GRADE 12 COMPULSORY SUBJECTS

ENGLISH LANGUAGE ARTS

COMPREHENSIVE FOCUS 40S

MATHEMATICS – ONE OF:

APPLIED MATH 40S

ESSENTIAL MATH 40S

PRE-CALCULUS MATH 40S

GRADE 12 POTENTIAL ELECTIVE SUBJECTS

BIOLOGY 40S

CINEMA as a WITNESS to HISTORY 40S

CHEMISTRY 40S - YEARS OFFERED IN 2022, 2024 AND 2026

CONCERT BAND 40S

CONSTRUCTION TECHNOLOGY 40S

CREDIT FOR EMPLOYMENT

DRAMA 40S

EXERCISE SCIENCE 40S

FOOD & NUTRITUTION 40S

FRENCH 40S

HSAP (Apprenticeship)

HOCKEY 41G

HUMAN ECOLOGY (HOME EC) 40S

LAW 40S

PHYSICAL EDUCATION 41G

PHYSICS 40S – YEARS OFFERED IN 2021, 2023, 2025, 2027

PSYCHOLOGY 40S

VISUAL ARTS 40S

WOODWORK TECHNOLOGY 40G

GRADE 12 COMPULSORY SUBJECTS

ENGLISH LANGUAGE ARTS

COMPREHENSIVE FOCUS 40S (1 credit)

Comprehensive Focus gives the opportunity to explore and produce a broad range of texts both literary (novels, plays, poetry, etc.) and transactional (resumes, documentaries, commercials, etc.). Students study the language arts in order to function in their communities and culture: to appreciate, enjoy, communicate, interact, solve problems, think critically, and make informed choices that will better the quality of their lives.

MATHEMATICS – ONE OF:

Pre-requisite for each math course is the Grade 11 course of the same name.

APPLIED MATHEMATICS 40S (1 credit)

Senior 4 Applied Math

Topics Include:

Investing Money

Borrowing Money

Set Theory

Counting Methods

Probability

Polynomial Functions and Regressions

Exponentials and Logarithms Functions and Regressions

Sinusoidal Functions and Regressions

Pre-requisite for each math course is the Grade 11 course of the same name.

ESSENTIAL MATHEMATICS 40S (1 credit)

Grade 12 Essential Mathematics is intended for students whose post secondary planning does note include a focus on mathematics and science-related fields. This is a one credit course emphasizing consumer applications, problem solving, decision making, as well as number sense and use.

Topics include:

- 1. Personal Finance
- 2. Design & Measurement
- 3. Government Finance
- 4. Statistics
- 5. Investigative Project
- 6. Career/Life Project
- 7. Investments
- 8. Income Tax
- 9. Variations & Formulas
- 10. Completing a Portfolio

Pre-requisite for each math course is the Grade 11 course of the same name.

PRECALCULUS 40S (1 credit)

Grade 12 Pre-Calculus is designed for students who intend to study calculus and related mathematics as part of their post-secondary education. Students must be creative thinkers and problem solvers. Topics include:

Transformations

Radical Functions

Polynomial Functions

Trigonometry:

Unit Circle

Functions

Identities

Exponential and Logarithmic Functions

Rational Functions

Permutation, Combinations and the Binomial Theorem

Functional Notation

GRADE 12 ELECTIVE SUBJECTS

BIOLOGY 40S (1 credit)

Major topics include a survey of the animal kingdom, and biodiversity. The unit on genetics (heredity) develops the basic patterns and mechanisms of inheritance of traits as well as some exposure to biotechnology. Students will study genetic disorders and their causes. Students will study the history of work of scientists like, Gregor Mendel, Charles Darwin and Watson and Crick. Students will participate in dissections, learn anatomical terms and become proficient in dissection techniques.

No pre-requisite, however, completion of Biology 30S is strongly encouraged.

CINEMA as a WITNESS to HISTORY 40S (1 credit)

Cinema as a witness to Modern History allows students to better understand the media of film, as it entertains, persuades and shapes our opinions of 20th century history. Students will analyze film techniques, the message generated by film makers and the styles that are associated with motion pictures. We will also be learning more about the people, events and places that are important to world history since the late 1800s. This course will allow students to take a critical look at film, the portrayal of history and their own viewing experiences. Warning: Films screened in-class deal with mature subject matter, ranging from G to 14A ratings.

CHEMISTRY 40S (1 credit)

This course is divided into two main sections: a core section consisting of five units, and an option section.

Core Section:

Unit A – Electronic Structure, Bonding, Periodic Table

Unit B – Reaction Rate and Chemical Reaction

Unit C – Ionic Equilibria – Acids and Bases

Unit D – Solubility

Unite E – Oxidation – Reduction

Option Section:

Analytical Chemistry

Metallurgy

Consumer Chemistry

Environmental Chemistry

Chemistry of Food Production

Total Course: Core Section and any two options

Pre-requisite: Chemistry 30S

CONCERT BAND 40S (1 credit)

The Grade 12 band program is open to any student who has completed four or five years of instruction on a brass, woodwind or percussion

instrument. Students may join the program with the permission of the instructor if they can demonstrate adequate instrumental skill. Students will be expected to develop or improve their individual playing skills. Students will have opportunities to perform in solo or ensemble events as part of their course. Students participating in the band program will be expected to perform at various concerts and school functions during the year.

CONSTRUCTION TECHNOLOGY 40S (1 credit)

This introductory course for Building Construction is designed to provide fundamentals in theory and practice relating to basic carpentry. Topics covered include scale plot plans, floor plans and elevations. Safety on the jobsite and in the use and care of power tools is emphasized. This class is divided 30 theoretical, and 70% hands on. Students will learn basic construction, but then be able to immediately apply it to their projects. In past years the green house and various sheds, a deck, and an outdoor classroom have been built.

CREDIT FOR EMPLOYMENT (1/2-1 credit)

Credit for Employment will allow students to earn high school credit for paid work experience, and to encourage and recognize the skills development and experience gained through employment. These guidelines can be used by educators, administrators, parents and students to support the planning, monitoring, evaluating, and reporting of student experiences related to the Credit for Employment (CFE). CFE offers students, who are a minimum of 16 years of age and/or in Grade 11 or Grade 12, the opportunity to earn a high-school credit in Credit for Employment. The CFE allows students to implement career development principles such as essential employability skills into the authentic context of work. Through employment, students will have an opportunity to apply and refine the knowledge and skills acquired in the Career Development Life/Work courses. Furthermore, the CFE will provide students with valuable workplace experience that will

contribute to their career-life planning. The credit(s) for Credit for Employment are Grade 11 one-half (0.5) credit 35G or the full (1.0) credit 30G and the Grade 12 one-half (0.5) credit 45G or the full (1.0) credit 40G. Number of CFE Credits Allowed the Career Development Life/Work courses provide a foundation for students that will help prepare them for participation in the CFE credit. To be eligible to participate in the CFE, a student must either complete a minimum of a half-credit (0.5) Career Development Life/Work course prior to registering for the CFE or they must complete a minimum of a halfcredit (0.5) Career Development Life/Work course while they are completing a CFE. The maximum number of CFE credits allowable in the calculation of a student's Senior Years graduation credit requirements is two (2.0) credits. A student may earn one (1.0) full credit by undertaking and successfully completing a CFE for a minimum of 110 hours of approved employment. A student may earn one-half (0.5) credit by undertaking and successfully completing a CFE for a minimum of 55 hours of approved employment. A student may earn either the 30G credit (1.0) or the 35G half-credit (0.5), but not both. A student may also earn either the 40 G credit (1.0) or the 45G credit (0.5) but not both.

DRAMA 40S (1 credit)

This course allows students to practice and further develop dramatic skills. Students will continue developing a variety of theatre skills including all aspects of theatre production. Students will develop rehearsal and performance skills, formal and informal character development through improvisational skills, performance exercises, student group projects, and script writing. Students will be expected to complete both solo and group performances in class.

EXERSICE SCIENCE 40S

A study of the anatomical structure of the human body. Essential

principles of human anatomy, including the structure and function of the skeletal, muscular, cardiovascular, and nervous system will be studied. Studies of the above body systems will be applied to the understanding of athletic injuries, the causes, treatment, and care of athletic injuries.

FOOD AND NUTRITION 40S (1 credit)

This is a full credit Food & Nutrition course designed for students interested in advanced study in food and nutrition. The course is in two parts:

- 1. Theory concentrates on the food industry in Canada, advanced study of nutrition consumer behavior, skills to use when living on your own, world food practices, and foreign food. Research projects and presentations are stressed.
- 2. Labs advanced skills in cooking, foreign/ethnic foods, and money management

FRENCH 40S (1 credit)

Grade 12 French students can expect to learn how to express their opinions and thoughts on varied topics more spontaneously than in previous years. There is a definite emphasis on oral French, general vocabulary enrichment and everyday situations, including discussion of current events (T.V. newscasts, sportscasts, etc.). Students will review basic verb and grammar structures from previous years and will also learn new more complex verb tenses and language structures. At this level, there will be a continued focus on developing oral fluency; therefore, many activities will incorporate prepared presentations or spontaneous conversation. Plays and skits performed in French as well as interactive communicative games will be an integral part of studying French language and culture in the classroom. The language of instruction will be mainly in French.

Pre-requisite: French 30S

HOCKEY 41G (1 credit)

The aim of this course is to provide a unique program of study to meet the individual needs of highly motivated students. The learning outcomes will be delivered by a variety of meaningful instructional strategies. This course is being offered to meet an emerging need for the development of sports school programs in Canada. This course will allow students at Teulon Collegiate to have access to an intense program of hockey instruction based on Theory, Technical and Dryland Training Units. Dryland: Weight Training, skill stations, circuit training, cross training and fitness training. Theory: Study of International Hockey, Issues in Canadian Hockey, Sports Psychology as well as other topics. Technical: Fundamental Skill Development, Power Skating, Individual Tactics, Team Tactics, Position Specific Skills and Strategies, Team Play Systems and Special Team Systems. Students can take this course each year grade 9 to 12 and if they did not take the class the previous year they can still take hockey for the grade level they are at. This course is geared to the individual and what level of play they are at when they take the course. Many Students have found the class beneficial to improving their individual hockey skills.

HSAP (Apprenticeship) (1-8 credits possible) What is the High School Apprenticeship Program?

- A program offered by Teulon Collegiate where you can get credits for working in an approved trade and GET PAID FOR IT!!!

How do you qualify for the HSAP?

- You must be in Grade 11 or Grade 12
- You should be 16 years of age
- You must cover compulsory requirements in Grades 9-12

Why enter the Apprenticeship Program?

- You are linked to real opportunities in the job market
- There is the chance to use state-of-the-art technology at work
- It is an access route to further apprenticeship training

- Many trades are forecasting a shortage of employees in the near future
- HSAP balances your schooling and on-the-job training
- You will receive a credit for every 110 hours of training
- You may earn up to 8 credits to be used towards graduation requirements

Grades are determined using Apprenticeship Branch competency lists

- On the job hours can be applied to continued apprenticeship training
- You will earn minimum wage + 10%

How do I register?

You are responsible for:

- Determining a trade of interest
- Finding your own employer in an approved trade that is willing to take you on as

an apprentice (the employer must be qualified and insured)

- Completing the apprenticeship agreement. Your parents and your employer will

also have to complete parts of the form and sign the agreement

What are the approved trades?

You have access to career opportunities in a number of trades. They are:

- Electric Motor System Technician
- Industrial Electrician
- Industrial Instrument Mechanic
- Industrial Mechanic (Millwright)
- Industrial Welder
- Machinist
- Power Electrician
- Steel Fabricator
- Tool and Die Maker
- Agricultural Equipment Technician
- Aircraft Maintenance Journeyperson
- Heavy Duty Equipment Technician

- Marine and Outdoor Power Equipment Technician
- Motor Vehicle Body Painter
- Motor Vehicle Body Repairer
- Motor Vehicle Mechanic
- Transport Trailer Technician
- Truck and Transport Mechanic
- Bricklayer
- Cabinetmaker
- Carpenter
- Concrete Finisher
- Glazier
- Ironworker
- Lather (Interior Systems Mechanic)
- Painter and Decorator
- Roofer
- Construction Electrician
- Crane and Hoisting Equipment Operator
- Refrigeration and Air Conditioning Mechanic
- Plumber
- Sheet Metal Worker
- Steamfitter Pipefitter
- Sprinkler System Installer
- Pork Production Technician
- Landscape Technician
- Cook
- Parts Person

If you have any further questions please feel free phone me at 886-2593.

Thank you.

Mr. J. Darragh HSAP Co-ordinator

HUMAN ECOLOGY (HOME EC) 40S (1 credit)

This course consists of two areas: Foods & Nutrition and Child Development. In Foods & Nutrition we discuss the nutrients and other areas of interest such as anorexia nervosa, bulimia, and fad diets. In Child Development, we learn about children from conception until age five. A practical component (day care experience) is offered.

LAW 40S (1 credit)

Law 40S provides an excellent opportunity for each student to acquire knowledge of basic legal principles. These principles are of considerable importance not only in his/her daily living but also in realizing his/her rights, remedies, duties and obligations as a member of society and in developing an appreciation for a just and stable legal system. Law is a course dealing primarily with the application of legal principles and procedures to the personal business problems of the individual; it also prompts the understanding of laws regulating the total economy that affects the individual as a producer and consumer in that economy. Law contributes to the two main bases of education. One is the potential of knowledge for the development of the process of thinking; and the other is the relative importance of the knowledge in the life of the pupil and of society. Law 40S should help the students to investigate that portion of our social structure that has legal implications. The program includes related aspects of law such as: legal solutions to social problems, contractual arrangements, crimes and torts, the law-making processes, the administration of justice, automobile negligence and family law.

PHYSICAL EDUCATION 41G (1 credit)

This is an optional course consisting of a physical education component and a leadership component, similar to the senior 3 course.

The Phys. Ed component consists of five activity units each lasting approximately one month. A variety of activities will be offered depending on class size, weather and availability of equipment and

facilities. The leadership component of the course involves organizing and running intramural activities, interscholastic events, and a variety of other school activities.

PHYSICS 40S (1 credit)

- 1. Electricity and Magnetism
- a) Static Electricity
- b) Coulomb's Law and Electric Circuits
- c) Magnetism
- d) Electromagnetic Induction
- 2. Eight compulsory labs on above topics and waves
- 3. Wave Motion
- 4. Optional Topics: Light, refraction, energy

PSYCHOLOGY 40S (1 credit)

Psychology is the scientific study of behaviour and mental processes. Units of study may include:

- 1. Introduction to Psychology, the Roots of Psychology, the Scientific Method, and excerpts from the 7 Habits of Highly Effective Teens
- 2. The Mind and Consciousness
- 3. Sensation and Perception
- 4. Learning and Memory
- 5. Thinking, Language and Intelligence
- 6. Motivation, Emotion and Stress
- 7. Personality
- 8. Social Psychology
- 9. Psychological Disorders and Treatments

This course is designed to help students understand themselves and acquire skills so they can deal with issues proactively, solve problems and nurture healthy relationships. It also helps students to understand societal issues such as mental illness and violence.

VISUAL ARTS 40S (1 credit)

- Gesture Drawings (Once in the year)
- Drawing Unit (Animals, expressive drawings)
- Pen & Ink (Pointillism & Crosshatching)
- Painting Unit (Acrylic & Watercolour)
- Sculpture Unit (Concept Drawing, Paper structures, Mono OR Complimentary Colour paper, cubist paper, Paper Mache, Plaster)
- Final Projects
- Art appreciation (4 styles of art REVIEW, Elements & Principles REVIEW, Project on famous artist)
- Art History (Overview of all units)
- Homework: one sketch per week in sketchbook

WOODWORK TENCHNOLOGY 40G (1 credit)

Students will cover different aspect of wood working including such topics as: safety; design & planning of furniture/casework; advance wood joints; furniture and cabinet applications, advanced adhesives, advance preparation for finish, advance wood finishing, advanced wood turning operations, mass production, tooling, construction and drafting. Students will also learn useful information about hand tools, such as processes they should be used for, selection, and maintenance.