathematics 10-3 or 40%+ in Mathematics 10C** (5 credits)

Mathematics 30-1 – This course is a continuation of Mathematics 20-1 covering transformations, trigonometry, logarithms, equations, and functions. A diploma exam from Alberta Education will be written at the end of this course, which will be worth 30% of the student's mark. **Pre-requisite: Mathematics 20-1 or Mathematics 30-2; Recommended: 70%+ in Mathematics 20-1 or 75%+ and teacher's recommendation in Mathematics 30-2** (5 credits)

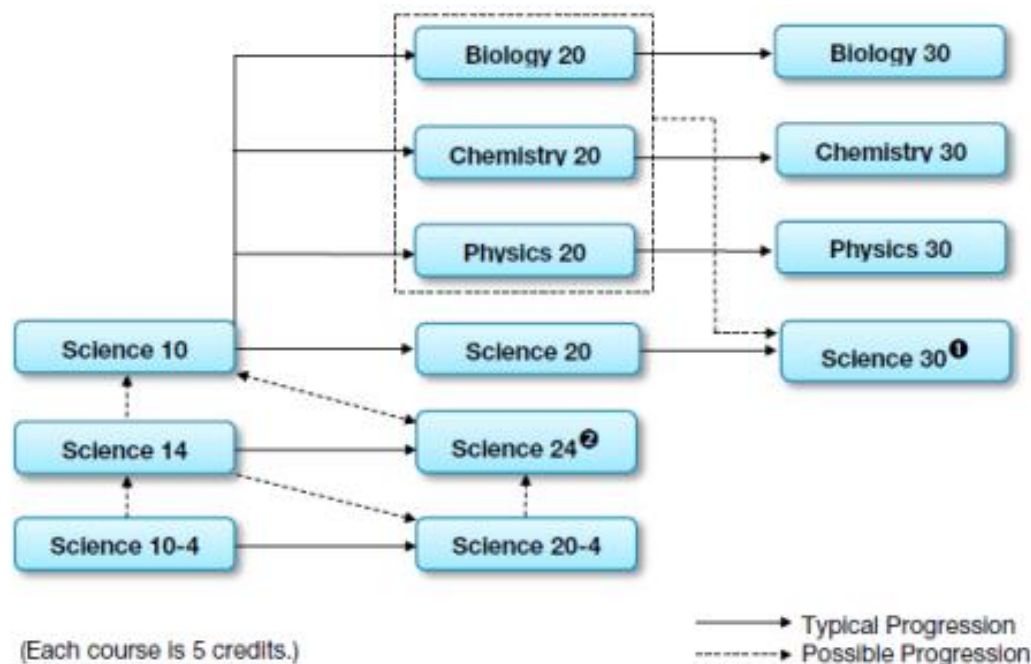
Mathematics 30-1 AP & Mathematics 31 AP – This is a full year course. Students need to enroll in both classes. Mathematics 30-1 AP is a continuation of Mathematics 20-1 AP covering transformations, trigonometry, logarithms, equations, and functions. A diploma exam from Alberta Education will be written at the end of this course. Mathematics 31 AP is a continuation of Mathematics 30-1 AP covering limits, differentiation, curve sketching, and integration. This intense course will cover both the Mathematics 31 curriculum and the Advanced Placement curriculum. All students may write the Advanced Placement exam in May. **Pre-requisite: Mathematics 20-1 or Mathematics 20-1 AP; Recommended: 75%+ in Mathematics 20-1 AP or 75%+ in Mathematics 20-1** (10 credits)

Mathematics 30-2 – This course is a continuation of Mathematics 20-2 covering logical reasoning, probability, relations, and functions. A diploma exam from Alberta Education will be written at the end of this course, which will be worth 30% of the student's mark. **Pre-requisite: 50%+ in Mathematics 20-2 or 40%+ in Mathematics 20-1** (5 credits)

Mathematics 30-3 – This course is a continuation of Mathematics 20-3 covering measurements, geometry, algebra, statistics, and probability. **Pre-requisite: 50%+ in Mathematics 20-3 or 40%+ in Mathematics 20-2 or Mathematics 20-1** (5 credits)

Mathematics 31 – This course is recommended for students planning to go to university or college. This course is a continuation of Mathematics 30-1 covering limits, differentiation, curve sketching, and integration. **Pre-requisite: 50%+ in Mathematics 30-1** (5 credits)

SCIENCE



- ❶ Students who have achieved a final mark of 50% or greater in Biology 20, Chemistry 20, Physics 20 or Science 20 may enroll in Science 30.
- ❷ Although the recommended transfer point from Science 24 is to Science 10, in exceptional cases, students may be placed by the principal in 20-level courses, as serves the student's best interests.

Biology 20 – In this course the focus is on helping students understand the biology principles behind the natural events they experience and the technology they use in their daily lives. Major topics include: the biosphere, cellular matter and energy flow, and energy exchange in ecosystems and in human organisms. This course is recommended for students planning to pursue the biological sciences at university. **Pre-requisite: Science 10; Recommended: 65%+ in Science 10.** (5 credits) *It is recommended that students taking Science 10 in semester 2 of grade 10 achieve a grade of 75%+

Biology 20 AP – This course covers the core curriculum in the Biology 20 program. Additional material is included to prepare students to move to the next level of the AP program. **Pre-requisite: 75% in Science 10 Honours and 75% in the Biology unit of Science 10 Honours.** (5 credits)

Biology 30 – This course expands on the concepts learned in Biology 20 and introduces new concepts in human physiology, reproduction and development, genetics, and population and communities. This is an academic course intended for students who plan to attend university or college to study a science related career. A diploma exam from Alberta Education will be written at the end of this course, which will be worth 30% of the student's mark. **Pre-requisite: Biology 20; Recommended: 65%+ in Biology 20** (5 credits)

Biology 30 AP/Biology 35 AP – Students will finish learning about the human body, specifically the nervous, endocrine, and reproductive systems. The cell cycle and genetics are also significant in this course. Students will cover the regular Biology curriculum in addition to many enriched AP topics. As with Biology 20, labs are a key component of the course. This course is also designed to support students preparing for the AP exams at the end of May. **Pre-requisite: 75%+ in Biology 20 AP.** (8 credits)

Chemistry 20 – This course is intended for students planning to pursue a career in a science-related field. The focus is on how science, technology, and society are interrelated. The major topics covered are: chemical bonding, solutions, gasses, and stoichiometry (calculations in chemistry). It is also recommended that students have strong algebra skills. **Pre-requisite: Science 10; Recommended: 65%+ in Science 10** (5 credits)

Chemistry 20 AP – Chemistry 20 AP offers the student a more detailed study of the basic units of study in Chemistry 20 while adding AP enrichment material. The pace of this course is faster than Chemistry 20 in order to accommodate the extra material. This course will be of benefit to students who plan to go to university to study science, medicine, or engineering. **Required: 75%+ in the Chemistry Unit of Science 10 Honours** (5 credits)

Chemistry 30 – This course expands on the concepts learned in Chemistry 20 and introduces new concepts in thermochemistry, electrochemistry, acid based chemistry, and organic chemistry. Chemistry 30 is more theoretical in nature than Chemistry 20 and has an extensive lab component, which supports the theoretical nature of this course. This is an academic course intended for students who plan to attend university or college to study a science career. A diploma exam from Alberta Education will be written at the end of this course, which will be worth 30% of the student's mark. **Pre-requisite: Chemistry 20; Recommended: 65%+ in Chemistry 20** (5 credits)

Chemistry 30 AP/Chemistry 35 AP – This course is designed to meet the Alberta Education requirements and also to provide students with an enhanced chemistry experience by focusing on laboratory skills and experimental design. Students will write the Chemistry 30 diploma at the end of this course. The course will take place in the first semester of the Grade 11 year. This course is also designed to support students preparing for the AP exams at the end of May. **Pre-requisite: 75%+ in Chemistry 20 AP** (11 credits)

Physics 20 – This course is intended for students planning to pursue a career in a science related field. The focus is on how science, technology, and society are interrelated. The major topics covered are: kinematics (motion), dynamics (forces), circular motion, and gravitation and waves. It is also recommended that students have strong algebra skills. **Pre-requisite: Science 10; Recommended: 65%+ in Science 10** (5 credits)

Physics 20 AP – Physics 20 AP offers the student a more detailed study of the basic units of study in Physics 20 while adding AP enrichment material. This course will prepare the student for the Physics 30 AP course of studies. The pace of this course is faster than Physics 20 in order to accommodate the extra material. This course will be of benefit to students who plan to go to university to study science, medicine, or engineering. **Required: 75%+ in the Physics Unit of Science 10 Honours.** (5 credits)

Physics 30 This course expands on the concepts learned in Physics 20 and introduces new concepts in conservation laws, electrostatics, magnetic fields, and modern physics. Physics 30 is more theoretical in nature than Physics 20. This is an academic course intended for students who plan to attend university or college. A diploma exam from Alberta Education will be written at the end of this course, which will be worth 30% of the student's mark. **Pre-requisite: Physics 20; Recommended: 65%+ in Physics 20** (5 credits)

Physics 30 AP/Physics 35 AP – These courses are designed to meet Alberta Education requirements and also to provide students with an enhanced physics experience. Physics 30 AP expands on the concepts learned in Physics 20 and introduces new concepts in conservation laws, electrostatics, magnetic fields, and modern physics. The Physics 35 AP course will expand on the concepts learned in Physics 30 and introduce enhanced material. The enhanced material will deal with thermodynamics, electric circuits, torque and rotational Motion as well as fluid dynamics. Students will write the Physics 30 diploma exam at the completion of the Physics 30 AP class in January. Students will write the Physics AP exams in May. A high score on the Physics AP exam may earn the student first year university Physics credit. The physics AP class will better prepare the student for university level physics and a career in the sciences. **Pre-requisite: 75%+ in Physics 20 AP** (8 credits)

Science 10 – This is an integrated academic course that helps students better understand and apply fundamental concepts and skills common to biology, chemistry, physics, and the earth sciences. The focus is on how science, technology, and society are interrelated. This course would be the starting point for students considering post-secondary programs that require one or more science course. **Recommended: 65%+ in Grade 9 Science and a strong background in Math.** (5 credits)

Science 10 Honours – This course covers the core curriculum in the Science 10 program, but additional material, enrichment opportunities, and rigor will be incorporated to prepare students to enter any or all of the Biology, Chemistry, and Physics AP programs. **Recommended: 75%+ in Grade 9 Science and a strong math background** (5 credits)

Science 14 – This course is a basic science program that helps students better understand and apply fundamental concepts and skills common to biology, chemistry, physics and environmental science. The focus is on the practical application of science as it relates to daily life. Students would be able to complete the 10 credit graduation requirement by taking the next level Science 24. (5 credits)

Science 10-4 K&E – This Grade 10 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in Science throughout their schooling. (5 credits)

Science 20 – This academic course is intended for students who are planning to attend university or college and would need a 20/30 level science course for a specific program (please check current requirements). The focus is on how science, technology, and society are interrelated within an environmental context. The major topics covered are: geology, ecology, physics, and chemistry. **Pre-requisite: 50%+ in Science 10** (5 credits)

Science 20-4 K&E – This Grade 11 course is from the Knowledge and Employability series of courses. It is designed for students who have struggled in Science throughout their schooling. Science 20-4 is the final Science course required for the K & E certificate and transfers to Science 24 in the diploma route. **Pre-requisite: 50%+ in Science 10-4 or 40%+ in Science 14** (5 credits)

Science 24 – This course is a continuation of Science 14. It is meant for students who are not planning to pursue a career in science. The focus is on the practical applications of science as it relates to a person's daily life. **Pre-requisite: 50%+ in Science 14 or 40%+ in Science 10** (5 credits)

Science 30 – This course is a rigorous science program. It is intended for students who are planning to attend university or college for specific programs (please check current requirements). The focus is on how science, technology, and society are interrelated within an environmental context. The major topics covered are: Living Systems, Chemistry, Electromagnetic Energy, and Energy and the Environment. A diploma exam from Alberta Education will be written at the end of this course, which will be worth 30% of the student's mark. **Pre-requisite: 50%+ in Science 20 or 50%+ in Biology 20 or 50%+ in Chemistry 20 or 50%+ in Physics 20** (5 credits)

PHYSICAL EDUCATION

Physical Education 10 – In this course, which is taught on campus, students are involved in developing their physical skills, leadership, and social skills by participating in a variety of activities that incorporate individual activities, fitness elements, team sports, traditional dance, and cooperative games. Students will also complete an Alberta Education mandated CPR component. (5 credits)

Physical Education 10 Girls – In this course, which is taught on campus with girls only, students are involved in developing their physical skills, leadership and social skills by participating in a variety of activities that incorporate individual activities, fitness elements, team sports, traditional dance and cooperative games. In addition, students will complete an Alberta Education mandated CPR Component. (5 credits)

Physical Education 20 3-credit – An active living program taught on campus that allows Grade 11 and 12 students who do not have space in their timetables for a full course equivalent to participate in a 20 level physical education course. **Pre-requisite: 50%+ in Physical Education 10** (3 credits)

Physical Education 20 5-credit – An active living program taught on campus. **Pre-requisite: 50%+ in Physical Education 10** (5 credits)

Physical Education 20 Girls Off Campus – This course is for girls only. This course is an active living program taught on and off campus. *A fee of approximately \$150 will be assessed for the off campus activities.* **Pre-requisite: 50%+ in Physical Education 10** (5 credits)

Physical Education 20 Off Campus – This course is an active living program taught on and off campus. *A fee of approximately \$150 will be assessed for the off campus activities.* **Pre-requisite: 50%+ in Physical Education 10** (5 credits)

Physical Education 20 Girls – An active living program taught on campus for girls only. **Pre-requisite: 50%+ in Physical Education 10** (5 credits)

Physical Education 30 3-credit – An active living program taught on campus which allows Grade 12 students who do not have space in their timetables for a full course equivalent to participate in Physical Education. **Pre-requisite: 50%+ in Physical Education 20** (3 credits)

Physical Education 30 5-credit – An active living program taught on campus. **Pre-requisite: 50%+ in Physical Education 20** (5 credits)

Physical Education 30 Girls Off Campus – This class is for girls only. An active living program taught off campus. A fee of approximately \$175 will be assessed for this course. **Pre-requisite: 50%+ in Physical Education 20** (5 credits)

Physical Education 30 Off Campus – An active living program taught off campus. A fee of approximately \$175 will be assessed for this course. **Pre-requisite: 50%+ in Physical Education 20** (5 credits)

Physical Education 30 Girls – An active living program taught on campus for girls only. **Pre-requisite: 50%+ in Physical Education 20** (5 credits)

SOCIAL SCIENCES

Experimental Psychology 30 – This course will focus on the scientific approach to human behavior and includes themes such as experimental psychology, statistics, research methods, and research projects. There is no pre-requisite for this course (3 credits)

Personal Psychology 20 – In this course students will develop the skills and understandings that make it possible for more effective living in our complex environment. There is no pre-requisite for this course (3 credits)

INTERNATIONAL LANGUAGES

Students who have a basic competency in one of the languages listed below are recommended to speak to the specific teacher in order to ensure you register in the correct level. Students who are fluent in a language are recommended to take a Challenge Exam in grade 11 administered by Instructional Services. For more information about this process please see someone in Student Services or International Languages.

French 10-3Y – This is an introductory first year program for those students who have studied the basic concepts of French at the elementary and/or junior high level. Students will learn to communicate in French within a limited context of everyday life and on a concrete level. (5 credits)

French 20-3Y – A continuation of the French 10 3Y program based on the skills already acquired in French 10. This level continues to reinforce student speech and comprehension with greater emphasis on writing and reading skills. **Pre-requisite: 50%+ in French 10** (5 credits)

French 30-3Y – This course continues to reinforce the skills of comprehension and speech and also increases the dimensions of reading and writing. The knowledge of the fundamentals of French grammar and the familiarity with French culture is a continued focus of the program. **Pre-requisite: 50%+ in French 20** (5 credits)

Italian L&C 10-3Y – This is an introductory course that gives students the opportunity to hear and speak Italian. This is accomplished with the use of multimedia, print, and workbook resources, which engage the students in vocabulary activities and emphasize the use of language in everyday situations. Please note: This course is designed for non-Italian speakers. (5 credits)

Italian L&C 20-3Y – This is a continuation of the Italian 10 3Y program; however, more emphasis is placed on writing and reading skills. This program also focuses on daily routines, clothing, travel, food, health, sports, and any other areas that meet the needs and interests of the students. **Pre-requisite: 50%+ in Italian 10** (5 credits)

Italian L&C 30-3Y – This course reinforces the skills of comprehension and speech and also increases the dimensions of reading and writing. There is also a greater emphasis on cultural activities and individual projects. The study of a novel or a play may also be possible. Many films will be viewed to expand communication skills and learn about Italian customs and culture. **Pre-requisite: 50%+ in Italian 20** (5 credits)

Spanish L&C 10-3Y – This is an introductory course that gives students the opportunity to hear and speak Spanish. This is accomplished with the use of multimedia, print, and workbook resources which engage the students in vocabulary activities and emphasize the use of language in everyday situations. Please note: This course is designed for non-Spanish speakers. (5 credits)

Spanish L&C 20-3Y – This course covers an intermediate level study of the oral and written language. The course will also investigate the Spanish culture including: foods, shopping, sports and exercise, vacations and travel, social life, and the introduction to cultural diversity in the Spanish speaking world. **Pre-requisite: 50%+ in Spanish 10** (5 credits)

Spanish L&C 30-3Y – This course covers the intermediate/advanced study of Hispanic culture and language. The course will also focus on cultural celebrations, folk tales, the environment, and Spanish music. **Pre-requisite: 50%+ in Spanish 20** (5 credits)

FINE ARTS

Advanced Acting/Touring Theatre 15 – This is a performance class. Students apply the skills of Drama 10 through the presentation of a play. Evening and matinee performances are required. Students will develop a theatre company and will advance their skills in acting, movement, voice, characterization, and professionalism.

Pre-requisite or Co-requisite: Drama 10 (5 credits)

Advanced Acting/Touring Theatre 25 – This is an intense course focused on the development of professional performance skills. Advanced Acting continues the development of acting techniques, staging, and production. Students are expected to exemplify professionalism and to become mentors for junior participants. Work outside the scheduled class time is expected. **Pre-requisite: 50%+ in Advanced Acting 15 or approval of the instructor** (5 credits)

Advanced Acting/Touring Theatre 35 – This is a rigorous professional actor training program that requires substantial leadership, initiative, and commitment. Participants will be active creators of the performances and will assist in the development of junior participants. Focus will be on student personal strengths, areas for growth, and post-secondary aspirations. **Pre-requisite: 50%+ in Advanced Acting 25 or approval of the instructor** (5 credits)

Art 10 – This course is an introduction to the basic principles of art and art appreciation. It concentrates on design, drawing, painting, sculpture, developing an art vocabulary, and appreciating all art forms. Art 10 offers an exploration of different forms of art media with a focus on wellness and the joy of expression. (3 or 5 credits)

Art 20 – This course is a continuation of Art 10 and is an intermediate study of the principles of art and art appreciation. It builds on sequential development of skills in 2D and 3D media. Specific reference to Art History is made and there is further application of formal, technical, and conceptual concerns to student art work. **Pre-requisite: 50%+ in Art 10** (3 or 5 credits)

Art 20 AP – This course is offered as a means for art students to improve the quality of their overall high school art portfolios in preparation for post-secondary placement in an art program. **Requirements:** approval by the art teacher. **Pre-requisite: 85%+ in Art 10** (5 credits)

Art 30 – This course is a continuation of Art 20 and is the senior study level of the principles of art and art appreciation for high school. Students will engage in the refinement and honing of art skills in 2D and 3D media along with individualized selections of course activities. Formal, technical, and conceptual goals remain key in this course. Students will develop their own unique style of work and will create artwork suitable for inclusion in a digital portfolio – perfect for those interested in applying to a post-secondary art program. **Pre-requisite: 50%+ in Art 20** (5 credits)

Art 30 AP – This course is offered as a means for art students to improve the quality of their overall high school art portfolios in preparation for post-secondary placement in an art program. **Requirements:** approval by the art teacher. **Pre-requisite: 85%+ in Art 20** (5 credits)

Choral Music 10 – The Choral Music program provides students with the opportunity to develop as musicians through singing. Choral Music focuses on pitch, rhythm, intonation, resonance, dynamics, articulations, balance, blend, phrasing, and expression. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Choral Music occurs outside the normal timetable; see Music Schedule.* (5 credits)

Choral Music 20 – The Choral Music program provides students with the opportunity to develop as musicians through singing. Choral Music focuses on pitch, rhythm, intonation, resonance, dynamics, articulations, balance, blend, phrasing, and expression. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Choral Music occurs outside the normal timetable; see Music Schedule.* **Pre-requisite: Choral Music 10** (5 credits)

Choral Music 30 – The Choral Music program provides students with the opportunity to develop as musicians through singing. Choral Music focuses on pitch, rhythm, intonation, resonance, dynamics, articulations, balance, blend, phrasing, and expression. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Choral Music occurs outside the normal timetable; see Music Schedule.* **Pre-requisite: Choral Music 20** (5 credits)

Drama 10 – Through a variety of games, presentations, and activities, students will attain the fundamentals of improvisation, acting, performance, and technical theatre. Regardless of previous experience, all students will gain new insight, knowledge,

and skills. This course develops the foundation for all Drama department curricular and extra-curricular activities. (3 or 5 credits)

Drama 20 – Students will continue to explore voice, movement, acting, improvisation, theatre history, and technical theatre. A significant part of the course involves the writing, casting, and directing of a short play. **Pre-requisite: 50%+ in Drama 10** (3 or 5 credits)

Drama 30 – During this course, students become directors, actors, and designers. There is substantial script work, analysis, and memorization. Students will develop an appreciation for professional theatre and the creative process as they reflect on and participate in various stages of the production. **Pre-requisite: 50%+ in Drama 20** (5 credits)

Film and Media Art 15 (Film Studies) – Film and media are significant elements of modern life. Students will analyze and create diverse projects. Activities could include film watching, film making, filming scenes, experimenting with cameras, story boarding, story writing, editing, and critiquing. The aim is to increase student knowledge of film and media: history, genres, format, and technique. Students will work individually and in various groupings. (5 credits)

Film and Media Art 25 (Film Studies) – In this course students deepen their understanding of film and media. A variety of films will be viewed with attention to the unique style of various directors. Students will form creative teams and experience the pre and post-production process of film making. **Pre-requisite: 50%+ in Film and Media Art 15 or permission of the instructor.** (5 credits)

Film and Media Art 35 (Film Studies) – This is an advanced course focusing on the development of the student as a creative artist. Through independent study, students analyze the stylistic, cultural, and artistic differences of film and media. Students will create their own projects with the option to submit them to a film festival. **Pre-requisite: 50%+ in Film and Media Art Studies 25** (5 credits)

Instrumental Jazz 15 – Students will study the fundamentals of big band jazz including swing, funk, blues, salsa, and other genres. Improvisation and soloing are integral components of this course. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Instrumental Jazz occurs outside the normal timetable; see Music Schedule.* **Students for Instrumental Jazz will be selected through an audition process in September. You do not need to include this in your current selection. Pre-requisite: None; Co-requisite: Instrumental Music 10, 20 or 30** (5 credits)

Instrumental Jazz 25 – Students will study the fundamentals of big band jazz including swing, funk, blues, salsa, and other genres. Improvisation and soloing are integral components of this course. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Instrumental Jazz occurs outside the normal timetable; see Music Schedule.* **Students for Instrumental Jazz will be selected through an audition process in September. You do not need to include this in your current selection. Pre-requisite: Instrumental Jazz 15; Co-requisite: Instrumental Music 10, 20 or 30** (5 credits)

Instrumental Jazz 35 – Students will study the fundamentals of big band jazz including swing, funk, blues, salsa, and other genres. Improvisation and soloing are integral components of this course. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Instrumental Jazz occurs outside the normal timetable; see Music Schedule.* **Students for Instrumental Jazz will be selected through an audition process in September. You do not need to include this in your current selection. Pre-requisite: Instrumental Jazz 25; Co-requisite: Instrumental Music 10, 20 or 30** (5 credits)

Instrumental Music 10 (Woodwind, Brass & Percussion Techniques) – The Instrumental Music program provides students with the opportunity to develop as musicians through performance on an instrument. Instrumental Music focuses on pitch, rhythm, intonation, tone, dynamics, articulations, balance, blend, phrasing, and expression. *Students must select either Woodwinds (Flute, Oboe, Clarinet, Bass Clarinet, Bassoon, Alto Saxophone, Tenor Saxophone, Baritone Saxophone) or Brass/Percussion (Trumpet, French Horn, Trombone, Bass Trombone, Euphonium/Baritone, Tuba, Battery, Keyboards, Timpani).* **Instrumental Music 10 students will be automatically enrolled in Band 15 in September / Pre-requisite: Band 9 or consent of the Music Director; Co-requisite: Band 15** (5 credits)

Instrumental Music 20 (Woodwind, Brass & Percussion Techniques) – The Instrumental Music program provides students with the opportunity to develop as musicians through performance on an instrument. Instrumental Music focuses on pitch, rhythm, intonation, tone, dynamics, articulations, balance, blend, phrasing, and expression. *Students must select either Woodwinds (Flute, Oboe, Clarinet, Bass Clarinet, Bassoon, Alto Saxophone, Tenor Saxophone, Baritone Saxophone)*

or Brass/Percussion (Trumpet, French Horn, Trombone, Bass Trombone, Euphonium/Baritone, Tuba, Battery, Keyboards, Timpani). **Instrumental Music 20 students will be automatically enrolled in Band 25 in September. Pre-requisite: Instrumental Music 10; Co-requisite: Band 25 (5 credits)**

Instrumental Music 30 (Woodwind, Brass & Percussion Techniques) – The Instrumental Music program provides students with the opportunity to develop as musicians through performance on an instrument. Instrumental Music focuses on pitch, rhythm, intonation, tone, dynamics, articulations, balance, blend, phrasing, and expression. *Students must select either Woodwinds (Flute, Oboe, Clarinet, Bass Clarinet, Bassoon, Alto Saxophone, Tenor Saxophone, Baritone Saxophone) or Brass/Percussion (Trumpet, French Horn, Trombone, Bass Trombone, Euphonium/Baritone, Tuba, Battery, Keyboards, Timpani).* **Instrumental Music 30 students will be automatically enrolled in Band 35 in September. Pre-requisite: Instrumental Music 20; Co-requisite: Band 35 (5 credits)**

Band 15 (Concert Band) – Band 15 is an extension of Instrumental Music 10. Woodwinds, Brass and Percussion Techniques classes are combined for large ensemble rehearsal. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Band rehearsals occur outside the normal timetable; see Music Schedule.* **Students will be automatically enrolled in this course in September. You do not need to include this in your current selection. Pre-requisite: Band 9 or consent of the Music Director; Co-requisite: Instrumental Music 10 (3 credits)**

Band 25 (Symphonic Band) – Band 25 is an extension of Instrumental Music 20. Woodwinds, Brass and Percussion Techniques classes are combined for large ensemble rehearsal. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Band rehearsals occur outside the normal timetable; see Music Schedule.* **Students will be automatically enrolled in this course in September. You do not need to include this in your current selection. Pre-requisite: Band 15; Co-requisite: Instrumental Music 20 (3 credits)**

Band 35 (Symphonic Band) – Band 35 is an extension of Instrumental Music 30. Woodwinds, Brass and Percussion Techniques classes are combined for large ensemble rehearsal. Students will study the works of great composers and arrangers and prepare pieces for performance in concert. *Band rehearsals occur outside the normal timetable; see Music Schedule.* **Students will be automatically enrolled in this course in September. You do not need to include this in your current selection. Pre-requisite: Band 25; Co-requisite: Instrumental Music 30 (3 credits)**

Musical Theatre 15 – The Musical Theatre program provides an integrated study of drama, vocal music, and dance. Students will focus on project work/performance. There may be opportunities for participants to work with professionals in the field as students share their particular strengths and develop new skills. The focus will be on large group activities and rehearsals outside of scheduled class time are anticipated. **Recommended: Drama 10, or Choral 10, or Dance 15 (5 credits)**

Musical Theatre 25 – In this course, students will work in smaller groups and take on the role of dance captain, vocal coach, stage manager, costume coordinator, or props coordinator. The focus will continue to be on project work and/or performance and making a personal commitment to share the responsibilities and obligation necessary to perform. **Pre-requisite: 50%+ in Musical Theatre 15 (5 credits)**

Musical Theatre 35 – Students will continue to work professionally as a company with the opportunity to take leadership positions in stage direction, musical direction, and choreography for a musical theatre number. Solo and ensemble work is an expectation of this course. **Pre-requisite: 50%+ in Musical Theatre 25 (5 credits)**

Technical Theatre 15 – This course is an introduction to all aspects of technical theatre. Areas of study include lights, sound, costumes, props, set, theatre management/publicity, and make-up. Work is both theoretical and practical. There will be opportunities to apply knowledge in an extra-curricular program. **Recommended: Drama 10 (3 credits)**

Technical Theatre 25 – Participants are expected to be self-motivated and responsible to research and design technical requirements for various presentations. There is an expectation of work outside the classroom and collaboration with other technicians, actors, and directors. Students will work as a professional technical theatre team. **Pre-requisite: 50%+ in Technical Theatre 15 (3 credits)**

Technical Theatre 35 – This course is a continuation of Technical Theatre 25 specializing and focusing on a larger scale production. Participants are expected to act as designers, crew members, and mentors for the production. Self-assessment and reflection is a significant part of the evaluation process. **Pre-requisite: 50%+ in Technical Theatre 25 (3 credits)**

CAREER AND TECHNOLOGY STUDIES (CTS)

Business Management 10 – This is an introductory course that allows students to identify basic management and marketing concepts. Students will develop a marketing plan for a particular product and identify various retail merchandising strategies. Students are then introduced to accounting terminology unique to financial accounting. They will become familiar with basic financial statements, generally accepted accounting principles, and how to prepare for the process of starting up a business. In the last module students will investigate the concept of e-commerce and design an e-commerce website to sell products/services. (3 credits)

Business Management 20 – Business 20 is an intermediate level course that allows students to demonstrate basic managerial skills by teaching students to become business owners and operators. This course helps students see themselves as agents of change encouraging them to develop skills as innovators and leaders. Students will identify business opportunities, develop a business plan, and create and implement a business in the school community. Students will also explore an introduction into the world of accounting by studying the basic accounting procedures necessary to start a business. **No pre-requisite is required** (3 credits)

Business Management 30 – Business 30 is an advanced course in which students will identify and describe organizational structures, management theories, and organizations as working units. Students also explain their beliefs of what successful organizations might look like in the future. Students will learn and demonstrate techniques for successful selling and be introduced to broadcast communication channels, delivery strategies, and advertising media that can be used to inform potential customers about products and services available in the marketplace. **No pre-requisite is required** (3 credits)

Computer Science 10 – No previous computer experience necessary. Students in CS10 will learn about the basic structure of the internet covering everything from Wi-Fi and IP addresses to cybersecurity and computer hardware. Students will learn the fundamentals of both HTML5 and JavaScript (3 credits)

Computer Science 20 – Students begin building iOS applications on day one and continue throughout the entire course. Students will learn the fundamentals of the swift programming language alongside the use of GitHub on the Mac. Students will also explore integrating hardware controls with their applications using Phidgets, as well as storing and retrieving user data using databases in preparation for their own app store ready iOS project. **Pre-requisite: Computer Science 10** (5 credits)

Computer Science 30 – Students will begin learning the C# language and use it for app development across multiple platforms. Students will then use those skills to heavily explore the Unity 2D/3D/VR game development engine, while using C# to create their own fully functional games that can be deployed to multiple devices. **Pre-requisite: Computer Science 20** (5 credits)

Note: As of 2011 Alberta universities recognize computer science as a core science course. This means 5 credits of CS30 at Notre Dame is held in the same entry requirement pool as Biology, Chemistry, and Physics 30. Students must complete 3 credits in CS10 and 5 credits in CS20 before entering the CS30 program.

Construction Tech 10 (Carpentry) – This is an introductory woodworking course designed to teach students basic woodworking theory, blueprint reading, safety, hand/power tools, and machinery skills. Students will complete a variety of projects such as a skill block, sanding block, and foot stool/saw pony. (3 or 5 credits)

Construction Tech 20 (Carpentry) – This is an intermediate course designed to further the hand and power tool skills and knowledge taught in the introductory woodworking course. Students will focus on being able to plan projects and operate machinery with production work being introduced. Students will complete a detailed solid wood clock or checkerboard with a drawer. Students who choose to take 5 credits will be exposed to set/house construction and will have the opportunity to enrich their clock project. **Pre-requisite: 50%+ in Construction Tech 10** (3 or 5 credits)

Construction Tech 30 (Carpentry) – For this course students will be required to plan and build their own larger scale furniture project. The individualized nature of the course is designed to prepare students for an entry level position in the building trades. Project choices may include a steamer trunk, coffee table, desk, chest of drawers, bed frame, card table, or other project that fits curricular outcomes. Students may also opt for shed or set construction. An emphasis will be put on jobsite skills as this course will prepare students for entry level positions in the building construction field. **Pre-requisite: 50%+ in Construction Tech 20** (3 or 5 credits)

Cosmetology Studies 10 – Students develop an increased appreciation for the significance of personal grooming in various life situations. Students learn to shampoo and style hair confidently. In long hair design students will create ropes, knots, and two or three strand braids. Students learn about hair and scalp care, long hair design, and hairstyling. (3 credits)

Cosmetology Studies 20 – This is an intermediate course in which the students will further develop competencies acquired in the introductory level and focus on developing more complex competencies within the beauty industry. Students use photos or other images as guides to recreate a variety of hair designs using long hair techniques. This course will include modules in long hair design, scalp and skin care, hair coloring, haircutting, and chemical texturizing.

Pre-requisite: 50%+ in Cosmetology Studies 10 (3 or 5 credits)

Cosmetology Studies 30 – This is an advanced level course, which demands a higher level of expertise and helps prepare students for entry into the workplace or a related post-secondary program. Students conduct a consultation with a client during which they analyze the client's needs and recommend and perform the appropriate services to meet industry standards. Students design and produce symmetrical and asymmetrical long hair designs. Advanced modules include customer service (working on clients) in haircutting, hair removal, hair and scalp care, facial and body adornment, and exploration of professional practices. **Pre-requisite: 50%+ in Cosmetology Studies 20** (3 or 5 credits)

Cosmetology 31 Apprenticeship – Students develop understanding of, and will be able to describe and demonstrate, the skills required for customer service in the cosmetology industry and demonstrate professional ethics for salon success. Students apply prior learning and demonstrate the attitudes, skills, and knowledge required by salons to set out and begin their first period apprenticeship. In the first period of the apprenticeship program an apprentice must acquire not less than 1400 hours of on the job training and successfully complete the technical training that is required or approved by the Board.

Pre-requisite: 50%+ in Cosmetology Studies 30 (5 credits)

Cosplay Couture 10/20/30 – This course is an introduction to the wonderful world of creating Cosplay costumes. Students will be required to investigate a variety of characters from different sources such as comic books, anime, and video games. Once they have found a character they are interested in reproducing, the students will learn how to analyze the character and replicate the clothing. Students will also explore different crafting specialties such as textile manipulation and sculpture. All students will receive an introduction to basic sewing techniques and pattern drafting. All students are welcome; no previous sewing experience required. (Each segment, A/B/C/D, represents 3 credits).

Culinary Arts 10/20/30 (3 credit) – Students will be able to get a taste of the culinary field in this 3 credit afternoon class. Through CKA3401, Kitchen Orientation, students will be introduced to food safety and structure. In CKA3406, Kitchen Mathematics, students will learn simple mathematical formulas to aid in recipe adjustments and food costing. In CKA3456, Introduction to Baking, students will learn the basics in the pastry shop. Time will be spent in the classroom as well as preparing food in a professional kitchen environment. Students will help produce food that is sold in the Notre Dame Pride Rock Cafeteria as well as food for catering functions that happen throughout the semester. (3 credits)

Culinary Arts 10/20/30 (5 credit) – This course provides the opportunity for a student to participate in the daily operation of the high school cafeteria. Culinary Arts 5 credit occurs during Periods 1 and 2. With the completion of three semesters in the program and 15 modules, a student may write the first year apprenticeship test and will be accredited some of their first year professional hours. Most of the student's learning time will be spent with hands-on learning methods focusing on daily production of food items to sell in the cafeteria. Modules offered may include Apprenticeship Safety, Meat and Seafood, Breakfast Cooking, Stocks and Soups, Cooking Proteins, Starches and Salads, Breads and Cookies, plus other offerings. (5 credits)

Dance 15 – This course is intended to provide students with the foundations of dance. It is designed to foster in students an understanding and appreciation of, curiosity about, and a lifelong interest in dance. It is also designed to expose learners to a broad range of artistic and aesthetic experiences from a variety of dance genres and traditions. (3 credits)

Dance 25 – This course allows students to develop self-expression, creativity, and communication through dance. This course also helps prepare students for a range of exciting and rewarding careers in the arts. **Pre-requisite: 50%+ in Dance 15** (3 credits)

Design Studies 10 – This course focuses on 3D design and basic drafting techniques. Students will use both Autodesk Inventor & Revit to develop 3D modelling techniques while designing a 3D multileveled house, mechanical models that may be printed in the 3D printer, and producing their corresponding technical drawings. Students continuing in Design Studies will choose to specialize in either Inventor or Revit while working towards a concentration in architectural, mechanical, or interior design. (3 credits)

Design Studies 20 – In Design 20 students choose to concentrate on either mechanical or architectural modeling using Autodesk Inventor or Revit. Students choosing the mechanical stream learn how to work with assemblies while modeling complex Lego kits then work towards modeling real world robotic components testing them via our 3D printer. Students choosing the architectural pathway will be given a real life case scenario based on either creating a new residential project or renovating an existing structure. Students may then choose to compete with other Calgary high schools for post-secondary scholarships in a competition hosted by the Calgary Homebuilders Association. **Pre-requisite: 50%+ in Design Studies 10.** (3 credits)

Design Studies 30 – Design 30 is an advanced level course where students will apply the techniques learned from the previous levels to solve more complex design problems regarding architectural and mechanical 3D design. The student will focus on large scale commercial projects while taking into consideration structural and material composition. Students will continue along their mechanical or architectural pathway using either Autodesk Inventor or Revit. **Pre-requisite: 50%+ in Design Studies 20.** (3 credits)

*****NEW*** Design Thinking for Innovation 15 (Pre-Engineering)** – This dynamic and innovative program provides students with a practical, hands-on experience in an interactive state-of-the-art lab environment. Students may work with a 3D printer, a variety of robots, pneumatics, electrical controls, wind/solar technologies, mechanical automation, electrical fabrication, computer added design, pump systems, bridge building, and more. Students work in teams to design and build actual objects. We recommend students enrolling in this course have a strong background in mathematics and science. (5 credits)

*****NEW*** Design Thinking for Innovation 25 (Pre-Engineering)** – Building on experiences in Pre-Engineering 15, students complete a combination of foundational skills which will allow students to choose projects based on their area of interest. Skills available include 3D printing, robotic programming, climate control systems, product development, electronic controls, production planning, electro-assembly, thermal systems, electrical fabrication, pump systems, pneumatics, 3D printing, structural systems, mechanical drive systems, environmental application systems, microprocessors, robotic vision/kinematics and behavior as well as various project based components. Pre-Engineering 25 will include designing and building a personal hovercraft. **Pre-requisite: 50%+ in Design Thinking for Innovation 15 (Pre-Engineering)** (5 credits)

*****NEW*** Design Thinking for Innovation 35 (Pre-Engineering)** – The Pre-Engineering courses create awareness towards the Engineering discipline. Pre-Engineering 35 not only teaches students about the different types of engineering such as civil, structural, chemical, electrical, and many others, but also showcases the steps to become an engineer. A key component to this process is the focus on the development of critical thinking skills required in the engineering field. Those students with a keen focus to pursue this area more intensely can do so through our hands-on-curriculum. Students will choose the capstone project that best represents their interests (e.g. building a drone or solar car). **Pre-requisite: 50%+ in Design Thinking for Innovation 25 (Pre-Engineering)** (5 credits)

Fabrication Studies 10 (Welding) – This course is for students interested in working with their hands and taking pride in creating works of art using cutting edge welding and metal fabrication technologies. Learn how to safely manipulate fire and electricity while creating amazing projects. Skills developed in this course will provide a head start for those planning on pursuing a welding trade at SAIT. The course is designed as an introduction to safety, theory and applied skills in welding and metal fabrication. Students will complete projects in: Shielded Metal Arc Welding, Gas Metal Arc Welding, Flux Core Arc Welding, Plasma Arc Cutting and Oxy-Acetylene Welding/Cutting. (3 or 5 credits)

Fabrication Studies 20 (Welding) – Having built a foundation of skills in Fabrication 10, students will dive farther into the magic of metallurgy in Fabrication 20. Trade skills will continue to be the focus while students learn the art of welding. Learn to fabricate and weld projects for potential clients under the supervision of a skilled tradesperson. Fabrication 20 is a continuation of the theory and practice learned in the introductory course. Students will practice and complete projects that will further their skills in a variety of welding processes. Basic blueprint reading, layout, assembly, and hand skills will be reinforced. Process and safety will also be a major focus. **Pre-requisite: 50%+ in Fabrication 10** (3 or 5 credits)

Fabrication Studies 30 (Welding) – Students will learn everything from how to use an anvil and forge to learn basic blacksmithing skills, to using Gas Tungsten Arc welders for welding aluminum and other exotic metals. This course will be the culmination of previous theory and skills related to welding and fabrication. An emphasis will be put on production skills, planning, and executing larger scale projects. Upon successful completion of this course students will be prepared for an entry level position in a fabrication trade. Skills gained through out this course will be a valuable asset to any resume. **Pre-requisite: 50%+ in Fabrication 20** (3 or 5 credits)

Fashion Studies 10/20/30 A/B/C/D – This student-centered program explores the latest in clothing styles and fashion trends throughout the industry. Students are encouraged to choose individualized pathways and focus on personal

interests. Exploring a variety of introductory, intermediate, and advanced courses, Fashion Studies will provide students with a foundation in design, garment construction, and pattern drafting. New students to the program need no previous sewing experience. Experienced students will have the opportunity to perfect skills gained in previous courses, explore their own design talents, and develop portfolio worthy projects. Each segment (A/B/C/D) represents 3 credits.

Foods 10 – This course introduces students to nutrition, food preparation and presentation, and safe and sanitary food handling in the kitchen and in the workplace. Recipes are chosen from the four basic food groups in this experiential course. (3 credits)

Foods 20 – This intermediate program is designed to build on the student's skills and knowledge. Students will be mastering the fine art of "Soups, Stocks and Sauces", "Cake and Pastry", and "Meat Cookery". **Pre-requisite: 50%+ in Foods 10** (3 credits)

Foods 30 – This advanced program is designed specifically for students who are considering pursuing a career in the food industry. This course requires students to independently and creatively build on the skills and knowledge learned in Foods 10/20. They will have the opportunity to exercise their creativity through a large scale baking project, such as cakes or gingerbread houses in the "Creative Baking" course. "Regional Cuisine", "Food Presentation", and "Advanced Yeast Products" may also be areas of study within this course. **Pre-requisite: 50%+ in Foods 20** (3 credits)

Hockey Sports Performance 10 – This course is only open to those students that are participating in the Notre Dame Hockey Skills Program. Hockey Sports Performance 10 will provide active students involved with the knowledge, skills, and attitudes necessary to understand the variety of factors related to the sport of hockey and sports performance. Through a combination of theory and practical exposure, students will be expected to demonstrate outcomes as they relate to the study of current training principles, performance enhancement, sports injuries, performance evaluation, sport studies, and personal development through participation in the sport of hockey. Fees must be paid before the course begins. (5 credits)

Note: Students may enroll in only one of Hockey Sports Performance, Sports Performance, or Sports Performance Girls.

Hockey Sports Performance 20 – This course is only open to those students who participated in the Notre Dame Hockey Sports Performance 10 course. Hockey Sports Performance 20 focuses on analyzing training principles, performance enhancement aids, sport injuries, performance evaluation, sport studies, and personal development through participation in the sport of hockey. Hockey Sports Performance 20 will provide active students involved with the knowledge, skills and attitudes necessary to understand the variety of factors related to the sport of hockey and sports performance. Fees must be paid before the course begins. **Pre-requisite: 50%+ in Hockey Sports Performance 10** (5 credits)

Hockey Sports Performance 30 – This course is only open to those students who participated in the Notre Dame Hockey Sports Performance 20 course. Hockey Sports Performance 30 focuses on either developing, designing, or assessing training principles, performance enhancement aids, sport injuries, performance evaluation, sport studies, and personal development through participation in the sport of hockey. Hockey Sports Performance 30 will provide active students involved with the knowledge, skills, and attitudes necessary to understand the variety of factors related to the sport of hockey and sports performance. Fees must be paid before the course begins. **Pre-requisite: 50%+ in Hockey Sports Performance 20** (5 credits)

Information Processing 10/20/30 – This course allows students to work towards earning certification in Microsoft Office. Students will work towards writing the Microsoft Office Specialist exam in Word, Excel, PowerPoint, and Access. (3 credits)

Leadership 10 – Students will explore basic principles of leadership and evaluate their personal leadership characteristics and qualities through organizing and running school events. Student driven team building will develop trust, responsibility, and commitment to each other and their projects. Students are given the opportunity and are encouraged to develop their own leadership skills and to take risks and grow in a positive productive way so as to make a difference within the class, school and extended community. (3 credits)

Leadership 20 – Students will explore basic principles of leadership and evaluate their personal leadership characteristics and qualities through organizing and running school events. Student driven team building will develop trust, responsibility and commitment to each other and their projects. Students are given the opportunity and are encouraged to develop their own leadership skills and to take risks and grow in a positive productive way so as to make a difference within the class, school, and extended community. **Pre-requisite: 50%+ in Leadership 10** (3 credits)

Leadership 30 – (Community Leadership) – The primary focus of the Leadership 30 class is the modeling and mentoring of the Leadership skills developed at the 10 and 20 levels. Mentorship is at its greatest at this level as student's model and

mentor their Leadership 20 peers in every aspect of the Leadership program. Similar to Leadership 10 and 20, students will continue their involvement with a mentorship program of their choice and volunteer the required minimum of 20 hours. **Students wishing to take Leadership 30 must be successful in the Mentorship, Volunteer, and Leadership Fundamentals modules of the Leadership 20 course in order to fulfill the pre-requisite requirements.** (3 credits)

Mechanics 10 – Course content includes vehicle service and care, ride and control, tires and brakes, engine fundamentals, and electrical fundamentals. Maintenance, repair procedures, safe handling of hand and power tools, and safe operation of shop equipment (hoist, tire changer and balancer) will be focused on. (3 credits)

Mechanics 20 – Course content includes diagnosis and repair of vehicle systems (tires, wheels, bearings, brake systems, steering/suspension systems, lubrication/cooling, and recommended vehicle maintenance procedures). Proper tightening specification and data research will be covered. Completion of all 5 modules needed for advancement to future mechanics courses. **Pre-requisite: 50%+ in Mechanics 10** (3 credits)

Mechanics 30 – Course content includes engine tune-up, analysis and repair, engine overhaul procedures, starting/charging systems, emission controls, ignition system diagnosis and repair, and wheel alignment. **Pre-requisite: 50%+ in Mechanics 20** (3 credits)

New Media 10 – This course is an introductory course that focuses on visual composition, graphic design, and printing. New Media 10 is offered as a student-centered course that allows students to acquire skills and knowledge while progressing at their own learning rate. Throughout this course, students will utilize industry standard programs such as Adobe Illustrator, InDesign, and Photoshop. Students will have the opportunity to create designs and print their designs using multiple printing methods (i.e. Vinyl plotting, sublimation, and heat transfer). (3 credits)

New Media 20/30 – This course is an intermediate and advanced course that focuses on visual communication, graphic design, animation, audio/video production, website design, and interactive presentation. Students taking this course will write their Adobe Certified Associate certification in either Photoshop, Illustrator, InDesign, Dreamweaver, or Flash. This certification is internationally recognized and developed by Adobe. **Pre-requisite: 50%+ in New Media 10** (3 credits)

Photography 10 – In the Introductory Photography course, students will develop essential skills in camera use with a focus on composition, set-up and camera operation, examination of exposure, basic lighting, image processing, and proofing and display. In this course, students will gain hands on experience with the Nikon DSLR camera and will be able to capture images and produce final display proofs. Students will learn in-depth the technical and creative uses of aperture, shutter speed, and ISO and demonstrate how combinations of the three elements give very different results. This is a great introductory course that will allow students the opportunity to explore their creative side with the use of a camera. Students will travel to the Calgary Zoo in order to capture creative images of animals in this course. (3 credits)

Photography 20 – In the Intermediate Photography course, students will expand their photography skills in the areas of composition, exposure, basic lighting, camera operation, image processing and proofing, and display. Students will explore in further depth photographic concepts by using various lenses and applying depth of field in composition. As the final project for this course, students will use photographic prints or digital images to communicate a message or tell a story. Students will travel to Eau Claire Market in Calgary's Downtown area in order to capture creative images in this course. **Pre-requisite: 50%+ in Photography 10** (3 credits)

Photography 30 – In the Advanced Photography course, students are introduced to various techniques used to create high-quality color photographs through understanding the process, parameters, and issues that arise when working on color photographs. In the next portion of the course, students plan and respond to outdoor conditions to capture and produce high-quality outdoor images. In the final project for this course, students will develop skills and explore processes to present a story primarily through the use of pictures and text. Students will travel to Johnston's Canyon in Banff, Alberta in order to capture creative images in this course. **Pre-requisite: 50%+ in Photography 20** (3 credits)

Sports Medicine 10 – This is an introductory course designed for students who want to understand how the human body works and how to manage sports injuries. Students will study musculoskeletal anatomy, physiology of injuries, disease, healing, preventive taping, safety, wrapping, and first aid. Concepts related to the determinants of health and wellness and reporting protocols for providing care are reviewed. Standard First Aid CPR/AED Level C shall be offered with students potentially earning certification for 3 years and potentially earning a 4th credit in this course. (3-4 credits)

Sports Medicine 20 – This is an intermediate level course built on the competencies learned at the introductory level. Students will examine complementary therapies focusing on the application, knowledge, and techniques to enhance athletic performance and identify common athletic injuries. Students study the anatomy, physiology, and pathology of body

systems. Students engage in the numerous aspect of modalities and complementary therapies including ethics and safety. Students will have the opportunity to attend the TELUS Spark Centre to view and interact with an operating room staff at the new program: Virtual (knee replacement) Surgery performed live from a local Calgary hospital via a live video feed. This experience may provide an additional link to potential career connections in the field of Medicine. **Pre-requisite: 50%+ in Sports Medicine 10** (3 credits)

Sports Medicine 30 – This is an advanced level course that builds on the competencies learned at the introductory and intermediate levels. Students will identify advanced perspectives on health and extend their competencies in career transitions and community health through advanced taping and strapping techniques. Students will learn assessment strategies for a variety of musculoskeletal injuries. Students engage in human movement and biomechanics. Students will have the opportunity to travel to Mount Royal University and participate in a lab which will introduce various therapies and modalities. Students will have the opportunity to tour the Sports Medicine facility at Mount Royal University as well as have an introduction to sports massage. First Aid Health Care Provider (HCP) will also be offered with 1-year certification. **Pre-requisite: 50%+ in Sports Medicine 20** (3 credits)

Sports Performance 10 – This course will concentrate on the development of both the physical and mental conditioning of student athletes. The course will consist of an advanced fitness-training component as well as sport specific drills used to improve skill development. Classroom instruction will also be provided and will focus on the area of developing leadership and learning while studying the traits of outstanding athletes. (3 credits)

Note: Students may enroll in only one of Hockey Sports Performance, Sports Performance, or Sports Performance Girls.

Sports Performance 10 - Girls – This course will concentrate on the physical and mental development of female athletes. This course will cover in depth training principles that are tailored to female athletes and will include conditioning, weight training, and sport specific drills. The classroom component of the course will focus on understanding the importance of mental fitness in sports as well as sport specific nutrition principles specifically focused on female athletes. Student athletes taking this course should be serious about fitness training, prepared for strenuous physical activity in each class, and passionate about learning how to successfully develop into a well-rounded female athlete. (3 credits)

Note: Students may enroll in only one of Hockey Sports Performance, Sports Performance, or Sports Performance Girls.

Sports Performance 20 – This course will concentrate on the development of both the physical and mental conditioning of student athletes. The course will consist of an advanced fitness training component as well as sport specific drills used to improve skill development. Classroom instruction will also be provided and will focus on the areas of developing leadership and learning while studying the traits of outstanding athletes. It is of the utmost importance that only the serious student athlete registers for the class as it will be extremely strenuous in nature. This course is not available to those students enrolled in the hockey skills program. A tour of the Sports Medicine facility at MRU will occur and a sports massage will be included. **Pre-requisite: 50%+ in Sports Performance 10** (3 credits)

Sports Performance 20/30 Girls – This course will concentrate on the physical and mental development of female athletes. This course will cover in depth training principles that are tailored to female athletes and will include conditioning, weight training, and sport specific drills. The classroom component of the course will focus on understanding the importance of mental fitness in sports as well as sport specific nutrition principles specifically focused on female athletes. Student athletes taking this course should be serious about fitness training, prepared for strenuous physical activity in each class, and passionate about learning how to successfully develop into a well-rounded female athlete. **Pre-requisite: 50%+ in Sports Performance 10 or Sports Performance 10 Girls** (3 credits)

Sports Performance 30 – This course will concentrate on the development of both the physical and mental conditioning of student athletes. The course will consist of an advanced fitness training component as well as sport specific drills used to improve skill development. Classroom instruction will also be provided and will focus on the areas of developing leadership and learning while studying the traits of outstanding athletes. It is of utmost importance that only the serious student athlete registers for the class as it will be extremely strenuous in nature. This course is not available to those students enrolled in the hockey skills program. **Pre-requisite: 50%+ in Sports Performance 20** (3 credits)

CAREER AND TECHNOLOGY STUDIES – ADDITIONAL COURSES

Students with a strong interest in the following areas, can take additional courses and complete different modules.

- Business Management 20/30
- Cosplay 10/20/30
- Design Studies 10/20/30
- Fashion Studies 10/20/30
- Information Processing 10/20/30
- New Media 10/20/30
- Photography 20/30

*****NEW*** OFF-CAMPUS EDUCATION**

We provide a variety of Off-Campus opportunities for students, including:

Work Experience

Work Experience is available to high school students who are *already* working or volunteering and want to earn credits towards their high school diploma.

During work experience, students can earn up to 35 credits (20 towards their first 100 credits needed to graduate). Students can earn 10 credits in each level of work experience 15, 25 and 35 and 5 credits in career internship. One credit is earned for every 25 hours of work. A minimum of 75 hours (3 credits) must be worked.

Work experience can also be one of the courses used to apply for the Alexander Rutherford Scholarship.

Dual-Credit

These programs are designed for high school students who are interested in specific career areas and would like to work towards post-secondary and/or workplace certification while still attending high school.

The Calgary Catholic School District offers dual-credit programs in the following areas:

- Veterinary Technical Assistant (Olds College)
- Pharmacy Assistant (SAIT)
- Pre-Employment Carpentry (SAIT)
- Pre-Employment Electrician (SAIT)
- Pre-Employment Pipe Trades (SAIT)
- Pre-Employment Welding (SAIT)
- Hospitality & Tourism (Olds College)
- Software Development (Bow Valley College)
- Healthcare Career Essentials (SAIT)

Exploratory Programs

These programs are designed for high school students who are interested in a skilled trade and would like to work with a journeyman to explore the trade and earn both workplace certifications and/or high school credits.

In conjunction with Industry partners, the Calgary Catholic offers Exploratory Programs in the following areas:

- Exploring Wood Trades
- Exploring Ironworker Trade
- Exploring Pipe Trade
- Exploring Metal Trades
- Foundations in Emergency Care

Green Certificate

Green Certificate is an apprenticeship-style program designed for young people interested in the agricultural industry who would like to learn on the job, under the direction of experienced farm personnel, earn high school credits and obtain certification from Alberta Agriculture and Forestry. In each Green Certificate program students can earn up to 16 high school credits towards their first 100 credits needed to graduate and a Technician Level Green Certificate for their chosen specialization.

Students can earn an industry recognized certificate from Alberta Agriculture and Forestry in the following areas:

- Cow-calf
- Feedlot
- Sheep
- Swine
- Dairy
- Field crop
- Irrigated crops
- Beekeeping
- Equine
- Greenhouse production

Career Discovery Program

This two-week long summer program provides Grade 10 and 11 high school students the opportunity to explore a particular career field, be mentored by an adult in a workplace environment and earn high school credits.

The Calgary Catholic School District actively pursues career discovery placements for students in the following careers:

- Engineering
- Law
- Veterinary Medicine
- Architecture
- Information Technology
- Aviation, Avionics and Aircraft Maintenance

Registered Apprenticeship Program (RAP)

The RAP program is designed for high school students who want to begin training in a trade of their choice, work towards becoming an indentured apprentice and earn credits toward their high school diploma.

Students usually enter the RAP program in the summer of Grade 10 or 11. Initially the student works with an employer as an assistant. This probationary time allows the student and the employer the opportunity to determine whether or not this trade is a good fit for the student. If the student is interested in pursuing a career in the trade, and the employer feels they have the attitude and aptitude to be a success at the trade, they may apply to become an indentured apprentice.

An indentured apprentice can earn as many as 1000 hours towards their Journeyman's Certificate. For every 125 hours as an indentured apprentice, they will receive five (5) credits up to a maximum of 40.

For more information about these programs, please contact Notre Dame's off-campus education teacher or career practitioner for more information on any of these programs.

RUTHERFORD SCHOLARSHIP

Please see the link below for any and all information regarding the Rutherford Scholarship Course Requirements.

<https://alis.alberta.ca/pdf/scholarships/RutherfordScholarship.pdf>