ANDERSON

Collegiate

Vocational Institute

Program Guide

2021 - 2022

Grades 9 to 12

400 Anderson Street
Whitby, Ontario L1N 3V6
905-668-5809
www.acvi.ca



ANDERSON COLLEGIATE VOCATIONAL INSTITUTE

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THE ONTARIO SECONDARY SCHOOL DIPLOMA

18 compulsory credits:

4 credits English (1 credit per grade)

1 credit French as a second language

3 credits Mathematics (at least 1 credit in Grade 11 or 12)

2 credits Science

1 credit Canadian History

1 credit Canadian Geography

1 credit Arts

1 credit Physical and Health Education

1 credit Civics and Career Education

PLUS:

1 additional credit selected from	1 additional credit selected from	1 additional credit selected from
 Canadian and World Studies English Social Science French as a Second Language Classical or International Language Guidance or Career 	 The Arts (art, drama, music) Business Studies Physical and Health Education French as a Second Language 	 Science - Grade 11 or 12 Technological Education 9-12 ICS 201 ICS 3U1/ICS 4U1 French as a Second Language
Education•		

PLUS:

- 12 elective credits selected from the menu of available courses
- 40 hours community involvement
- Successful completion of a Ministry of Education test of reading and writing the Ontario Secondary School Literacy Test (OSSLT) or successful completion of the Ontario Secondary School Literacy Course (OLC 4O1)

^{**} A maximum of 2 credits in Co-operative Education can count as compulsory credits in the 'group' categories.

^{***} A maximum of 3 credits in English as a second language (ESL) may be counted towards the compulsory credits in English, but the fourth must be a credit earned for a Grade 12 Compulsory English course.

THE ONTARIO SECONDARY SCHOOL CERTIFICATE

The Ontario Secondary School Certificate will be granted on request to students who leave school before earning the Ontario Secondary School Diploma, provided that they have earned a minimum of 14 credits distributed as follows:

Compulsory Credits (total of 7)

2 credits in English

1 credit in Canadian Geography or Canadian History

1 credit in Mathematics

1 credit in Science

1 credit in Health and Physical Education

1 credit in the Arts or Technological Education

Optional credits (total of 7)

7 credits selected by the student from available courses

THE CERTIFICATE OF ACCOMPLISHMENT

Students who leave school before fulfilling the requirements for the Ontario Secondary School Diploma or the Ontario Secondary School Certificate may be granted a Certificate of Accomplishment. The Certificate of Accomplishment may be a useful means of recognizing achievement for students who plan to take certain vocational programs or who plan to find employment after leaving school.

The Certificate of Accomplishment will be accompanied by the student's Ontario Student Transcript. For those students who have an IEP, a copy of the IEP may be included.

Students who return to school to complete additional credit and non-credit courses (including courses with modified or alternative expectations in special education programs) will have their transcript updated accordingly, but will not be issued a new Certificate of Accomplishment. The Ontario Secondary School Diploma or Ontario Secondary School Certificate will be granted when a student has fulfilled the appropriate requirements.



COURSE TYPES

Secondary school programs are "destination focused". This means that courses are designed to prepare students for particular destinations after they finish their secondary school program (College, University, Apprenticeship, Work).

Open Level

An open level course in a subject has one set of expectations for that subject and is appropriate for all students.

Locally Developed/ Essential Stream (L and E courses)

A focus on the essential concepts of the discipline. Locally developed/Essential courses develop students' knowledge and skills by emphasizing practical, concrete applications of the essential concepts.

Applied Stream (P, M and C courses)

A focus on the essential concepts of the discipline. Applied courses develop students' knowledge and skills by emphasizing practical, concrete applications of the essential concepts while incorporating theoretical applications, as appropriate.

Academic Stream (D, M and U courses)

A focus on the essential concepts of the discipline plus additional related concepts. Academic courses develop students' knowledge and skills by emphasizing theoretical, abstract applications of the essential concepts while incorporating practical applications, as appropriate.

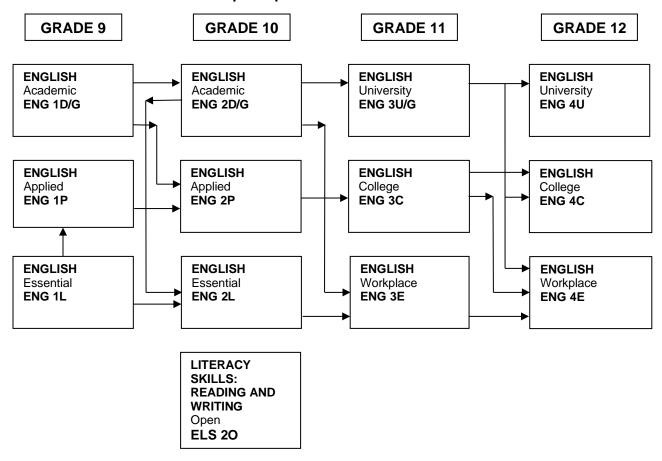
INFORMATION ABOUT COURSE SELECTION

- The flowcharts of prerequisites are included for planning (pages 6 to 8).
- Students should use the flowcharts of prerequisites to select Grade 10 courses when they are in Grade 9.
- Students should choose Grade 10 and 11 courses that meet the prerequisite requirements for the Grade 11 and 12 courses they plan to take.

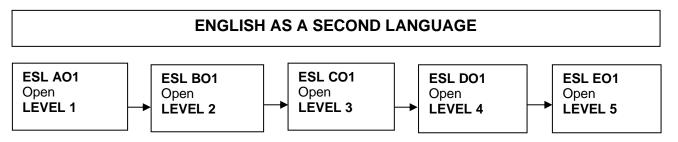


ENGLISH

This chart maps out all the grade 9 - 12 courses in the discipline, and shows the link between the courses. The arrows indicate the prerequisites for the different courses.

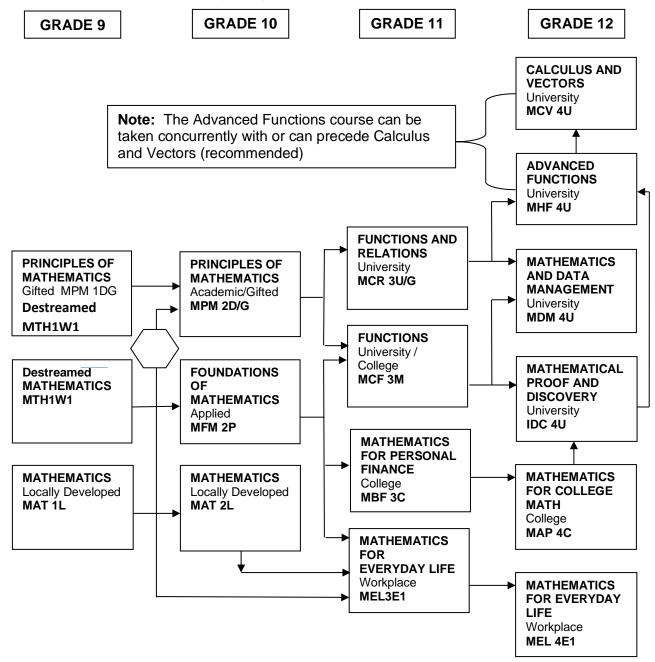


COURSE
Open: Grade
11 or 12
OLC 40



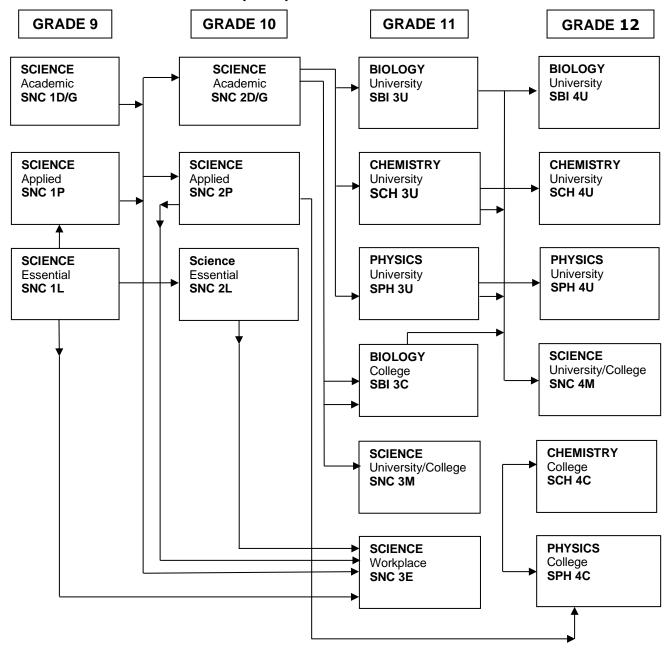
MATHEMATICS

This chart maps out all the grade 9 - 12 courses in the discipline and shows the link between the courses. The arrows indicate the prerequisites for the different courses.

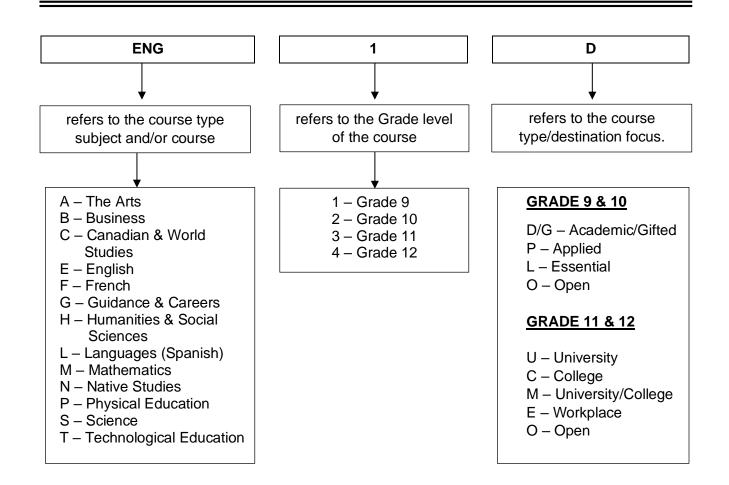


SCIENCE

This chart maps out all the grade 9 - 12 courses in the discipline, and shows the link between the courses. The arrows indicate the prerequisites for the different courses.



HOW TO READ THE COURSE CODES



COMMUNITY SERVICE HOURS

As part of the Ontario Secondary School Diploma, every student entering grade 9 must complete 40 hours of community involvement over 4 years prior to graduation. The purpose of this requirement is to promote community values. Students will develop an awareness of community needs, and a positive self-image while gaining a greater sense of identity within the community. Students will be provided with a sheet that outlines eligible and ineligible activities and that contains tracking materials. Volunteer opportunities will be posted at the Volunteer Resource Centre for Durham website: www.volunteerdurham.net.

ONTARIO SECONDARY SCHOOL LITERACY TEST (OSSLT)

All students working toward the Ontario Secondary School Diploma are required to successfully complete the Ontario Secondary School Literacy Test. This test will measure basic levels of literacy and will be based on the literacy expectations up until the end of grade 9. Students with an IEP may write with accommodations as long as those accommodations are contained in the IEP.

Students who have been eligible to write the OSSLT once and who have been unsuccessful are eligible to take the ONTARIO SECONDARY SCHOOL LITERACY COURSE (OLC 401). This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the OSSLT. Students who successfully complete this course, in Grade 11 or 12, will meet the provincial literacy requirement for graduation.

ADJUDICATION PROCESS FOR THE OSSLT

School boards have established adjudication panels at the end of the school year to provide certain students with an additional opportunity to meet the literacy graduation requirement. These students include those who would otherwise be eligible to graduate in June but, through no fault of their own, have not been able to take advantage of the normal opportunities to write the OSSLT and/or have not been able to enroll in or complete the OSSLC, owing to unforeseen circumstances. Also eligible for the adjudication process are students who were receiving special education programs or services, and who had an IEP documenting required accommodations, but, owing to unforeseen circumstances, did not have access to these accommodations when they were taking the OSSLT.

SCHOOL CODE OF CONDUCT AND SAFE SCHOOLS POLICY

At the start of each school year students are provided with a student agenda book that contains the school's Code of Conduct and Safe Schools Policy. Students and parents should familiarize themselves with these items. These policies are based upon Ministry guidelines and may be accessed through the Durham Board website www.ddsb.ca.

ONTARIO STUDENT TRANSCRIPT AND THE ONTARIO STUDENT RECORD

In secondary schools, a student's record of successfully completed courses in Grades 9 and 10 and all courses taken at the Grade 11 and 12 level (i.e. credits), is kept on the Ontario Student Transcript. This "Transcript" becomes part of a student's Ontario Student Record (O.S.R.) which was established for the student when he/she first attended school in Ontario. Both the Ontario Student Transcript and the Ontario Student Record are retained at the last secondary school the student attended for a period of fifty-five (55) years after the student leaves the school. The "Transcript" is particularly important, as the information it contains could be needed by the student to qualify for employment or a post-secondary opportunity in the future. Copies of this "Transcript" are available upon request from the school's Student Services Department. The Ontario Student Transcript and the Ontario Student Record may be inspected upon request.

FULL DISCLOSURE

All students taking Grade 11 and 12 courses will be subject to a Full Disclosure policy. All courses taken at these grade levels will be recorded on a student's transcript, whether the course has been successfully completed or not. This information is to be made available to Community Colleges and Universities for them to consider when making admission and scholarship decisions. Parents and students who have further questions about this policy should contact a Guidance Counsellor.

THE ONTARIO CREDIT SYSTEM

Credit Definition:

A credit is granted upon successful completion of a course which has at least 110 hours of scheduled instructional time.

Student Promotion:

Students are promoted by subject rather than by grade. Students are promoted in each subject they pass but may repeat courses on an individual basis when necessary.

Individualized Timetables:

On the first day of school, each student is provided with a personal timetable based upon their subject selections. Students wishing to make a course change are encouraged to make an appointment in Student Services early in the semester (or quadmester). All timetable changes should be completed within the specified timeframes from Guidance to maximize student success in the new course.

Courses of Study:

The courses offered at Anderson have been developed according to the requirements of the Ontario Ministry of Education. Information on course outlines and Ontario Curriculum Policy documents may be found at the Ministry website www.edu.gov.on.ca.

Semester System:

Anderson is a semestered school and our school year is divided into two parts. Students can take a maximum of four subjects from September to January; then, four from the end of January to June. Each period in the day is seventy-five minutes in length. Students in grade nine, ten and eleven are required to take four courses per semester. Given the uncertainty of education in Ontario due to the pandemic, there is a possibility that Anderson students will continue to be in quadmesters for the 2021/22 school year.

Grade 12 students pursuing a degree at a post-secondary institution are required to take a minimum of 6 4U1/4M1 courses to meet entrance requirements.

The requirements vary for Grade 12 students pursuing a post-secondary option other than a degree.

Students must ensure they achieve the required pre-requisites for the program of their choice.

Report Cards:

Report Cards are distributed three times each semester. In a semester system, the Progress Report is issued at the 6 week point, followed by Mid-Term and Final Report Cards. In a quadmester system, reports will be issued at the end of each 9 week quad.

Evaluation and Examination Policies:

Mandatory final examinations are held at the end of each semester. All students are required to write these final examinations. In a quadmester system, exams may not occur.

Detailed information about specific evaluation strategies for each course will be distributed to students at the start of each semester/quadmester.

Attendance:

Regular attendance on the part of students is vital to the process of learning. A unit of study usually involves the development of a sequence of related understandings. When the processes and content of learning are disrupted by irregular attendance, both the individual student and their classmates suffer a loss of experiences that cannot be entirely regained. While methods of evaluation vary according to subject areas, emphasis is placed on day-to-day work, assignments, projects, term tests and formal examinations.

Punctuality:

Punctuality is imperative for the proper conduct of classroom activities. Students must be on time and ready to participate both for their sake and for that of their classmates. Lateness for class for inappropriate reasons is not acceptable and is dealt with as a disciplinary matter by the Administration.

ALTERNATE WAYS TO EARN A CREDIT

Students may earn credits in alternative ways such as summer school, night school and online courses. Students should make an appointment with a guidance counsellor for further information and to determine if they are eligible for these programs. All requests must be approved by the day school Principal.

SUMMER SCHOOL

Summer school courses may be available for students to:

- retake courses they did not successfully complete
- upgrade their mark: two weeks for an unsuccessful attempt, four weeks to improve a passing grade
- earn a credit a new course they have not attempted

NIGHT SCHOOL

Night school courses are offered for the general public. Under special circumstances, the Principal may give approval for a day school student to enroll in a night school course.

ONLINE COURSES

The DDSB will offer a number of Secondary e-Learning credit courses. Each participating student must be enrolled as a full time day student at one of the participating secondary schools.

Successful e-Learning Students are:

- independent learners
- academically motived
- comfortable with technology
- collaborative
- have good time management skills

PLAR FOR SECONDARY STUDENTS

Students interested in obtaining credits through the PLAR Challenge Process, and who are currently registered in Durham School Board secondary schools, should seek information from the Guidance department of their school. After meeting with the home school counsellor, if students wish to proceed with the PLAR Challenge Process they should:

- 1. Attend a Challenge Orientation Appointment at the Credential Centre, 120 Centre Street South, Oshawa, by calling Durham Continuing Education at 905-436-3211
- 2. Complete a Challenge Application package as directed at the orientation appointment and meet all deadlines
- 3. Proceed with the Challenge if approved.

DURHAM CENTRES FOR SUCCESS

Students in the Centre for Success complete their secondary school diploma requirements in a small class - you'll get lots of support and encouragement from your teacher as you finish your courses. You might be involved in earning new credits, credit recovery or credit continuation. You'll also sign up for one college course. Your secondary school teacher will be around to support you as you work on the college course which will be taught by a college professor. Come to Durham College now - try it out see if it's the right fit for you. (The choice of college course will vary depending on the semester and your school.) Talk to your Guidance Counsellor, Student Success teacher or VP to see if this program is right for you.

SPECIAL EDUCATION

Identified Students within the Durham Board have an identification based upon the IPRC (Identification, Placement and Review Committee) process and may require a more specialized and individualized educational program. Some students with an IEP may receive accommodations and/or modifications in order to achieve success. An accommodation does not change the expectations outlined in the Ministry curriculum, while a modification does change the expectations and may change the credit values earned. Accommodations and/or Modifications can be made to the classroom environment, assessment and evaluation techniques, and/or instructional methods. Identified students in a small class placement may achieve success in alternative (non-credit) courses.

Copies of the DDSB Special Education Parent Guide may be obtained by contacting the Anderson Academic Resource Department or by visiting the DDSB website. The DDSB has a Special Education Advisory Committee (SEAC). Further information on SEAC can be obtained from the DDSB website at www.ddsb.ca and clicking on Programs and Learning – Inclusive and Student Services.

Substitutions for Compulsory Courses

In order to allow flexibility in designing a student's program and to ensure that all students can qualify for the secondary school diploma, substitutions may be made for a limited number of compulsory credit courses pending principal approval.

GIFTED CERTIFICATE

Students must be identified as Gifted by the Durham District School Board through the IPRC process. The following are course offerings:

GRADE	COURSES	MINISTRY TERM – PLACEMENT ON IPRC
Grade 9	English, Geography, Math, Science	Special Education Class with partial integration - students must be in Gifted classes for 50% of the school day.
Grade 10	English, History, Math, Science	Special Education Class with partial integration - students must be in Gifted classes for 50% of the school day.
Grade 11	English, Math	Regular class with withdrawal assistance.

Students must complete a minimum of 8 courses, at least one of which must be at the Senior Level (Grade 11) to be eligible for this certificate. In grades 9 and 10, students are strongly encouraged to take all four gifted offerings to fulfil the pre-requisite requirements.



ESL - ENGLISH AS A SECOND LANGUAGE

English as a Second Language (ESL) programs are for students who are either new to the country or are Canadian-born, whose first language is other than English or is a variety of English that is significantly different from the English used in Ontario schools. These students are proficient users of their first language, but have limited facility in English. Students identified by the DDSB as ESL Learners have several courses available to them depending on their level of English proficiency. Anderson offers the following courses in coordination with our Special Education Department however, an appointment with Guidance must be made in order to register for these courses.

ESL AO1 - Level 1, Beginning Communication in English

This course builds on students' previous education and language knowledge to introduce the English language and help students adjust to their new cultural environment. Students will use beginning English language skills in listening, speaking, reading, and writing for everyday and essential academic purposes; use basic English language structures and simple sentence patterns in short conversations; read short adapted texts; and write phrases and short sentences. The course also provides students with the knowledge and skills they need to begin to adapt to their new lives in Canada.

ESL BO1 - Level 2, English in Daily Life

This course expands students' listening, speaking, reading, and writing skills in English for everyday and academic purposes. Students will participate in conversations, in structured situations, on a variety of familiar and new topics; link English sentences to compose paragraphs; read a variety of texts designed or adapted for English language learners; and expand their knowledge of English grammatical structures and sentence patterns. The course also supports students' continuing adaptation to the Ontario school system by expanding their cultural knowledge of their new province and country.

ESL CO1 - Level 3, English for School and Work

This course extends students' skills in listening, speaking, reading, and writing in English for a variety of everyday and academic purposes. Students will make short classroom presentations; read a variety of adapted and original texts in English; and write using a variety of forms of text. Students will also expand their academic vocabulary and their study skills to facilitate the transition to the mainstream school program. This course also introduces students to the rights and responsibilities inherent in Canadian citizenship, and to a variety of current Canadian issues.

ESL DO1 - Level 4, Study Skills in English

This course prepares students to use English with increasing fluency and accuracy in classroom and social situations and to participate in Canadian society as informed citizens. Students will develop the reading, writing, and oral presentation skills required for success in all school subjects. They will study and interpret a variety of grade-level texts; extend listening and speaking skills through participation in discussions and seminars; write narratives, articles, and summaries in English; and respond critically to various print and media texts.

ESL EO1 - Level 5, Bridge to English

This course provides students with the skills and strategies they need to make the transition to college and university preparation courses in English and other secondary school disciplines.

STUDENT SERVICES

The Student Services Department provides information and counselling to students and parents of Anderson Collegiate. The counsellors are highly skilled and well trained to assist individual students with questions or concerns regarding educational programs, career planning and personal problems. The counsellors work with students to evaluate capabilities, assess aptitudes, interpret results or provide information about educational and occupational requirements.

Students will have many opportunities to meet counsellors in group and individual sessions. Counsellors are involved in student orientation, seminars on scholarships and bursaries, course selection, Community Involvement, Take A Student to Work, college and university applications and transition to the world of work.

Student Services will track academic progress and meet with students to problem solve and plan for success. Strategies could include study and homework habits, time management skills, exam preparation and referral to the Credit Recovery program.

Student Services provides a Resource Centre where students may obtain community resource information, university and college calendars, career descriptions, career computer programs and other materials pertaining to occupations, careers, or admission to post-secondary institutions. The Resource Centre also has information regarding student exchanges and learning opportunities in Canada and overseas. The Volunteer section contains contacts for completing the 40 hours of Community Involvement.

INDIVIDUAL PATHWAY PLAN (IPP)

All students in grades 9 through 12 will be required to maintain an Individual Pathway Plan which will help them to set goals and priorities and make decisions. Students will set these goals and review their progress towards them at the end of each semester or term. As part of this plan, students will also research career and educational opportunities and alternatives. It is expected that parents will play an active role along with students and teachers in the ongoing review of this plan. A common template and specific activities will assist students as they begin to make the decisions that affect their future both at school and beyond.

The IPP can be found at www.myblueprint.ca/ddsb



SUBJECT CONCENTRATION CERTIFICATES

An Arts Certificate will be awarded to students who have successfully completed 6 or more courses in either visual arts, drama or music. Cooperative education credits will count in this total.

A Business Certificate will be awarded to students who have successfully completed 6 or more business courses. Cooperative education credits will count in this total.

An International Language Certificate will be awarded to students who have successfully completed French through Grade 9-12 at the Academic Level and/or Spanish through Grade 10-12.

A Technology Certificate will be awarded to students who have successfully completed 6 or more technology courses. Cooperative education credits will count in this total.

FOCUS PROGRAMS

Specialist High Skills Major

A Specialist High Skills Major (SHSM) is a type of Ministry-approved specialized program. Students who graduate with a SHSM designation on their diploma are prepared for success in a particular sector and in the post-secondary destination of their choice, whether it be apprenticeship training, a college or university program, or the workplace.

At Anderson, Specialist High Skills Majors will be offered in:

Environmental Studies

School - To - Work Programs

Students who decide on a work destination high school program may participate in a Cooperative Education program to work in an industry. A typical program might be Cooperative Education for one half day in Grade 11 and continue a placement or internship in Grade 12 for a full day in Semester 2. Students are encouraged to discuss their career pathway with a Guidance counsellor or a Co-operative Education teacher.

OYAP - Ontario Youth Apprenticeship Program

The Ontario Youth Apprenticeship Program (OYAP) is an opportunity available in Ontario Secondary Schools for all students participating in Cooperative Education. OYAP allows students to get a jump-start on their future in the skilled trades. OYAP students must meet all the requirements and elements of Cooperative Education in order to participate. Students can earn high school credits while they get experience in the trade of their choice. All students completing Cooperative Education placements in a skilled trade are considered OYAP students. Students also may have the choice of registering as an OYAP apprentice while at their placement. To register as an apprentice while completing Co-op credits, students must be at least 16 years of age and have 16 credits. Students must also have good academic standing and excellent attendance. Students with special needs are welcome to participate in OYAP if they have interest.

OYAP - Ontario Youth Apprenticeship Program (continued)

Additionally, the Durham District School Board offers students the opportunity to apply for **Accelerated Level One programs**. Students may earn the first level of their Apprenticeship training in the final semester of high school at a local Community College while also completing a Co-op placement in a skilled trade. Programs include: Automotive Service Technician, Child Development Practitioner, Cook, Electrical, Carpentry, Hairstyling, Plumbing, Welding and Industrial Mechanic Millwright. To apply for the Accelerated Level One programs, students must be in at least Grade 11 and plan on completing all of their compulsory courses during the first semester of their Grade twelve school year. To begin the program in the second semester of their final year, students must have 26 credits including all compulsory credits completed. It is recommended that students complete at least one Co-op experience in a trade before applying to the Accelerated OYAP program. Applications will be available in your Guidance or Co-op Office in February.

The Ontario Youth Apprenticeship program supports Student Success in our Secondary Schools including our Specialist High Skills Major Programs.

Please see your Guidance Counsellor or Co-op Teacher for more information.



CHOOSING YOUR GRADE 9 COURSES

COMPULSORY SUBJECTS (Students must choose <u>ONE</u> in each subject area)

PAGE	SUBJECT AREA	ACADEMIC	GIFTED	APPLIED	ESSENTIAL
19	English	ENG 1D1	ENG 1DG	ENG 1P1	ENG 1LS
19	French	FSF 1D1		FSF 1P1	
20	Canadian Geography	CGC 1D1	CGC 1DG	CGC 1P1	
20-21	Mathematics	MTH1W1	MPM 1DG	MTH1W1	MAT 1LS
21	Science	SNC 1D1	SNC 1DG	SNC 1P1	SNC 1LS

OPTIONAL SUBJECTS (Students must choose <u>THREE</u> from the following list of Optional Courses)

PAGE	CODE	DESCRIPTION
22	ADA 101	Drama
22	AMI 101	Music, Instrumental
22	AMV 101	Vocal Music
22	AVI 101	Visual Arts
22	BTT 101	Information and Communication Technology in Business
22	HIF 101	Individual and Family Living
23	PPL 103	Healthy Active Living Education (Male)
23	PPL 104	Healthy Active Living Education (Female)
23	TIJ 101	Exploring Technologies
23	GLE 101	Learning Strategies (Permission Required)
23	NAC 101/S	Expressions of First Nations, Metis and Inuit Cultures

COURSE DESCRIPTIONS FOR GRADE 9 COMPULSORY COURSES

ENG 1D1 – English, Academic

This course is designed to develop the oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, interpret informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the use of strategies that contribute to effective communication. The course is intended to prepare students for the Grade 10 academic English course, which leads to university or college preparation courses in Grades 11 and 12.

ENG 1DG - English, Gifted

This course is similar to the Academic English course (ENG 1D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

ENG 1P1 – English, Applied

This course is designed to develop the key oral communication, reading, writing, and media literacy skills students need for success in secondary school and daily life. Students will read, interpret, and create a variety of informational, literary, and graphic texts. An important focus will be on identifying and using appropriate strategies and processes to improve students' comprehension of texts and to help them communicate clearly and effectively. The course is intended to prepare students for the Grade 10 applied English course, which leads to college or workplace preparation courses in Grades 11 and 12.

ENG 1LS - English, Essential

This course provides foundational literacy and communication skills to prepare students for success in their daily lives and in the workplace. The course is organized by strands that develop listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on developing foundational literacy skills and in using language clearly and accurately in a variety of authentic contexts. Students may proceed to ENG 1P1 or ENG 2LS.

FSF 1D1 - Core French, Academic

This course provides opportunities for students to communicate and interact in French with increasing independence, with a focus on familiar topics related to their daily lives. Students will continue to develop language knowledge and skills by using language-learning strategies introduced in the elementary Core French program, and will apply creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop the skills necessary for life-long language learning.

FSF 1P1 - Core French, Applied

This course provides opportunities for students to communicate and interact in French in structured situations on everyday topics and to apply their knowledge of French in everyday situations. Students will continue to develop language knowledge and skills introduced in the elementary Core French program, through practical applications and concrete examples, and will use creative and critical thinking skills in various ways. They will also enhance their understanding and appreciation of diverse French-speaking communities, and will develop the skills necessary for life-long language learning.

CGC 1D1 - Canadian Geography, Academic

This course examines interrelationships within and between Canada's natural and human systems and how these systems interconnect with those in other parts of the world. Students will explore environmental, economic, and social geographic issues relating to topics such as transportation options, energy choices, and urban development. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate various geographic issues and to develop possible approaches for making Canada a more sustainable place to live. At Anderson, students in this course go on field trips both in the local community and other parts of Southern Ontario to explore first-hand the diversity between Canada's human and physical geographies that surround our everyday lives.

CGC 1DG – Canadian Geography, Gifted

This course is similar to the Academic Geography course (CGC 1D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

CGC 1P1 – Canadian Geography, Applied

This course focuses on current geographic issues that affect Canadians. Students will draw on personal and everyday experiences as they explore a range of issues, including food and water supplies, competing land uses, and interaction with the natural environment, developing their awareness that issues that affect their lives are interconnected with issues in other parts of the world. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate choices related to sustainable living in Canada. At Anderson, students in this course go on field trips both in the local community and other parts of Southern Ontario to explore first-hand the diversity between Canada's human and physical geographies that surround our everyday lives.

MPM 1DG - Mathematics, Gifted

This course enables students to develop understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a relationship. They will also explore relationships that emerge from the measurement of three-dimensional objects and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multistep problems. Successful completion of this course prepares students for Principles of Mathematics, Grade 10, Gifted (MPM 2DG).

MTH 1W1 – Mathematics, Destreamed

This course enables students to consolidate, and continue to develop, an understanding of mathematical concepts related to number sense and operations, algebra, measurement, geometry, data, probability, and financial literacy. Students will use mathematical processes, mathematical modelling, and coding to make sense of the mathematics they are learning and to apply their understanding to culturally responsive and relevant real-world situations. Students will continue to enhance their mathematical reasoning skills, including proportional reasoning, spatial reasoning, and algebraic reasoning, as they solve problems and communicate their thinking. Prerequisite: None

MAT 1LS - Mathematics, Essential

This course emphasizes further development of mathematical knowledge and skills to prepare students for success in their everyday lives in the workplace. The course is organized by three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on developing and consolidating key foundational mathematical concepts and skills by solving authentic everyday problems. Students have opportunities to further develop their mathematical literacy and problem solving skills and to continue developing their skills, writing, and oral language through relevant and practical math activities. Students may proceed to MFM 1P1 or MAT 2LS or MEL 3ES.

SNC 1D1 – Science, Academic

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their stills in the process of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

SNC 1DG - Science, Gifted

This course is similar to the Academic Science course (SNC 1D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

SNC 1P1 - Science, Applied

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science to everyday situations. They are also given opportunities to develop practical skills related to scientific investigation. Students will plan and conduct investigations into practical problems and issues related to the impact of human activity on ecosystems; the structure and properties of elements and compounds; space exploration and the components of the universe; and static and current electricity.

SNC 1LS - Science, Essential

This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking and the relationship between science, society, and the environment to prepare students for success in everyday life and in the workplace. Students explore a range of topics including science in daily life, properties of common materials, life-sustaining processes in simple and complex organisms, and electrical circuits. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing and oral language through relevant and practical science activities. Students may proceed to SNC 1P1 or SNC 2LS or SVN 3ES.

COURSE DESCRIPTIONS FOR GRADE 9 OPTIONAL COURSES

ADA 101 – Drama

This course provides opportunities for students to explore dramatic forms and techniques, using material from a wide range of sources and cultures. Students will use the elements of drama to examine situations and issues that are relevant to their lives. Students will create, perform, discuss, and analyze drama, and then reflect on the experiences to develop an understanding of themselves, the art form, and the world around them.

AMI 101 - Music, Instrumental

This course emphasizes the creation and performance of music at a level consistent with previous experience and is aimed at developing technique, sensitivity, and imagination. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. Students will develop an understanding of the conventions and elements of music and of safe practices related to music, and will develop a variety of skills transferable to other areas of their life. Performance in Junior Concert Band is strongly encouraged.

COURSE NOTE: Traditional Concert Band Instrumentation (Students will learn wind or percussion instruments. Percussion students play mallets and snare).

AMV 101 - Music, Vocal-Choral

The Vocal Music course is designed for students who are interested in developing their singing skills. No previous vocal experience is required. This program is intended to develop students' understanding and appreciation of music through practical skills and creative work. Through this program students will not only find in music a source of enjoyment and personal satisfaction, but also gain creative problem-solving skills, individual and cooperative work habits, knowledge of themselves and others, a sense of personal responsibility, and connections to their communities and future careers. Participation in the choir is strongly encouraged.

AVI 101 - Visual Arts

The course is exploratory in nature, offering an overview of visual arts as a foundation for further study. Students will become familiar with the elements of principles of design and the expressive qualities of various materials by using a range of media, processes, techniques, and styles. Students will use the creative and critical analysis processes and will interpret art within a personal, contemporary, and historical context.

BTT 101 - Information and Communication Technology in Business

In this course students will build and refine their skills using Microsoft Office (Word, Excel, PowerPoint, Publisher). They will also be introduced to Web site design and Photo enhancement techniques using current software. This course introduces students to information and communication technology in a business environment and builds a foundation of digital literacy skills necessary for success in a technologically driven society. Students will develop word processing, spreadsheet, database, desktop publishing, presentation software, and website design skills. Throughout the course, there is an emphasis on digital literacy, effective electronic research and communication skills, and current issues related to the impact of information and communication technology.

HIF 101 - Individual and Family Living

This course explores, within the context of families, some of the fundamental challenges people face: how to meet basic needs, how to relate to others, how to manage resources, and how to become responsible members of society. Students will explore adolescent development and will have opportunities to develop interpersonal, decision-making, and practical skills related to daily life. They will learn about the diverse ways in which families function in Canada and will use research skills as they explore topics related to individual and family needs and resources. Course Fee: \$10.00

PPL 103 (Male) / PPL 104 (Female) - Healthy Active Living Education

All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Students will learn movement techniques and principles, ways to improve personal fitness and physical competence, and safety/injury-prevention strategies. They will investigate issues related to healthy sexuality and the use and abuse of alcohol, tobacco, and other drugs and will participate in activities designed to develop goal-setting, communication, and social skills. A CPR unit is also taught within the health curriculum which may result in certification.

NOTE- It is the responsibility of the parent(s)/guardian(s) to notify the principal and teacher, in writing, if they wish their student to be exempt from the Human Development and Sexual Health portion of the course.

TIJ 101 – Exploring Technologies

This course enables students to further explore and develop technological knowledge and skills introduced in the elementary science and technology program. Students will be given the opportunity to design and create products and/or provide services related to the various technological areas or industries, working with a variety of tools, equipment, and software commonly used in industry. Students will develop an awareness of environmental and societal issues, and will begin to explore secondary and postsecondary education and training pathways leading to careers in technology-related fields.

GLE 101 - Learning Strategies: Skills for Success in High School (Spec. Ed.) Permission Required from Special Education

This course introduces students to learning theories and strategies, prepares them to become effective independent learners, and helps them increase their personal management skills, both in school and in other contexts. Students will study the following topics: using advanced technology, note taking, time management, goal setting, study skills, memory skills, listening skills and self-advocacy. In this course students will review their IEPs in order to discover how they can use their strengths to accommodate for their areas of need and to increase self-confidence, motivation and ability to learn.

NAC 101/S – Expressions of First Nations, Metis and Inuit Cultures

This course explores various First Nations, Metis and Inuit art forms (media arts, music, dance, drama, storytelling, visual art, installation and performance art, clothing design and architectural design), giving students the opportunity to create, present and analyze integrated art works infused with First Nations, Metis and Inuit perspectives. Students will examine relationships between art forms and individual and cultural identities, histories and values. Students will demonstrate innovation as they learn and apply art-related concepts, styles and conventions and acquire skills that are transferable beyond the classroom. Students will use the creative process and responsible practices to explore solutions to integrated-arts challenges. This is an open level course.



CHOOSING YOUR GRADE 10 COURSES

COMPULSORY SUBJECTS (Students must choose <u>ONE</u> in each subject area)

PAGE	SUBJECT AREA	ACADEMIC	GIFTED	APPLIED	ESSENTIAL	OPEN
25	English	ENG 2D1	ENG 2DG	ENG 2P1	ENG 2LS	
25-26	Canadian History since WWI	CHC 2D1	CHC 2DG	CHC 2P1	CHC 2LS	
26	Career Studies					GLC 2O1 (.5)
26	Civics					CHV 2O1 (.5)
26-27	Mathematics	MPM 2D1	MPM 2DG	MFM 2P1	MAT 2LS	
27	Science	SNC 2D1	SNC 2DG	SNC 2P1	SNC 2LS	

OPTIONAL SUBJECTS (Students must choose <u>THREE</u> from the following list of Optional Courses)

PAGE	CODE	DESCRIPTION
28	ADA 201	Drama
28	AMI 2O1	Music, Instrumental
28	AMG 2O1	Music, Guitar
28	AMV 201	Music, Vocal
28	AVI 201	Visual Arts
28	BBI 201	Introduction to Business
29	ICS 201	Introduction to Computer Studies
29	FSF2D1	Core French
29	HFN 2O1	Food and Nutrition
29	NAC 201	First Nations, Metis and Inuit Peoples in Canada
29	PPL 203	Healthy Active Living Education – Activity (Male)
29	PPL 2O4	Healthy Active Living Education – Activity (Female)
30	PAF 2O3	Healthy Active Living Education – Fitness (Male)
30	PAF 2O4	Healthy Active Living Education – Fitness (Female)
30	TCJ 2O1	Construction Technology
30	TDJ 2O1	Technological Design
30	TGJ 2O1	Communications Technology
30	TMJ 2O1	Manufacturing, Welding
31	TTJ 201	Transportation Technology

COURSE DESCRIPTIONS FOR GRADE 10 COMPULSORY COURSES

ENG 2D1 - English, Academic

Prerequisite: ENG 1D1 or ENG 1P1

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in their secondary school academic programs and in their daily lives. Students will analyse literary texts from contemporary and historical periods, interpret and evaluate informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on the selective use of strategies that contribute to effective communication. This course is intended to prepare students for the compulsory Grade 11 university or college preparation course.

ENG 2DG - English, Gifted

Prerequisite: ENG 1DG

This course is similar to the Academic English course (ENG 2D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

ENG 2P1 - English, Applied

Prerequisite: ENG 1P1 or ENG 1D1

This course is designed to extend the range of oral communication, reading, writing, and media literacy skills that students need for success in secondary school and daily life. Students will study and create a variety of informational, literary, and graphic texts. An important focus will be on the consolidation of strategies and processes that help students interpret texts and communicate clearly and effectively. This course is intended to prepare students for the compulsory Grade 11 college or workplace preparation course.

ENG 2LS - English, Essential

Prerequisite: Any Grade 9 English course

In this course, students focus on extending their literacy and communication skills to prepare for success in their daily lives and in the workplace. The course is organized by strands that extend listening and talking skills, reading and viewing skills, and writing skills. In all strands, the focus is on refining foundational literacy skills and in using language clearly and accurately in a variety of authentic contexts. Students build on their strategies and engage in the processes involved in talking, listening, reading, viewing, writing, and thinking, and reflect regularly upon their growth in these areas. Students may proceed to ENG 2P1 or ENG 3ES.

CHC 2D1 - Canadian History since WW1, Academic

This course explores social, economic, and political developments and events and their impact on the lives of different groups in Canada since 1914. Students will examine the role of conflict and cooperation in Canadian society, Canada's evolving role within the global community, and the impact of various individuals, organizations and events on Canadian identity, citizenship, and heritage. They will develop their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating key issues and events in Canadian history since 1914.

CHC 2DG- Canadian History since WW1, Gifted

This course is similar to the Academic History course (CHC 2D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

CHC 2P1- Canadian History since WW1, Applied

This course focuses on the social context of historical developments and events and how they have affected the lives of people in Canada since 1914. Students will explore interactions between various communities in Canada as well as contributions of individuals and groups to Canadian heritage and identity. Students will develop their ability to apply the concepts of historical thinking and the historical inquiry process including the interpretation and analysis of evidence, when investigating the continuing relevance of historical developments and how they have helped shape communities in present-day Canada.

CHC 2LS - Canadian History since WW1, Essential

This course focuses on the connections between the student and key people, events, and themes in Canadian history from World War I to the present. Students prepare for the Grades 11 and 12 Workplace Preparation history courses through the development and extension of historical literacy and inquiry skills. Students explore a variety of topics highlighting individuals and events that have contributed to the story of Canada. The major themes of Canadian identity, internal and external relationships, and changes since 1914, are explored through guided investigation. Students have the opportunity to extend analytical skills with a focus on identifying and interpreting events and perspectives and making connections. Students practice reading, writing, visual, and oral literacy skills, and mathematical literacy skills to identify and communicate ideas in a variety of forms.

CHV 201 - Civics, Open

This course explores rights and responsibilities associated with being an active citizen in a democratic society. Students will explore issues of civic importance such as healthy school, community planning, environmental responsibility, and the influence of social media, while developing their understanding of the role of civic engagement and of political processes in the local, national, and/or global community. Students will apply the concepts of political thinking and the political inquiry process to investigate, and express informed opinions about, a range of political issues and developments that are both of significance in today's world and of personal interest to them.

Please Note: This course is a half credit course taken in conjunction with GLC 201.

GLC 201 – Career Studies, Open

This course gives students the opportunity to develop the skills, knowledge, and habits that will support them in their education and career/life planning. Students will learn about global work trends, and seek opportunities within the school and community to expand and strengthen their transferable skills and their ability to adapt to the changing world of work. On the basis of exploration, reflective practice, and decision-making processes, students will make connections between their skills, interests, and values and their postsecondary options, whether in apprenticeship training, college, community living, university, or the workplace. They will set goals and create a plan for their first postsecondary year. As part of their preparation for the future, they will learn about personal financial management – including the variety of saving and borrowing tools available to them and how to use them to their advantage.

Please Note: This course is a half credit course taken in conjunction with CHV 2O1.

MPM 2D1 - Mathematics. Academic

Prerequisite: MPM 1D1/G

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relationships and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically communicate their thinking as they solve multistep problems.

MPM 2DG - Mathematics, Gifted

Prerequisite: MPM 1DG This course is similar to the Academic Mathematics course (MPM 2D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

MFM 2P1 - Mathematics, Applied

Prerequisite: MFM 1P1 or MPM 1D1

This course enables students to consolidate their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and hands-on activities. Students will develop and graph equations in analytic geometry; solve and apply linear systems, using real-life examples; and explore and interpret graphs of quadratic relationships. Students will investigate similar triangles, the trigonometry of right-angled triangles, and the measurement of three-dimensional objects. Students will consolidate their mathematical skills as they solve problems and communicate their thinking. It is recommended that students enroll in TCJ 2O1, TMJ 2O1 or TTJ 2O1 for direct application of these mathematical skills.

MAT 2LS - Mathematics, Essential

Prerequisite: Any Grade 9 Mathematics Credit

This course emphasizes the extension of mathematical knowledge and skills to prepare students for success in their everyday lives, in the workplace, and in the Mathematics Grade 11 and Grade 12 Workplace Preparation courses. The course is organized by three strands related to money sense, measurement, and proportional reasoning. In all strands, the focus is on strengthening and extending key foundational mathematical concepts and skills by solving authentic, everyday problems. Students have opportunities to extend their mathematical literacy and problem-solving skills and to continue developing their skills in reading, writing, & oral language through relevant and practical math activities.

SNC 2D1 - Science, Academic

Prerequisite: SNC 1D1 or SNC 1P1

This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid-base reactions; forces that affect climate and climate change; and the interaction of light and matter.

SNC 2DG - Science, Gifted

Prerequisite: SNC 1DG

This course is similar to the Academic Science course (SNC 2D1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

SNC 2P1 - Science, Applied

Prerequisite: SNC 1P1 or SNC 1D1

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics; and to apply their knowledge of science in real-world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter.

SNC 2LS - Science, Essential

Prerequisite: Any Grade 9 Science course and the recommendation of a teacher

This course emphasizes reinforcing and strengthening science-related knowledge and skills, including scientific inquiry, critical thinking, and the environmental impact of science and technology, to prepare students for success in everyday life and the workplace. Students explore a range of topics including science in the media, interactions of common materials, interdependence of organisms in communities, and using electrical energy. Students have the opportunity to extend mathematical and scientific process skills and to continue developing their skills in reading, writing, and oral language through relevant and practical science activities. Students may proceed to SNC 2P1 or SVN 3ES.

ADA 201 - Drama, Open

This course provides opportunities for students to explore dramatic forms, conventions, and techniques. Students will explore a variety of dramatic sources from various cultures and representing a range of genres. Students will use the elements of drama in creating and communicating through dramatic works. Students will assume responsibility for decisions made in the creative and collaborative processes and will reflect on their experiences.

AMI 201 – Music, Instrumental, Open

Prerequisite: AMI 101 or permission of the Instructor

Students will continue to learn music performing with Traditional Concert Band instruments (Wind or percussion instruments). This course emphasizes the creation and performance of music at a level consistent with previous experience. Students will develop musical literacy skills by using the creative and critical analysis processes in composition, performance, and a range of reflective and analytical activities. They will also explore the function of music in society with reference to the self, communities, and cultures. Performance in the Junior or Senior Concert Band is strongly encouraged. Materials fee \$15.00.

AMG 201 - Music, Guitar, Open

This course is designed for students with no previous experience in playing the guitar. Learning to play the guitar in both classical and popular styles will comprise the greater part of the year's work. In addition, the rudiments of theory, ear training, history, listening, and music appreciation are also covered. This course is not a prerequisite to AMI 3M1. Materials fee \$20.00.

AMV 201 - Music, Vocal/Choral, Open

The Vocal Music course is designed for students who are interested in developing their singing skills. This course emphasizes performance of music at an intermediate level that strikes a balance between challenge and skill. Student learning will include participating in creative activities and listening perceptively. Students will also be required to develop a thorough understanding of the language of music, including the elements, terminology and history. Participation in the choir is strongly encouraged.

AVI 201 - Visual Arts, Open

This course enables students to develop their skills in producing and presenting art by introducing them to new ideas, materials, and processes for artistic exploration and experimentation. Students will apply the elements and principles of design when exploring the creative process. Students will use the critical analysis process to reflect on and interpret art within a personal, contemporary, and historical context. Course objectives will be achieved through a comprehensive program.

Note: Students are required to provide their own basic art kit and a course fee of \$20 is required for supplemental items.

BBI 201 - Introduction to Business, Open

This course introduces students to the world of business. Students will develop an understanding of the functions of business, including accounting, marketing, information and communication technology, human resources, and production, and of the importance of ethics and social responsibility. This course builds a foundation for further studies in business and helps students develop the business knowledge and skills they will need in their everyday lives. Students will have an opportunity to explore different types of investment alternatives including stocks, real estate and capital investments. Students will end the course with heightened financial planning skills.

ICS 201 - Introduction to Computer Studies, Open

This course introduces students to the design and creation of computer programs using a variety of current programming languages. Students will be involved in the creation of graphical and text based projects, with some of the focus on the creation of simple games. Students will plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

FSF 2D1 - Core French, Academic

Prerequisite: FSF 1D1 or 1P1

This course provides opportunities for students to communicate in French about personally relevant, familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will continue to develop their language knowledge and skills through the selective use of strategies that contribute to effective communication. They will also increase their understanding and appreciation of diverse French-speaking communities, and will continue to develop the skills necessary for lifelong language learning.

HFN 201 - Food and Nutrition, Open

This course focuses on guidelines for making nutritious food choices. Students will investigate factors that influence food choices, including beliefs, attitudes, current trends, traditional eating patterns, food marketing strategies, and individual needs. Students will also explore the environmental impact of a variety of food choices at the local and global level. The course provides students with opportunities to develop food preparation skills and introduces them to the use of social science research methods in the area of food and nutrition. Materials fee: \$30.00.

NAC2O1 - First Nations. Metis and Inuit Peoples in Canada

This course explores the histories of First Nations, Métis, and Inuit in Canada from precontact to the present day. Students will examine the continuing impact of past social, cultural, economic, political, and legal trends and developments on First Nations, Métis and Inuit individuals and communities. Students will apply the concepts of historical thinking and the historical inquiry process to investigate a range of issues, events, and interactions that have affected First Nations, Métis, and Inuit individuals and communities, including those that continue to affect relations between Indigenous and non-Indigenous peoples in Canada.

PPL 203 (Male) / PPL 204 (Female), Open

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living. Student learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness, and health; examination of issues related to healthy sexuality, healthy eating, substance use and abuse; and the use of informed decision-making, conflict resolution, and social skills in making personal choices. All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

PAF 203 (Male) / PAF 204 (Female) - Fitness, Open

This course emphasizes regular participation in a variety of enjoyable physical activities that promote lifelong healthy active living as well as an introduction to a weight training and aerobics fitness program. Student learning will include the application of movement principles to refine skills; participation in a variety of activities that enhance personal competence, fitness, and health; examination of issues related to healthy sexuality, healthy eating, substance use and abuse; and the use of informed decision-making, conflict resolution, and social skills in making personal choices. A brief outline of anatomical and physiological principles of weight training, are also introduced in the instructional and theory aspect of the course. Improved physical fitness through aerobic and weight training is the main objective of this course. Success is dependent upon the student being **highly** motivated to improve their personal fitness. All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

TCJ 201 - Construction Technology, Open

This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop an awareness of environmental and societal issues related to construction technology, and will explore secondary and postsecondary pathways leading to careers in the industry. Students registered in TCJ 201, TMJ 201 or TTJ 201 will apply the mathematical concepts from MFM 1P1 to their technical studies. Materials fee: \$30.00.

TDJ 201 - Technological Design, Open

This course provides students with opportunities to apply a design process to meet a variety of technological challenges. Students will research projects, create designs, build models and/or prototypes, and assess products and/or processes using appropriate tools, techniques, and strategies. Student projects may include designs for homes, vehicles, bridges, robotic arms, clothing, or other products. Students will develop an awareness of environmental and societal issues related to technological design, and learn about secondary and postsecondary education and training leading to careers in the field. This course leads students directly into grade 11 Technological Design (TDJ 3M1).

TGJ 201 - Communications Technology, Open

This course introduces students to communications technology from a media perspective. Students will work in the areas of TV/video and movie production, radio and audio production, print and graphic communications, photography, and animation. Students' projects may include computer-based activities such as creating videos, editing photos, working with audio, developing animations, and designing web pages. Students will also develop an awareness of environmental and societal issues related to communications technology and explore secondary and postsecondary education and training pathways and career opportunities in the various communications technology fields.

TMJ 201 - Manufacturing Technology, Open

This course introduces students to the manufacturing industry by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about technical drawing, properties and preparation of materials, and manufacturing techniques. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary and postsecondary pathways leading to careers in the industry. Students registered in TCJ 2O1, TMJ 2O1 or TTJ 2O1 will apply the mathematical concepts from MFM 1P1 to their technical studies. Materials fee \$30.00.

TTJ 201 - Transportation Technology, Open

This course introduces students to the service and maintenance of vehicles, aircraft, and/or watercraft. Students will develop knowledge and skills related to the construction and operation of vehicle/craft systems and learn maintenance and repair techniques. Student projects may include the construction of a self-propelled vehicle or craft, engine service, tire/wheel service or electrical/battery service. Students will develop an awareness of related environmental and societal issues and will explore secondary and post-secondary pathways leading to careers in the transportation industry. Students registered in TCJ 201, TMJ 201 or TTJ 201 will apply the mathematical concepts from MFM 1P1 to their technical studies.

CHOOSING YOUR GRADE 11 COURSES

COMPULSORY COURSES (Students must select <u>ONE</u> English and <u>ONE</u> Mathematics course)

PAGE	Course Code	Subject	
34	ENG 3U1	English	
34	ENG 3UG	English	
34	ENG 3C1	English	
34	ENG 3ES	English	
34	MCR 3U1	Functions and Relations	
34	MCR 3UG	Functions and Relations	
35	MCF 3M1	Functions	
35	MBF 3C1	Mathematics of Personal Finance	
35	MEL 3ES	Mathematics for Everyday Life	

OPTIONAL COURSES

(Students must select six courses based on diploma requirements and post-secondary plans)

Page	Course Code	Description	
36	ADA 3M1	Drama	
36	AMG 3O1	Music – Guitar	
36	AMI 3M1	Music – Instrumental	
36	AMV 3O1	Music – Vocal/Choral	
36	AVI 3M1	Visual Arts	
36	AWA 3O1	Visual Arts – Crafts	
37	BAF 3M1(D)	Financial Accounting Fundamentals	
37	BMI 3C1 (D)	Marketing: Goods, Services, Events	
37	BMX 3ES	Marketing: Retail and Service	
37	ICS 3U1	Introduction to Computer Science	
37	CGF 3M1	Forces of Nature: Physical Processes and Disasters	
38	CGG 3O1 (D)	Travel and Tourism: A Geographic Perspective	
38	CHA 3U1	American History	
38	CHW 3M1	World History to the 16th Century	
38	CLU 3M1	Understanding Canadian Law	
39	NDA 3M1	Current Aboriginal Issues in Canada	
39	FSF 3U1	Core French	
39	PAI 3O1	In-Game Sport Performance (co-ed)	
39	PPL3O3/PPL3O4	Healthy Active Living Education	
39	PAF 3O3/PAF 3O4	Personal and Fitness Activities	

OPTIONAL COURSES (continued)

(Students must select \underline{six} courses based on diploma requirements and post-secondary plans)

Page	Course Code	Description	
40	SBI 3U1	Biology	
40	SBI 3C1	Biology	
40	SCH 3U1	Chemistry	
40	SPH 3U1	Physics	
40	SVN 3ES	Environmental Science	
41	SVN 3M2	Environmental Science through Outdoor Pursuits	
41	SVN 3M1	Environmental Science	
41	HPW 3C1	Working with Infants and Young Children	
41	HSG 3M1	Gender Studies	
41	HSP 3U1	Introduction to Anthropology, Psychology, and Sociology	
42	HSP 3C1	Introduction to Anthropology, Psychology, and Sociology	
42	TDJ 3M1	Architecture Technological Design	
42	TGJ 3M1	Communications Technology	
42	TGP 3M1	Digital Photography & Digital Imaging	
42	TMJ 3E1	Welding - Manufacturing Technology	
42	TTJ 3O1	Transportation Technology – Vehicle Ownership	
43	TWJ 3E1	Custom Woodworking	
44	CWE 2A9	Co-op (2 credit)	
44	CWE 4A9	Co-op (4 credit)	
44	CWE 309	Co-op – Peer Tutor – 1 credit	

COURSE DESCRIPTIONS FOR GRADE 11 COMPULSORY COURSES

ENG 3U1 – English, University

Prerequisite: ENG 2D1

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse challenging literary texts from various periods, countries, and cultures, as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course.

ENG 3UG - English, Gifted

Prerequisite: ENG 2DG

This course is similar to the University Preparation Course (ENG 3U1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

ENG 3C1 - English, College

Prerequisite: ENG 2D1 or ENG 2P1

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory Grade 12 college preparation course.

ENG 3ES - English, Essential

Prerequisite: ENG 2D1, ENG 2P1 or ENG 2LS

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course.

MCR 3U1 - Functions and Relations, University

Prerequisite: MPM 2D1

This course is designed for students who plan on taking Advanced Functions (MHF 4U1) and Calculus and Vectors (MCV 4U1) as their Grade 12 math courses. This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; and develop facility in simplifying polynomial and rational expressions. Students will reason mathematically and communicate their thinking as they solve multistep problems.

MCR 3UG - Functions and Relations, Gifted

Prerequisite: MPM 2DG

This course is similar to the University Preparation Course (MCR 3U1) however, it has been differentiated to meet the needs of a student in the Gifted Program.

MCF 3M1 - Functions, University/College

Prerequisite: MPM 2D1/G or MFM 2P1

This course is designed for students who plan on taking Data Management (MDM 4U1) as their Grade 12 math course or those students who plan to enter into a college technology program (MCT 4C1 or MAP 4C1). The MCF 3M1 offers an opportunity for high achieving Grade 10 applied students to enter into the university preparation stream. This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to financial and trigonometric applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

If you are considering taking most or all of the Grade 12 University-level math courses (Mathematical Proof & Discovery, Data Management, Advanced Functions and Calculus/Vectors) there is an opportunity to take some of these courses in your grade 11 year. The math department suggests that students who have competed MCR 3U or MCF 3M may enroll in MDM 4U (Mathematics of Data Management) in the second semester of their grade 11 year. As well IDC 4U (Mathematical Proof & Discovery) can be taken after completing Grade 10 Academic Math. To investigate this option, speak to a guidance counsellor or your math teacher.

MBF 3C1 - Mathematics of Personal Finance, College

Prerequisite: MFM 2P1 or MPM 2D1/G

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations, as well as of measurement and geometry; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; and develop their ability to reason by collecting, analyzing, and evaluating data involving one and two variables. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

MEL 3ES – Mathematics for Everyday Life, Essential

Prerequisite: Any Grade 9 or Grade 10 Mathematics course

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

COURSE DESCRIPTIONS FOR GRADE 11 OPTIONAL COURSES

ADA 3M1 - Drama, Open

Prerequisite: ADA 101 or ADA 201

This course requires student to create and perform in dramatic presentations. Students will analyse, interpret, and perform dramatic works from various cultures and time periods. Students will research various acting styles and conventions that could be used in their presentations, and analyse the functions of playwrights, directors, actors, designers, technicians, and audiences.

AMG 3O1 - Guitar, Open

Prerequisite: AMG 201

This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analyzing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers. Materials fee: \$15.00.

AMI 3M1 – Music, Instrumental, Open

Prerequisite: AMI 101, AMI 201

This course provides students with opportunities to develop their musical literacy through the creation, appreciation, analysis, and performance of music, including traditional, commercial, and art music. Students will apply the creative process when performing appropriate technical exercises and repertoire and will employ the critical analysis processes when reflecting on, responding to, and analyzing live and recorded performances. Students will consider the function of music in society and the impact of music on individuals and communities. They will explore how to apply skills developed in music to their life and careers. Materials fee \$15.00.

AMV 301 - Music, Vocal/Choral, Open

This course emphasizes the performance of music at a level that strikes a balance between challenge and skill and is aimed at developing techniques, sensitivity, and imagination. Students will participate in creative activities that teach them to listen with understanding. They will also learn correct musical terminology and its appropriate use. Students are strongly encouraged to join the choir.

AVI 3M1 - Visual Arts, Open

Prerequisite: AVI 101 or AVI 201

This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emergent technologies. Students will use the critical analysis process when evaluating their own work and the work of others. Course objectives will be covered through a comprehensive program. Students are required to provide their own basic art kit and a materials fee of \$20 is required for supplemental items.

AWA 301 - Visual Arts, Crafts, Open

This course focuses on studio activities in Crafts and is aimed at first time art students and students who wish to explore the craft genre. Students will create art works that explore a wide range of subject matter, and will evaluate art works, providing grounds for the aesthetic judgement. They will also examine historical and cultural contexts of Western art (including Canadian art) and art from various world cultures to support their study of specific media. This course is not a prerequisite for AVI 4M1. Materials fee: \$40.00.

BAF 3M1(D) - Financial Accounting Fundamentals, University/College

Note: This course may be offered as a Dual Credit pending Ministry approval.

This course introduces students to the fundamental principles and procedures of accounting. Students will develop financial analysis and decision-making skills that will assist them in future studies and/or career opportunities in business. Students will acquire an understanding of accounting for a service and a merchandising business, computerized accounting, financial analysis, and ethics and current issues in accounting.

BMI 3C1(D) - Marketing: Goods, Services, Events, College

Note: This course may be offered as a Dual Credit pending Ministry approval.

This course introduces the fundamental concepts of product marketing, which includes the marketing of goods, services, and events. Students will examine how trends, issues, global economic changes, and information technology influence consumer buying habits. Students will engage in marketing research, develop marketing strategies, and produce a marketing plan for a product of their choice.

BMX 3ES - Marketing: Retail and Service, Essential Permission of Special Education Department required

This course focuses on marketing activities in the retail and service sectors. Students will examine trends and global influences on marketing decisions and will learn about the 24 importance of customer service in developing a customer base and maintaining customer loyalty. Through hands-on learning, students will develop personal selling and information technology skills that will prepare them for a variety of marketing-related positions in the workplace.

This course will be offered in alternating years- next offered in 2021/2022.

ICS 3U1 - Introduction to Computer Science, University

Recommended Preparation: ICS 201

Ever wonder how Facebook manages such vast amounts of data, or how that little man moves across your computer screen, or how you could make your own Phone App? This course will take you into the world of Computer Science, where you will create your own astounding applications and programs. This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields.

CGF 3M1 - Physical Geography: Patterns, Processes, and Interactions (Natural Disasters), University/College

Prerequisite: CGC 1P1 or CGC 1D1

In this course, students will explore physical processes related to the earth's water, land, and air. They will investigate how these processes shape the planet's natural characteristics and affect human systems, how they are involved in the creation of natural disasters, and how they influence the impacts of human disasters. Throughout the course, students will apply the concepts of geographic thinking and the geographic inquiry process and use spatial technologies to analyse these processes, make predictions related to natural disasters, and assess ways of responding to them. Anderson students in this course explore natural disasters and other land changing processes through hands on field work outside the classroom and viewing popular feature films in a whole new light.

CGG 3O1(D) - Travel and Tourism: Open

Prerequisite: CGC 1P1 or CGC 1D1

Note: This course may be offered as a Dual Credit pending Ministry approval.

This course focuses on issues related to travel and tourism within and between various regions of the world. Students will investigate unique environmental, sociocultural, economic, and political characteristics of selected world regions. They will explore travel patterns and trends, as well as tensions related to tourism, and will predict future tourism destinations. Students will apply the concepts of geographic thinking and the geographic inquiry process, including spatial technologies, to investigate the impact of the travel industry on natural environments and human communities. At Anderson, students in this course explore 9 different regions of the world in terms of their tourism potential and incorporate field trips, classroom Parisian café days, food and cultural experiences.

CHA 3U1 - American History, University

Prerequisite: CHC 2P1 or CHC 2D1

This course explores key aspects of the social, economic, and political development of the United States from pre-contact to the present. Students will examine the contributions of groups and individuals to the country's evolution and will explore the historical context of key issues, trends, and events that have had an impact on the United States, its identity and culture, and its role in the global community. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating various forces that helped shape American history. At Anderson, students learn about the history and development of our neighbour to the south – right from the beginnings through to modern-day issues. Study topics such as the Colonial Age, slavery, the American Revolution, the Civil War and the United States in the 20th century including WWI, WWII, the Korean War and Vietnam.

CHW 3M1 - World History to the 16th Century, University/College

Prerequisite: CHC 2P1 or CHC 2D1

This course explores the history of various societies and civilizations around the world, from earliest times to around 1500 CE. Students will investigate a range of factors that contributed to the rise, success, and decline of various ancient and pre-modern societies throughout the world and will examine life in and the cultural and political legacy of these societies. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating social, political, and economic structures and historical forces at work in various societies and in different historical eras. At Anderson, students study the significance and impact of such civilizations as Egypt, Greece, Rome, the Medieval Era, and the Americas (Inca, Aztec, Maya).

CLU 3M1 - Understanding Canadian Law, University/College

Prerequisite: CHC 2P1 or CHC 2D1

This course explores Canadian law, with a focus on legal issues that are relevant to the lives of people in Canada. Students will gain an understanding of laws relating to rights and freedoms in Canada; our legal system; and family, contract, employment, tort, and criminal law. Students will develop legal reasoning skills and will apply the concepts of legal thinking and the legal studies inquiry process when investigating a range of legal issues and formulating and communicating informed opinions about them. Through mock trials, case studies and courtroom visits, students at Anderson are introduced to an overview of the Canadian legal system and how it works.

NDA 3M1 - Current Aboriginal Issues in Canada, University/College

Prerequisite: CHC 2P1 or CHC 2D1

This course explores existing and emerging issues of regional, and national importance to First Nations, Métis, and Inuit in Canada. Students will analyse diverse perspectives on issues and events related to land, community, governance, identity, culture, and global trends. Using the concepts of political thinking and the tools of political inquiry, students will explore their own and others' ideas and investigate issues to determine what needs to change and why. Students are also given the opportunity to develop their own problem-solving strategies to address an issue of their choice.

FSF 3U1 - Core French, University

Prerequisite: FSF 2D1

This course offers students extended opportunities to speak and interact in real-life situations in French with greater independence. Students will develop their creative and critical thinking skills through responding to and exploring a variety of oral and written texts. They will also broaden their understanding and appreciation of diverse French-speaking communities and develop the skills necessary for life-long language learning.

PAI 301 - In-Game Sport Performance (Co-ed), Open

Prerequisite: PAF 20, PAF 30 or PAF 40 OR PPL 20, 30 or 40

All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

This course focuses on the development and understanding of "in game" performance, offensive and defensive awareness, as well as tactical strategies as it relates to team and individual sport. Focus will be primarily based on the sports of Volleyball, Handball, Soccer, Basketball, Rugby, Football and Badminton. A high intensity warm-up and fitness plan are required. Students will be expected to know the values of personal growth, coaching and refereeing in each sports area. Health components include: psychological preparation as it relates to athletic performance, building team cohesion and strong group development, coaching vs. teaching as it relates to skill development.

PPL 3O4 (Female) / PPL 3O3 (Male) - Healthy Active Living Education, Open

All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

This course enables students to further develop the knowledge and skills they need to make healthy choices now and lead healthy, active lives in the future. Through participation in a wide range of physical activities and exposure to a broader range of activity settings, students enhance their movement competence, personal fitness, and confidence. Students also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own well-being is affected by, and affects, the world around them. Students build their sense of self, learn to interact positively with others, and develop their ability to think critically and creatively. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety.

PAF 3O4 (Female) / PAF 3O 3(Male) - Personal and Fitness Activities, Open

All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

This course focuses on the development of a healthy lifestyle through participation in a variety of enjoyable physical activities and a strength and aerobic conditioning program. Students will be encouraged to develop personal competence in a variety of movement skills, and will be given opportunities to practice goal-setting, decision-making, coping, and interpersonal skills. Students will also study the components of healthy relationships, reproductive health, mental health, and personal safety. Anatomical and physiological components of weight training are also taught in the instructional and theory aspects of the course. Improved physical fitness through aerobic and weight training is the main objective of this course. Success is dependent upon the student being **highly** motivated to improve their personal fitness.

SBI 3U1 - Biology, University

Prerequisite: SNC 2D1

This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation. Materials fee: \$10.00.

SBI 3C1 - Biology, College

Prerequisite: SNC 2P1 or SNC 2D1

This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals; and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in the various branches of life sciences and related fields. Materials fee: \$10.00.

SCH 3U1 – Chemistry, University

Prerequisite: SNC 2D1

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment. **Note:** Students should consider their mastery of the Grade 10 Chemistry Unit before taking this course. Materials fee: \$10.00.

SPH 3U1 – Physics, University

Prerequisite: SNC 2D1

This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment. **Note:** Students should consider their mastery of the Grade 10 Physics Unit before taking this course. Materials fee: \$5.00.

SVN 3ES - Environmental Science, Essential

Prerequisite: Any Grade 9 or 10 Science Course

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in work and life after secondary school. Students will explore a range of topics, including the impact of human activities on the environment; human health and the environment; energy conservation; resource science and management; and safety and environmental responsibility in the workplace. Emphasis is placed on relevant, practical applications and current topics in environmental science, with attention to the refinement of students' literacy and mathematical literacy skills as well as the development of their scientific and environmental literacy.

SVN 3M2 - Environmental Science through Outdoor Pursuits, University/College

Prerequisite: SNC 2D1 or SNC 2P1

This course is a 2 credit course that requires the completion of an application. Applications can be obtained from the Guidance Department. Successful candidates will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas. There is an outdoor education component to this course. This will provide practical experience as students apply their environmental study research skills though activities such as: hiking, cycling, canoeing, camping, rock climbing, etc. Students will also pursue certifications in First Aid, CPR, WHMIS, GPS, Species Identification, Stream Monitoring Protocol, ORCKA-Basic Canoeing Level 1 and Hike Ontario Safe Hiking course. Participation in on-water excursions will require successful completion of a swim test.

NOTE: This is a required course for the Environmental Science SHSM. Students will receive one Science and one Physical Education (PAD 301) credit as part of the double credit SVN3M2 course. Materials fee: \$150.00.

SVN 3M1 - Environmental Science, University/College

Prerequisite: SNC 2D1, SNC 2P1

This course provides students with the fundamental knowledge of and skills relating to environmental science that will help them succeed in life after secondary school. Students will explore a range of topics, including the role of science in addressing contemporary environmental challenges; the impact of the environment on human health; sustainable agriculture and forestry; the reduction and management of waste; and the conservation of energy. Students will increase their scientific and environmental literacy and examine the interrelationships between science, the environment, and society in a variety of areas. Materials fee: \$10.00.

HPW 3C1 - Working with Infants and Young Children, College

This course prepares students for occupations involving children from birth to six years of age. Students will study theories about child behaviours and development, and will have opportunities for research and observation for practical experiences with young children. Students will become familiar with occupational opportunities and requirements related to working with infants and young children. They will also have opportunities to develop research and critical-thinking skills as they investigate and evaluate current research about early childhood education.

HSG 3M1 - Gender Studies, University/College

This course enables students to explore the social construction of gender. Students will learn about the dynamic nature of gender roles and norms; sexism and power relations; and the impact of representations of women and men in the media, popular culture, and the arts. Students will analyze a range of gender equity issues, including gender-based violence and workplace equity, in both Canadian and global contexts. Students will develop and apply research skills and will design and implement a social action initiative relating to gender equity.

Note: This course will be offered in alternating years – next offered in 2021/22.

HSP 3U1 - Introduction to Anthropology, Psychology, and Sociology, University

Prerequisite: ENG 2D1 or CHC 2D1

This course provides students with opportunities to think critically about theories, questions, and issues related to anthropology, psychology, and sociology. Students will develop an understanding of the approaches and research methods used by social scientists. They will be given opportunities to explore theories from a variety of perspectives, to conduct social science research, and to become familiar with current thinking on a range of issues within the three disciplines.

HSP 3C1 - Introduction to Anthropology, Psychology, and Sociology, College

This course introduces students to theories, questions, and issues related to anthropology, psychology, and sociology. Students learn about approaches and research methods used by social scientists. They will be given opportunities to apply theories from a variety of perspectives, to conduct social science research, and to become familiar with current issues within the three disciplines.

TDJ 3M1 - Architecture Technological Design, University/College

Recommended Preparation: TDJ 201

This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs, using working drawings and other communication methods to present their design ideas. They will develop and awareness of environmental, societal, and cultural issues related to technological design, and will explore career opportunities in the field, as well as the college and/or university program requirements for them.

TGJ 3M1 - Communications Technology, University/College

Recommended Preparation: TGJ 201

This course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas will include TV, video and movie productions and broadcast media. Students may also have opportunities to develop skills in print and graphics communications, digital imagery, and photography. Students will also develop an awareness of related environmental and societal issues and explore college and university programs and career opportunities in the various communications technology fields.

TGP 3M1 - Photography & Digital Imaging Communications Technology, University/College

This course examines communications technology from a media perspective with an emphasis in the areas of Photography and Digital Imaging. Students will work both independently and as part of a production team to design and produce photographic media products in a project-driven studio environment. Practical projects and units of study may include: poster design, school yearbook, digital photographic still video productions, digital photo enhancement, web based photo galleries, the history of photographic images and photographic technology. Students will also develop an awareness of related environmental and societal issues and explore college and university programs and career opportunities in the various communications technology fields. It is strongly recommended that students have access to a digital SLR or "Prosumer" type digital camera for this course.

TMJ 3E1 – Welding: Manufacturing Technology, Essential

This hands-on, project-based course is designed for students planning to enter an occupation or apprenticeship in manufacturing directly after graduation. Students will work on a variety of manufacturing projects, developing knowledge and skills in design, fabrication, and problem solving using various tools. In addition, students may have the opportunity to acquire industry-standard certification and training. Students will develop and awareness of environmental and societal issues related to manufacturing and will learn about secondary school pathways that lead to careers in the industry. Materials fee: \$30.00.

TTJ 301 - Transportation Technology: Vehicle Ownership, Open

This general interest course enables students to become familiar with the options and features of various vehicles, issues of registration, and the legal requirements affecting vehicle owners. Students will also learn about vehicle financing and insurance, vehicle maintenance, emergency procedures, and the responsibilities of being a vehicle owner. Students will develop an awareness of environmental and societal issues related to vehicle ownership and use, and will explore career opportunities in the transportation industry.

TWJ 3E1 - Custom Woodworking, Essential

This course enables students to develop knowledge and skills related to cabinet making and furniture making. Students will gain practical experience using a variety of the materials, tools, equipment, and joinery techniques associated with custom woodworking. Students will learn to create and interpret technical drawings and will plan, design, and fabricate projects. They will also develop and awareness of environmental and societal issues related to the woodworking industry, and explore apprenticeships, postsecondary training, and career opportunities in the field that may be pursued directly after graduation. Materials fee \$30.00.

COOPERATIVE EDUCATION

Cooperative Education is credit granting - 1, 2 or 4 credits. The number of credits depends on the length of the experience in the program: 110 hours for 1 credit; 220 hours for 2 credits, or one full day (440 hours) for 4 credits in one semester. Cooperative Education will be offered in all subject areas, in all destinations.

Course Note: Students are required to complete a Co-operative Education Application Form and have achieved 16 credits. Forms are available in the Co-operative Education office. An interview with a Co-operative Education teacher will follow. Participation in program will depend on a number of factors including: Candidate's attendance, conduct and behavioural record at school, teacher references, availability of a placement and acceptance by the community partner after the interview process.

Grade 11 and 12, Cooperative Education - Two Credits - Four Credits

CWE 2A9 CWE 4A9

Cooperative Education is an active learning process which integrates theory from classroom subjects with practical experience. There is a classroom component and a placement component. Preplacement sessions will include health and safety training, interviewing skills, confidentiality, human rights, workplace ethics, employment standards, the role of unions and orientation preparation. A student cooperative education learning plan is developed for each student.

CWE 309 - Peer Tutor Program

Available in Grades 11 and 12

The peer tutor program is integrated into the Cooperative Education program and follows the co-op guidelines. This course prepares students to provide leadership and assistance to teachers and students in Grade 9 and 10 classrooms. Students will develop skills in communication, interpersonal relations, leadership, teamwork, and tutoring in the classroom. Interested students must have a good command of the subject in which they wish to tutor and where possible, have taken or be concurrently enrolled in a senior credit in that department. Priority will be given to those students who have achieved 75% or better in the related course. Students interested in a teaching career, child-related professions or improving their employability skills will gain valuable experience in this course.

CHOOSING YOUR GRADE 12 COURSES

COMPULSORY COURSES (Students must select ONE English course)

PAGE	Course Code
47	ENG 4U1
47	ENG 4C1
47	ENG 4ES

OPTIONAL COURSES

Grade 12 students pursuing a degree at a post-secondary institution are required to take a minimum of 6 4U1/4M1 courses to meet entrance requirements.

The requirements vary for Grade 12 students pursuing a post-secondary option other than a degree.

Students must ensure they achieve the required pre-requisites for the program of their choice.

Page	Course Code	Description
49	ADA 4M1	Drama
49	AMI 4M1	Music – Instrumental
49	AVI 4M1	Visual Art
49	BAT 4M1	Financial Accounting Principles
49	BOG 4E1	Business Leadership: Becoming a Manager
50	BOH 4M1(D)	Business Leadership: Management Fundamentals
50	ICS 4U1	Computer Science
50	IDC 4U1	Mathematical Proof and Discovery
50	CGR 4M1	The Environment and Resource Management
51	CGW 4U1	World Issues: A Geographic Analysis
51	CHM 4E1	Adventures in World History
51	CHY 4U1	World History Since the Fifteenth Century
51	CHY 4C1	World History Since the Fifteenth Century
52	CLN 4U1	Canadian and International Law
52	CPW 4U1	Canadian and International Politics
53	OLC 401	Ontario Secondary School Literacy Course
53	FSF 4U1	French
53	PAF 4O3/4	Personal and Fitness Activities
53	PAR 401	Yoga
54	PPL 4O1	Healthy Active Living Education Recreational-Co-Ed
54	PSK 4U1	Introductory Kinesiology
54	MHF 4U1	Advanced Functions

OPTIONAL COURSES

(continued)

(Students must select six courses based on diploma requirements and post-secondary plans)

Page	Course Code	Description
52	MCV 4U1	Calculus and Vectors
53	MDM 4U1	Mathematics of Data Management
53	MAP 4C1	College and Apprenticeship Mathematics
53	MEL 4ES	Mathematics for Everyday Life
53	SBI 4U1	Biology
53	SCH 4U1	Chemistry
53	SCH 4C1	Chemistry
54	SES 4U1	Earth and Space Science
54	SPH 4U1	Physics
54	SPH 4C1	Physics
54	SNC 4M1	Science
54	HFA 4C1	Nutrition and Health
55	HFA 4U1	Nutrition and Health
55	HHS 4C1	Families in Canada
55	HHS 4U1	Families in Canada
55	HIP 4OS	Personal Life Management (Permission required)
55	HPD 4C1	Working with School-Age Children and Adolescents
56	HSB 4U1	Challenge and Change in Society
56	HSC 4M1	World Cultures
56	TDJ 4M1	Technological Design
56	TGJ 4M1	Communication Technology
56	TGP 4M1	Digital Photography
57	TMJ 4E1	Manufacturing Technology – Welding
57	TWJ 4E1	Custom Woodworking
44	CWE 2A9	Co-op (2 credits)
44	CWE 4A9	Co-op (4 credits)
44	CWE 3O9	Co-op – Peer Tutor – 1 credit

COURSE DESCRIPTIONS FOR GRADE 12 COMPULSORY COURSES

ENG 4U1 – English, University

Prerequisite: ENG 3U1

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. While this course is intended to prepare students for university, college or the workplace, it is highly recommended that those students who are pursuing university should elect to take ENG 4U1 at day school rather than summer school due to the emphasis on oral and written skills for all university programs. Students with questions or concerns should speak to his or her English teacher.

ENG 4C1 – English, College

Prerequisite: ENG 3C1 or ENG 3U1

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace.

ENG 4ES - English, Essential

Prerequisite: Any Grade 11 English

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyse informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship.

COURSE DESCRIPTIONS FOR GRADE 12 OPTIONAL COURSES

ADA 4M1 - Drama, University/College

Prerequisite: ADA 3M1

This course requires students to experiment individually and collaboratively with forms and conventions of both drama and theatre from various cultures and time periods. Students will interpret dramatic literature and other text and media sources while learning about various theories of directing and acting. Students will examine the significance of dramatic arts in various cultures, and will analyse how the knowledge and skills developed in drama are related to their personal skills, social awareness, and goals beyond secondary school. **There is an evening performance exam for this course.**

AMI 4M1 - Music, Instrumental, University/College

Prerequisite: AMI 3M1 or Permission of the Instructor

This course emphasizes the appreciation, analysis, and performance of music from the romantic period and the twentieth century, including art music, jazz, popular music, and Canadian and non-Western music. Students will concentrate on developing interpretive skills and the ability to work independently. They will also complete complex creative projects. Materials fee: \$15.00.

AVI 4M1 - Visual Arts, University/College

Prerequisite: AVI 3M1 or Permission of the Instructor

This course focuses on enabling students to refine their use of the creative process when creating and presenting two- and three-dimensional art works using a variety of traditional and emerging media and technologies. Students will use the critical analysis process to deconstruct art works and explore connections between art and society. The studio program enables students to explore a range of materials, processes, and techniques that can be applied in their own art production. Students will also make connections between various works of art in personal, contemporary, historical, and cultural contexts. Note: Students are required to provide their own basic art kit and a materials fee of \$25.00 is required for supplemental items.

BAT 4M1 - Financial Accounting Principles, University/College

Prerequisite: BAF 3M1

This course introduces students to advanced accounting principles that will prepare them for postsecondary studies in business. Students will learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students' knowledge of sources of financing, further develops accounting methods for assets, and introduces accounting for partnerships and corporations.

BOG 4E1 - Business Leadership: Becoming a Manager, Essential

This course helps students prepare for managerial positions in their future careers. Students will focus on the development of core skills required to become a successful manager, including operations management, inventory control, marketing, financial planning, scheduling, and communication. Students will also explore the management challenges of hiring, training, and motivating employees, and complying with legal requirements.

Note: This course will be offered in alternate years - next offered in 2021-2022.

BOH 4M1 (D) - Business Leadership: Management Fundamentals, University/College

Prerequisite: Any university, university/college or college preparation course in Business Studies or Canadian and World Studies

Note: This course may be offered as a Dual Credit pending Ministry approval.

This course focuses on the development of leadership skills used in managing a successful business. Students will analyze the role of a leader in business, with a focus on decision making, management of group dynamics, workplace stress and conflict, motivation of employees, and planning. Effective business communication skills, ethics, and social responsibility are also emphasized.

ICS 4U1 - Computer Science, University

Prerequisite: ICS 3U1

In this course students will create some advanced applications using current programming software such as Java, Python, asp, javascript, php, and Visual Basic. This course enables students to further develop knowledge and skills in computer science and is excellent preparation for post-secondary studies in Math, Science or Technology. Students will use modular design principles to create complex and fully documented programs. Student teams will manage a large software development project from planning through to project review. Students will also analyse algorithms for effectiveness. They will investigate ethical issues in computing and further explore environmental issues, emerging technologies, areas of research in computer science, and careers in the field.

IDC 4U1- Mathematical Proof and Discovery, University

Prerequisite: MPM 2D1 or MPM 2DG

In this course students will develop a deeper understanding of mathematics and its history by learning about mathematical proof, complex numbers and the mathematics of ancient civilizations. This course is designed for: those students going on to a degree with extensive math and logic requirements (pure math, computer science, etc.), those students who enjoy writing math contests, or those students who just enjoy math, especially exploring the how's and why's of the math they have learned. The course will be discovery based with lots of time for you to come to your conclusions and will culminate with a project where you learn, teach, assign and grade work, of a topic of your choosing. This course is available to students who have completed Grade 10 Academic Mathematics.

Note: This course will be offered in alternate years – next offered in 2021-2022.

CGR 4M1 - The Environment and Resource Management, University/College

Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

This course investigates interactions between natural and human systems, with a particular emphasis on the impacts of human activity on ecosystems and natural processes. Students will use the geographic inquiry process, apply the concepts of geographic thinking, and employ a variety of spatial skills and technologies to analyse these impacts and propose ways of reducing them. In the course of their investigations, they will assess resource management and sustainability practices, as well as related government policies and international accords. They will also consider questions of individual responsibility and environmental stewardship as they explore ways of developing a more sustainable relationship with the environment. At Anderson, students will engage in field work, field trips and guest speakers where they can learn from experts in the field, gaining exposure to the diverse career opportunities. This course allows students to complete hands-on learning in a cooperative and creative environment.

CGW 4U1 - Canadian and World Issues: A Geographic Analysis, University

Prerequisite: Any University or University/College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

In this course, students will address the challenge of creating a more sustainable and equitable world. They will explore issues involving a wide range of topics, including economic disparities, threats to the environment, globalization, human rights, and quality of life, and will analyse government policies, international agreements, and individual responsibilities relating to them. Students will apply the concepts of geographic thinking and the geographic inquiry process, including the use of spatial technologies, to investigate these complex issues and their impacts on natural and human communities around the world. At Anderson, students in this course explore current events from around the world including international relations, population, development, and sustainability issues. Students become informed and develop strong, supported opinions through small group and larger interactive tutorial discussions or simulations, field trips and viewing social media or films from a different perspective.

CHM 4E1 - Adventures in World History, Essential

Prerequisite: CHC 2P1 or CHC 2D1

This course examines significant developments and events in world history from earliest times to the present. Students will explore a variety of social, cultural, economic, and political developments in different regions of the world and during different periods. In addition to investigating how conflict, religion, work, and technology have helped shape people's lives, students will examine the contributions of some significant individuals to our global heritage. Students will apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating a variety of human experiences in world history. At Anderson, students will study, research and analyse many of the events and eras that have made a significant contribution to the development of the world today.

CHY 4U1 - World History: The West and the World, University

Prerequisite: Any University or University/College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history. Through an emphasis on university preparation (with a few handson, creative activities along the way), students are prepared for post-secondary school through the study of such topics as the French Revolution, the Napoleonic Era, the Industrial Revolution, The Russian Revolution and the World Wars. Particular emphasis is placed on the impact/modern significance of events and issues studied.

CHY 4C1 - World History: The West and the World, College

Prerequisite: Any University, University/College, or College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

This course explores key developments and events in world history since approximately 1450, with a focus on interactions within and between various regions. Students will examine social, economic, and political developments and how they have affected different peoples. Students will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, when investigating key turning points in world history and historical forces that have shaped our world. At Anderson, students take a hands-on look at the significant events and issues that have shaped our world today. Students taking this course will study such topics as the French Revolution, Age of Napoleon, Industrial Era, and the World Wars.

CLN 4U1 - Canadian and International Law, University

Prerequisite: Any University or University/College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

This course explores a range of contemporary legal issues and how they are addressed in both Canadian and international law. Students will develop an understanding of the principles of Canadian and international law and of issues related to human rights and freedoms, conflict resolution, and criminal, environmental, and workplace law, both in Canada and internationally. Students will apply the concepts of legal thinking and the legal studies inquiry process, and will develop legal reasoning skills, when investigating these and other issues in both Canadian and international contexts. At Anderson, this course builds on the Grade 11 Law course by incorporating such ideas and themes as forensic science, serial killers, mock trials, and mysteries of international law. This course is designed for students interested in pursuing law at the post-secondary level and those that are interested in learning about Canadian and global legal issues in greater depth.

CPW 4U1 - Canadian and World Politics, University

Prerequisite: Any University or University/College preparation course in Canadian and World Studies, English, or Social Sciences and Humanities

This course explores various perspectives on issues in Canadian and world politics. Students will explore political decision making and ways in which individuals, stakeholder groups, and various institutions, including governments, multinational corporations, and non-governmental organizations, respond to and work to address domestic and international issues. Students will apply the concepts of political thinking and the political inquiry process to investigate issues, events, and developments of national and international political importance, and to develop and communicate informed opinions about them. At Anderson, emphasis is placed on individual development, to better understand where students stand on the political spectrum, what they believe and more importantly why. It teaches students to be informed, active individuals. Current, topical issues both in the world and in Canada are of particular interest.

OLC 401/S - Ontario Secondary School Literacy Course, Open

Eligibility requirement: Students who have been eligible to write the OSSLT once and who have been unsuccessful are eligible to take the course

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing.

FSF 4U1 - Core French, University

Prerequisite: FSF 3U1

This course provides extensive opportunities for students to speak and interact in French independently. Students will develop their listening, speaking, reading, and writing skills, apply language learning strategies in a wide variety of real-life situations, and develop their creative and critical thinking skills through responding to and interacting with a variety of oral and written texts. They will also enrich their understanding and appreciation of diverse French speaking communities, and will develop skills necessary for lifelong language learning.

PAF 4O3 (MALE)/ PAF 4O4 (FEMALE) - Personal and Fitness Activities, Open

All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

This course focuses on the development of a personalized approach to healthy active living through participation in a range of strength, fitness and aerobic conditioning programs that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans, as well as gain an understanding as to some indirect factors that could affect a training program; nutrition, rest time, mental imagery etc. In addition, they will be given opportunities to refine their decision-making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others. Anatomical and physiological components of strength training are also further examined. Improved physical fitness through aerobic and weight training is the objective of this course. The student must be strongly motivated and willing to fully participate in all classes.

PAR 401 – Yoga, Open

This course will focus on the study of yoga as a disciplined approach to uniting mind and body so as to allow individuals to respond to the world around them with consideration, responsibility, and balance. Yoga is a mindfulness based daily practice and as such the course will examine the mental and physical practices of yoga, including: mindfulness meditation, diet and nutrition, breathing, yoga postures, and yoga anatomy as well as the history, philosophy, and ethics of yoga. Yoga practice as a positive response to the overwhelming nature of modern life will also be examined and students will be encouraged to reflect on this course as a method for individual and societal wellness.

PPL 401 - Healthy Active Living Education Recreational: Co-ed, Open

All activity courses require a gym uniform that consists of an Anderson t-shirt and athletic shorts. These items can be purchased from the Physical Education Office.

This course focuses on the development of a personalized approach to healthy active living through participation in a variety of sports and recreational activities that have the potential to engage students' interest throughout their lives. Students will develop and implement personal physical fitness plans. In addition, they will be given opportunities to refine their decision-making, conflict-resolution, and interpersonal skills, with a view to enhancing their mental health and their relationships with others. Materials fee: \$75.00.

PSK 4U1 - Introductory Kinesiology, University

Prerequisite: Any Grade 11 University or University/College preparation course in Science, or any Grade 11 or open course in Health and Physical Education

This course focuses on the study of human movement and of systems, factors, and principles involved in human development. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sports, and the factors that influence an individual's participation in physical activity. The course prepares students for university programs in physical education, kinesiology, recreation, and sports administration.

MHF 4U1 - Advanced Functions

Prerequisite: MCR 3U1/G

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students who plan to study mathematics in university and for those wishing to consolidate their students who plan to study mathematics in university and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

MCV 4U1 - Calculus and Vectors

Prerequisite: MCR 3U1/G and MHF 4U1

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors, and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, rational, exponential, and sinusoidal functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as business, physics and engineering.

Note: Although Advanced Functions can be taken concurrently with Calculus and Vectors, it is recommended that Advanced Functions be taken before the Calculus and Vectors course.

MDM 4U1 - Mathematics of Data Management

Prerequisite: MCR 3U1/G or MCF 3M1

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing large amounts of information; solve problems involving probability and statistics; and carry out a culminating project that integrates statistical concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.

MAP 4C1 - College and Apprenticeship Mathematics

Prerequisite: MBF 3C1 or MCF 3M1 or MCR 3U1/G

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

MEL 4ES - Mathematics for Everyday Life

Prerequisite: MEL 3ES or MBF 3C1

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs and create household budgets; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

SBI 4U1 - Biology

Prerequisite: SBI 3U1, Recommended SCH 3U1

This course provides students with the opportunity for in-depth study of the concepts and processes associated with biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on achievement of the detailed knowledge and refined skills needed for further study in the various branches of life sciences and related fields. Please note: Since this course deals with chemical reactions in biological systems, SCH 3U1 is highly recommended.

Materials fee: \$10.00.

SCH 4U1 - Chemistry

Prerequisite: SCH 3U1

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment. Materials fee: \$10.00.

SCH 4C1 - Chemistry

Prerequisite: SNC 2D1 or SNC 2P1

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment. Materials fee: \$5.00.

SES 4U1 – Earth and Space Science

Prerequisite: SNC 2D1

This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence.

Note: This course will be offered in alternating years – next offered in 2021/22. Course fees may be incurred due to field trips.

SPH 4U1 - Physics

Prerequisite: SPH 3U1

This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyze, qualitatively and quantitatively, data relating to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment. Materials fee: \$5.00.

SPH 4C1 - Physics

Prerequisite: SNC 2D1 or SNC 2P1

This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment. Materials fee \$5.00.

SNC 4M1 - Science

Prerequisite: SNC 2D1, Grade 11, University/College or College Preparation course

This course enables students, including those pursuing post-secondary programs outside the sciences, to increase their understanding of science and contemporary social and environmental issues in health-related fields. Students will explore a variety of medical technologies, pathogens and disease, nutritional science, public health issues, and biotechnology. The course focuses on the theoretical aspects of the topics under study and helps refine students' scientific investigation skills. Materials fee: \$5.00.

Note: This course will be offered in alternating years – next offered in 2022/23.

HFA 4C1 - Nutrition and Health

Prerequisite: Any University/College, or College preparation course in Social Sciences and Humanities, English or Canadian and World Studies

This course focuses on the relationship between nutrition and health at different stages of life and on global issues related to food production. Students will investigate the role of nutrition in health and disease and assess strategies for promoting food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food preparation techniques, and refine their ability to use social science research and inquiry methods to investigate topics related to nutrition and health Materials fee: \$20.00.

HFA 4U1 - Nutrition and Health

Prerequisite: Any University/College, or College preparation course in Social Sciences and Humanities, English or Canadian and World Studies

This course examines relationships between food, energy balance, and nutritional status; the nutritional needs of individuals at different stages of life; and the role of nutrition in health and disease. Students will evaluate nutrition-related trends and will determine how food choices can promote food security and environmental responsibility. Students will learn about healthy eating, expand their repertoire of food-preparation techniques, and develop their social science research skills by investigating issues related to nutrition and health. Materials fee: \$20.00.

HHS 4C1 - Families in Canada

Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies

This course enables students to develop an understanding of social science theories as they apply to individual development, the development of intimate relationships, and family and parent-child relationships. Students will explore a range of issues relating to the development of individuals and families in contemporary Canadian society as well as in other cultures and historical periods. They will develop the investigative skills required to conduct research on individuals, intimate relationships, and parent-child roles and relationships in Canada.

HHS 4U1 - Families in Canada

Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies

This course enables students to draw on sociological, psychological and anthropological theories and research to analyze the development of individuals, intimate relationships, and family and parent-child relationships. Students will focus on issues and challenges facing individuals and families in Canada's diverse society. They will develop analytical tools that enable them to assess various factors affecting families and to consider policies and practices intended to support families in Canada. They will develop the investigative skills required to conduct and communicate the results of research on individuals, intimate relationships, and parent-child relationships.

HIP 4OS - Personal Life Management

Permission of Special Education Department required

This course focuses on preparing students for living independently and working successfully with others. Students will learn to manage their personal resources to meet their basic needs for food, clothing, and housing. They will also learn about their personal, legal, and financial responsibilities and develop and apply interpersonal skills in order to make wise and responsible personal and occupational choices. Students will apply research and inquiry skills while investigating topics related to personal life management. The course emphasizes the achievement of expectations through practical experiences.

HPD 4C1 - Working with School-Age Children and Adolescents

Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies

This course prepares students for occupations involving school-age children and adolescents. Students will study a variety of theories about child behaviour and development, and will have opportunities for research and observation and for practical experiences with older children. Students will become familiar with occupational opportunities and requirements related to working with older children and adolescents. They will develop research skills used in investigating child and adolescent behaviour and development.

NOTE – This course will be offered in alternating years – offered next in the 2022/23 school year.

HSB 4U1 - Challenge and Change in Society

Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies

This course focuses on the use of social science theories, perspectives, and methodologies to investigate and explain shifts in knowledge, attitudes, beliefs, and behaviour and their impact on society. Students will critically analyze how and why cultural, social, and behavioural patterns change over time. They will explore the ideas of social theorists and use those ideas to analyze causes of and responses to challenges such as technological change, deviance, and global inequalities. Students will explore ways in which social science research methods can be used to study social change.

HSC 4M1 – World Cultures

Prerequisite: Any University, University/College, or College preparation course in Social Sciences and Humanities, English, or Canadian and World Studies

This course examines the nature of culture; how cultural identities are acquired, maintained and transformed; and theories used to analyze cultures. Students will explore world cultures, with an emphasis on the analysis of religious and spiritual beliefs, art forms and philosophy. They will study the contributions and influence of a range of cultural groups and will critically analyze issues facing ethnocultural groups within Canada and around the world. Students will develop and apply research skills and will design and implement a social action initiative relating to cultural diversity.

TDJ 4M1 - Mechanical Technological Design

Prerequisite: TDJ 3M1

This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, and solving and communication skills, and explore career opportunities and the postsecondary education and training requirements for them.

TGJ 4M1 - Communications Technology

Prerequisite: TGJ 3M1

This course enables students to further develop media knowledge and skills while designing and producing projects in the areas of live, recorded, and graphic communications, Students may work in the areas of TV, video, and movie production; radio and audio production; print and graphic communication; photography; digital imaging; broadcast journalism; and interactive new media. Students will also expand their awareness of environmental and societal issues related to communications technology and will investigate career opportunities and challenges in a rapidly changing technological environment. A strong emphasis will be put on practical application.

TGP 4M1 - Digital Photography

Prerequisite: TGP 3M1

This course provides students with opportunities to learn and develop their skills and knowledge in digital photography. Students will explore a range of subject matter through studio activities from Adobe Photoshop to studio lighting and will consolidate their practical skill with a camera. Alternative/experimental tools, materials, and processes will be studied to enrich and complement the creative studio. Students will analyze photographic works, studying aspects of historic and contemporary photography as they relate to their own artistic practice. The development of a portfolio is an integral part of this course, which makes this an ideal class for students applying to any post-secondary program that requires a portfolio. **Students may be involved in the creation, design, and production of the school yearbook.**

TMJ 4E1 - Manufacturing Technology

Prerequisite: TMJ 3E1

This project-driven, hands-on course builds on students' experiences in manufacturing technology. Students will further develop knowledge and skills related to the use of welding machines, and other related tools and equipment as they design and fabricate solutions to a variety of technological challenges in manufacturing. Students may have opportunities to acquire industry-standard training and certification. Students will expand their awareness of environmental and societal issues and of career opportunities in the manufacturing industry. Material fees \$30.00.

The opportunity exists for students taking this course to design and manufacture a go cart or mini bike/chopper. Costs incurred above the basic \$30.00 will be the student's responsibility to cover. Parental approval required. These projects must meet appropriate safety standards before they will be released from the school.

TWJ 4E1 - Custom Woodworking

Prerequisite: TCJ 201 or TWJ 3E1

This course enables students to further develop knowledge and skills related to the planning, design, and construction of residential and/or commercial cabinets and furniture. Students will gain further experience in the safe use of common woodworking materials, tools, equipment, finishes, and hardware, and will learn about the entrepreneurial skills needed to establish and operate a custom woodworking business. Students will also expand their awareness of health and safety issues and environmental and societal issues related to woodworking, and will explore career opportunities that may be pursued directly after graduation. Material fees \$30.00.