

**WINSTON
KNOLL
COLLEGIATE**



COURSE CALENDAR

2011- 2012

“Where Tradition Meets the Future”

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COURSE CALENDAR

INTRODUCTION

In many important ways high school represents a significant step toward preparing for the future - a preparation that assumes careful planning to ensure that many options are available to the student.

KEEPING OPTIONS OPEN

Following grade 12, students may decide to enter the work force directly; they may want to attend a technical institute; they may wish to enter university. Regardless of the decisions made, students will find that entry into the world of work or enrollment in post-secondary education depends to a large extent on their high school education including marks achieved and subjects carried.

DECIDING WHAT TO TAKE

Each year students choose their courses for the following term. Conversations with parents, friends and teachers can provide valuable information regarding subjects to take during grade 10, 11 and 12. Student interest and ability should be taken into account. In addition to preparing for a future occupation, developing life-long interests should be continued in high school by registering in carefully selected electives. Another key information source is the guidance department. Throughout high school, guidance personnel offer students many opportunities to take tests and inventories designed to give students an assessment of their interests and abilities.

When students and parents are selecting classes for grade 10, 11 and 12, they should do so for the three-year block of time taking into consideration plans for the future, regardless of how tentative the plans may be.

CREDIT REQUIREMENTS

In order to graduate from grade 12, students must accumulate a minimum of 24 credits during grades 10, 11 and 12. The Department of Education specifies which subjects must be taken. These are compulsory courses. Next, certain subjects from various disciplines must be carried but the grade level at which they are achieved is optional. Finally, open electives can be selected according to future plans, interest and ability of the student.

During high school, students and parents are given the freedom to select a three-year course of study. However, if students decide to further their education, they will have to meet the subject requirements set by the chosen individual university or technical institute before enrolling. The guidance department is well aware of these requirements and encourages students to use its resources.

Students at Winston Knoll Collegiate can elect to take as many as 30 credits during grades 10, 11 and 12. Ten of these credits are required over the three years, seven are specified, leaving up to thirteen options to individual choice. In addition to TAG, all grade 10 students will carry ten subjects; grade 11 students must carry at least nine; grade 12 students are strongly encouraged to carry a minimum of eight subjects. Prerequisites are required for many courses.

Although meeting all graduation requirements is the responsibility of the students and parents, the staff and administration of Winston Knoll Collegiate are more than happy to offer guidance in this vital activity of choosing a high school program. Various sources of information are available to students; tapping all of them can better prepare students for their futures in the work place or at institutions of higher learning.

Recognizing that goals change over time should reinforce in our minds that all we can presently do is choose wisely and keep options open for the future.

ARTS EDUCATION

Arts Education 9

The Arts Education program offered at Winston Knoll Collegiate is to enable students to understand and value the Arts throughout life. The students are exposed to all of the arts education strands: Dance, Drama, Music and Visual Art. All areas are structured within three components: Creative/Productive, Cultural/ Historical, and Critical Responsive.

Drama 10

Creative drama is an integral part of the Drama 10 course of study. Students will learn to create script and perform scenes as well as how to improvise. Students are introduced to scenes from existing plays, and collaborate with classmates to collectively write and produce a drama.

Drama 20

Students in Drama 20 need not have had any prior drama experience. In this class students will explore a relevant social issue using various strategies and focusing on commitment and credibility. They will be expected to create characters from a variety of stimuli and will present their characters in monologues. Improvisation is a part of this course as is scripted scene work.

Drama 30

Drama 30 students will build on the skills learned in previous years. They will continue to work on characterization skills as well as scripted scenes and improvisation. In Drama 30, however, students will be expected to write a one-act play and to study a period of theater history and present a scene representative of that period.

Arts Education 10/20/30 and Theatre Arts 20/30

In these classes students will receive either an Arts Education 10/20/30 credit or a Theatre Arts 20/30 credit, depending on their area of focus. In Arts Education, students will be introduced to the various strands of Arts Education, including Drama, Dance, Visual Art, and Music. The fall musical will be the production in which students will perform skills learned in all strands.

Theatre Arts is an introductory course. Students will become familiar with the technical aspects of the theatre, such as the principles of stage lighting, sound, set construction, make-up and wardrobe. Students will develop technical skills involved in each of these areas through a module based on practical experience.

This class will be offered at 7:30 am in the fall semester. Participation in the musical is mandatory. Please note that a significant extra curricular component is also necessary to the success of the production.

Band 9/10/20/30

This class is for students at Winston Knoll Collegiate who have skills and an interest in playing in a Concert Band or Wind Ensemble. Students must have previous playing experience. Performances will include festivals and concerts throughout the year as well as a trip in the spring of the school year. This is a non-semestered class, offering students at the 10/20/30 levels, 1 credit per year.

Students enrolled in Concert Band or Wind Ensemble are eligible to play in an ensemble such as Jazz Band.

Jazz Band 10/20/30

This class is available to students that are enrolled in either Concert Band or Wind Ensemble. Performances will include festivals and concerts throughout the year, including "All that Jazz" night, as well as a Jazz Trip. This is a non-semestered class, offering students at the 10/20/30 levels, 1 credit per year.

Choral 9/10/20/30

This class is for students at Winston Knoll Collegiate who have an interest in singing. No previous experience is required. Students are separated into two groups, Junior Choir (Grades 9 and 10) and Senior Choir (Grades 11 and 12). Senior Choir meets on Tuesdays and Thursdays from 12:20-1:05. Junior Choir meets on Mondays and Wednesdays from 12:20-1:05. Students will study and perform repertoire of varied historical and musical style. Practical vocal skills will be developed as they relate to choral performances. The Choir participates in festivals and concerts throughout the year as well as the annual Band/Choir trip in the spring of the school year. This is a non-semestered class offering students at the 10/20/30 levels, 1 credit per year.

Music/Guitar 10/20/30

The specific aim of the guitar class is to enable students to communicate effectively through instrumental music and to understand and value a variety of musical expressions throughout life. Through learning to play guitar students will acquire the skills, abilities, understandings and attitudes necessary to express themselves musically as individuals and as members of an ensemble. They will be able to make informed decisions both as producers and consumers of music, and understand the role of music in daily life.

Vocal Jazz 10/20/30

These programs are an extension of the Choral 10, 20, 30 curriculums which enables students to experience music through singing and to understand and value a variety of musical expressions. Vocal Jazz 10 and 20 are intended to develop in students an understanding and appreciation of Vocal Jazz through practical skills and creative work. Students will receive a comprehensive study of jazz music, a universal art form conceived in North America. Classes will offer students a thorough study of Vocal Jazz through musical literacy, creative and practical performances, and analysis and interpretation. Students taking Vocal Jazz must also be enrolled in Choral 10, 20, or 30.

Visual Art 10/20/30

The Visual Arts courses are based on a broad definition of “Visual Arts” which includes fine arts, traditional arts, craft, commercial and functional arts. Students participate in a variety of projects while learning cultural/historical aspects of the arts and exploring various skills and mediums.

The grade 10, 11 and 12 Visual Art program offered at Winston Knoll Collegiate aims to meet the following goals. Students will:

- respect the uniqueness and creativity of themselves and others
- increase their visual literacy
- understand the contributions of the arts and artists to societies and cultures, past and present
- gain a lasting appreciation of art forms experienced as participant and as audience
- recognize the many connections between the arts and daily life

Winston Knoll Collegiate art students will have the opportunity to build upon prior skills and knowledge at each level and develop an appreciation of visual art. Opportunities to use community resources, technology and subject integration will exist at each level.

AP-Advanced Placement Art 20L – Studio Art

The Pre-AP Program in Studio Art is intended for highly motivated and artistically skilled students considering submitting a portfolio during their grade 12 year. The class is an opportunity for students to continue learning and honing art skills while beginning their AP portfolios. Students considering this class will need to apply for admission through the studio art instructor.

AP-Advanced Placement Art 30L – Studio Art

Pre-Requisite: Visual Art 30 highly recommended by the instructor

The AP Program in Studio Art is intended for highly motivated and skilled students who are seriously interested in the study of art. Students should be made aware that AP work involves significantly more commitment and accomplishment than the typical high school course and that the program is not for the casually interested. It is highly recommended that AP students have a previous art course. Students considering this class will need to apply for admission through the studio art instructor. Enrollment in Visual Art 30 is highly recommended by the instructor

BUSINESS AND COMPUTER EDUCATION

Information Processing 10

The focus of this course is the development of a variety of computer-based skills for a student's personal use. Touch keyboarding skills will be further developed. Instruction and experience in the following areas, at an introductory level, develops students' computer application skills that are vital in today's technological world: word processing, spreadsheets, databases, presentation and web page design.

Information Processing 20

This level of Information Processing has a business focus. Students will examine the role of an employee in the Information Age. Instruction in a wide variety of intermediate level document production will be available. Data input skills are continually improved. Instruction and experience, at an intermediate level, develop students' skills in: business documents, spreadsheets, web development and desktop publishing.

Information Processing 30

The course has a managerial focus and therefore students are presented with opportunities to make decisions within the realm of computer based assignments. Content areas include advanced work in word processing in Microsoft Office and the integration of spreadsheets and databases. Web development and desktop publishing are also part of this course.

Computer Science 20

This class teaches students to use a programming language to develop usable applications for the computer. The programming language will be Visual Basic. Course content shall include:

- ❖ Problem solving methods
 - Algorithms and Pseudo Code
- ❖ Program design fundamentals
 - Planning programs
 - Errors/Debugging techniques
- ❖ Program experience
 - Controls, data types, variables, functions, procedures, looping, conditional statements and multiple forms
- ❖ Problem solving methods
 - Algorithms and Pseudo Code
- ❖ Creating Simple Games
 - Jeopardy
 - Click a Mole
 - Yahtzee

Computer Science 30

Prerequisite of Computer Science 20

This class will expand the knowledge gained in Computer Science 20 using Visual Basic

- ❖ Problem Solving and Programming
- ❖ Experience with Programming and Design – Advanced
 - Control Arrays
 - Arrays – One Dimensional
 - Text files – Saving/Loading
 - Gaming Examples (Simon, Frogger, Space Invaders)
 - Introduction to JAVA

Career and Work Exploration 20

This course provides students with an opportunity to focus on their career development process. Students are assisted with determining their strengths, aptitudes and interests and connecting them to career possibilities. Content in WHMIS and Occupational Health and Safety is also offered. With this information, students then proceed to experience two valuable work placements of approximately 30 hours each. Introductory information on the Labour Standards Act, resume development and educational planning complete this program.

Career and Work Exploration A30

Career and Work Exploration A30 maximize opportunities for students to access the workplace. This 100-hour course consists of approximately 30 hours of classroom learning and 70 hours of workplace learning. Students have an opportunity to shape and manage their life career development. This course offers the chance for students to experience career choices and to develop entry-level skills in a workplace setting.

Entrepreneurship 30

This course provides students with the opportunity to develop entrepreneurial attitudes, skills and abilities through experiences in research and planning a venture and classroom presentations. This course of study will cover:

- Examining entrepreneurial careers
- Researching and developing ideas and opportunities
- The role that entrepreneurs have in our society and economy
- Business plans
- Evaluating risks and being able to solve possible problems that may arise in running a business
- Organizations that assist young entrepreneurs
- Present venture plans/ideas

Accounting 10

This is an introductory Accounting course that teaches basic accounting concepts and procedures for a service business organized as a proprietorship. Areas to be covered include: the 8 Steps in the Accounting cycle, T-Accounts, Basic Accounting Equation, GAAP, Journalizing Transactions, Banking, Electric Money, and Financial Statements. If time permits there will be mini units covered on Electric Money, Accounting Scams, Simply Accounting, and Careers in Accounting. There is no prerequisite for this class.

Accounting 20

Prerequisite: Accounting 10

This course starts off with a brief review of the Accounting 10 curriculum as a refresher. The students will learn the skills required to keep accurate records for a Merchandising business. Areas to be covered include: Journalizing Purchases, Cash payments, Sales, and Cash receipts, Posting to General and Subsidiary ledgers, Payroll, distributing Dividends, Taxes, and a heavy emphasis is placed on Careers in Accounting. If time permits a mini unit in Forensic Accounting is explored.

Accounting 30

Prerequisite: Accounting 20

This course introduces students to Managerial Accounting. So far in the other courses the students have been learning the Financial side of Accounting and now they have the opportunity to see Accounting from a different angle. The areas of study include: Management decisions, Analysis of Financial Statements, Budgeting, Partnerships, Uncollectible Accounts, Depreciation, Accounting for Inventory, Agricultural Accounting, and Income Tax and Simply Accounting if time permits. Students will leave this course highly prepared for an introductory Accounting course at a post-secondary level.

WELLNESS AND PHYSICAL EDUCATION

Wellness 9

The main emphasis of this program is participation. Students will spend time in our fitness center, gymnasium, on the track and in the classroom. The key is to be active and to have 'fun'. Topics include: alcohol and drugs, sexuality, STD's, fitness, nutrition and self worth

Wellness 10

The emphasis of this course is to develop an awareness of healthy lifestyles and the pursuit of wellness as a lifelong behavior pattern. Topics include: AIDS, nutrition, anatomy, fitness components, stress management and volunteerism. The students will spend time in the gym, fitness center and the classroom.

Physical Education 20/30

The purpose of this course is to develop an awareness of the various leisure time activities available in our community. Emphasis will also be placed on physical fitness. An understanding of the rules and strategies involved in activities will be developed. The cost of the program is \$125.00.

High Level Performance and Fitness 20 (1 Credit)

Prerequisite: Wellness 10 (no fee class)

The course focuses on specific training for a sport or personal fitness goals. Students will gain a deeper understanding of nutrition, anatomy, sport psychology and training principles in order to meet their objectives. Due to the nature of the class students will need commitment and hard work in order to reach their desired outcomes. Training sessions will include specified weight training, plyometrics, running, core strength, speed training and program design.

LANGUAGES

French 9

French 9 reviews all of the components taught in elementary school and continues to use a communicative/experiential approach. Students will be taught in French and expected to converse in French. One of the main themes is a French survival unit that includes map reading, ordering in a restaurant and using basic questions in order to survive in a French milieu. Another theme is an art unit that incorporates vocabulary, grammar structures and group activities.

French 10

Prerequisite: French 9 recommended

French 10 balances oral and written French equally and is based on a thematic communicative/experiential approach. Students will be taught in French and will be expected to converse in French. Students will be introduced to the imperfect and future simple tenses. Vocabulary and grammar skills will be expanded upon. Themes include trips and excursions, pastimes and part time jobs.

French 20

Prerequisite: French 10

French 20 balances oral and written French equally and is based on a thematic communicative/experiential approach. Students will be taught in French and will be expected to converse in French. Students will be introduced to the pluperfect, conditional present and conditional past tenses. Vocabulary and grammar skills will be expanded upon. Themes include healthy lifestyles, friendship and school life.

French 30

Prerequisite: French 20

French 30 balances oral and written French equally and is based on a thematic communicative/experiential approach. Students will be taught in French and will be expected to converse in French. Students will be introduced to the future anterior, subjective present, verb tenses and an extensive review of all verb tenses. Vocabulary and grammar skills will be expanded upon. Themes include film, culture and newspaper.

Spanish 10

This course is an introduction to the Spanish language and culture. It is organized around four themes: Family and Self, School, Daily and Leisure Activities, and Arts and Entertainment. While students work through these themes, they will be developing speaking, listening, reading and writing skills. The language will be practiced through interactive activities and presentations. Grammar will be introduced as necessary to complete the activities. Students will learn greetings and farewells, describing yourself and family, numbers, days and months, weather, telling time, birthdays and ages, and daily schedules.

Spanish 20

Prerequisite: Spanish 10

This course is a follow up to Spanish 10. Students will continue to build on vocabulary and skills learned in Spanish 10. Oral as well as written skills will be improved. The course is organized around five themes: Friends, Daily Activities, Health and Physical Education, Travel, Consumerism (spending habits, shopping, clothes). While students work through these themes, they will continue to develop speaking, listening, reading and writing skills. The language will be practiced through interactive activities and presentations. Grammar will be introduced as necessary to complete the activities. Verbs in the present, present progressive, future and past tenses will be introduced.

Spanish 30

Prerequisite: Spanish 20

Spanish 30 has a balance between oral and written work. This course continues to build on what has been learned in Spanish 10 and 20. The course is organized around themes including Friends and Self, Work and School, Arts and Entertainment, and Mass Media and cultural studies. Students will continue to learn grammar through projects within these themes. They will learn imperfect and preterit tenses, the conditional tense, and idiomatic and set expressions. Cultural differences among Spanish-speaking countries will also be explored.

TECHNOLOGY

Practical and Applied Arts A9

The Grade 9 Practical and Applied Arts A program is intended to give the students an introduction to a variety of shop areas. The student will receive an introduction into Woods, Keyboarding/Computer familiarization, basic Computer Assisted Drafting and Design, Communication Production Technology, Sheet Metals, and Food Technology. Classes are structured primarily to enable the student to have hands on experience.

Practical and Applied Arts B9

The Grade 9 Practical and Applied Arts B program is intended to give the students an introduction to analysis, problem solving, as well as critical and creative thinking skills. This area of study will focus on a practical engineering approach through hands on/project oriented exploration of Electronics, Engineering, Aerospace, Aeronautics, Propulsion, Wind Energy and Robotics.

Practical and Applied Arts A10

In Grade 10 the students will spend 30 hours of their time in each of the three main areas. In Electrical and design, the students will focus on residential electricity and learn how to repair/fabricate small appliances as well as hook up simple house hold circuits. In Robotics the students will focus on the advanced units and challenges of the Lego Robotics kits that we possess using computer programming and circuits to create small Robots. In Transportation, the students will focus on disassembly, assembly, repair and maintenance of small engines.

Practical and Applied Arts A20

Prerequisite - Practical and Applied Arts A10 or Construction 10 recommended
In Grade 11 Practical and Applied Arts A20, the students may spend 30 hours in three of the following areas as decided by the teachers. In Communications, the student may explore intermediate level audio/visual production, video editing and animation. In Wood Fabrication, the student will focus on intermediate level power tools and joinery to produce a project assigned by the teacher. In ACAD, the students will enhance their skills and produce house drawings and more elaborate floor plans. In Robotics, the students will focus on the development of basic Robots, circuits and building of Robots. There may be a possibility of an integrated project using all four areas listed above.

Practical and Applied Arts A30

Prerequisite: Practical and Applied Arts A20 recommended
In Grade 12 Practical and Applied Arts A, the students will spend 30 hours in each of the three main areas. In Communications, the students will explore advanced level audio/video production, video editing, and animation. In Wood Fabrication, the student will focus on advanced level power tools, and joinery to produce a project assigned by the teacher. In Computer generated drafting, the students will hone their developing skills and produce house drawings and more elaborate floor plans for the house of their dreams.

Drafting & Computer-Aided Design 10

This course will focus on developing drafting skills using AutoCAD software and expose the student to both mechanical and architectural drawings and design. The student will learn about industry standard drawing practices and develop an eye for detail and perfection in their drawings. Students will also learn about the design process and have an opportunity to make a scaled model of one of their designs.

Drafting & Computer-Aided Design 20

Prerequisite: Drafting & Computer-Aided Design 10

This course will focus more on the design and use of CAD software to aid in the design process. Students will be exposed to both architectural and mechanical design drawings. Students will be introduced to the Canadian Building Code and Provincial building standards as they examine different architectural drawings like plot plans, floor plans, foundation plans and framing plans. Students will also understand mechanical part drawings and how they fit with assembly and working drawings. Students will have an opportunity to experience the design process from start to finish with a major design project during the course. Local experts in the industry and tours will provide insight and enrichment to the course. Time permitting students will be introduced to 3D modeling and design.

Drafting & Computer-Aided Design 30

Prerequisite: Architectural Design 20

This course will focus on practical hands on projects and the computer generated drawings that are essential to create a set of production plans. Students will have an option to focus on (A) architectural design or (B) mechanical design with the major design project for the semester.

Option A: Students will generate floor plans, foundation plans, presentation elevations, roofing plans, and section views necessary to construct a scale model of a house.

Option B: Students will be required to create production part drawings, assembly and exploded assembly drawings, and working drawings for a mechanical assembly project that will be created in 3D modeling software.

Visits from SIAST and other post-secondary institutions will provide exposure to opportunity for extended studies beyond high school.

Interior Design 30

Interior Design 30 will be a practical hands on project based course. The students will focus on the design process and how it effectively enhances their home living environment. Students will learn how colour and the Principles of Design combine to boost the looks and value of a room.

Computer searches, building models of different rooms, scale layout, and the development of a design portfolio are essential aspects of this course. Guest speakers and professionals from the Interior Design field will add realism and focus. Enrichment and insight will be provided by numerous tours to business/job sights as well as tour to SIAST, Palliser Campus which will highlight post secondary education opportunities.

Commercial Cooking 10/20/30

Commercial Cooking 10: 1 credit

Commercial Cooking 20: 1 credit - Prerequisite: Commercial Cooking 10

Commercial Cooking 30: 1 credit - Prerequisite: Commercial Cooking 20

These courses are an introduction to the commercial cooking trade. Students get “hands on” experience in food preparation for *Winston’s* Restaurant. As well, students study basic cooking theory and commercial cooking practice.

These courses stress positive work habits and participation. Senior students assume roles of responsibility and participate in planning, management, and entrepreneurial projects. All students taking these courses are expected to work in the school restaurant as part of course requirements.

Communications Production Technology 10

2D Animation – using Flash students will be introduced to creating animations and basic applications for web deployment.

Introduction to special effects – students will be introduced to such things as Chromakeying (Green Screen), multiple character scenes, fade in and outs, etc.

Multi-Track Non-Linear Editing – using a non-linear editing suite such as Final Cut (Pro) students will create a music video.

Image Manipulation – students will be introduced to the multiple image types available in a program such as Photoshop. They will then be able to manipulate the various properties of .gif, .jpg, .bmp, and .png image types.

2D Game Design – using manipulated graphics and a 2 dimensional game design program such as the Games Factory students will create a multi-level school based game.

Communications Production Technology 20

Communications Production Technology 20 will provide the student with experiences in the graphic and multi media areas. Students will learn basic functions and operating procedures for audio and mixing equipment. Working as production teams, the students will use video cameras and video editing equipment to produce their own video complete with sound and special effects. Tours of production facilities and local television stations and advertising companies will enhance their learning experiences.

Communications Production Technology 30

Prerequisites: Communications Production Technology 20

Communications Production Technology 30 will provide the student with opportunities to expand on Communications Production Technology 20 training and develop a more extensive video production project. Students will work as production teams, varying duties, to co-ordinate the final project. Tours of production facilities and local television stations and advertising companies will enhance their learning experiences.

Construction and Carpentry 10

The students will focus on basic power tools, joinery and theory. The students will work through several small learning projects before completing a couple of smaller projects using the basic joinery theory taught that will be assigned by the teacher. A major focus will be placed upon shop and workplace safety, and an introduction to the operation of a woodshop environment. An introduction to Apprenticeship possibilities in the workforce may possibly be investigated. Students will be required to pay for the material costs associated with the projects built.

Construction and Carpentry 20

Prerequisite: Practical and Applied Arts 10A & 20A or Construction 10

Construction and Carpentry will focus on the operation of a woodshop environment. Emphasis will be placed on safety, power tool techniques, wood joinery, and cabinetry. Students will work through several small learning projects, before completing a major project assigned by the teacher. Students will be required to pay for the material costs associated with the project.

Construction and Carpentry 30

Prerequisite: Construction and Carpentry 20

Construction and Carpentry 30 is a continuation and expansion of the woodshop environment, with emphasis on more advanced techniques and wood theory. Students will learn: miter and mortise and tenon joints; advanced power tools and some construction modules. Students will work through a variety of small learning projects, before completing a major project assigned by the teacher. Students will be required to pay for the material costs associated with the project.

Functionally Integrated Academic Program (FIAP)

The FIAP program is designed to provide education in the areas of practical academics, personal management, work experience and leisure.

The program emphasizes teaching in the natural environment at school and in the community.

Integration is an integral component of the program, providing opportunities for students to enhance social, physical and academic skills.

The goal of the program is to prepare students for working and living in the community. The program assists students in developing positive, well balanced lifestyles in order to improve the quality of life experienced by each individual student.

LIFE TRANSITIONS

Life Transitions 20/30

The aim of this course is to enable students to acquire and refine the knowledge, skills and abilities to plan and enhance their personal health, family life, community life, and career development in order to effectively manage the change encountered in the transitions faced throughout life.

At Winston Knoll the courses are covered by taking Life Transitions 20 during grades 9 and 10 TAG periods and Life Transitions 30 during grades 11 and 12 TAG periods. The course is designed so that students cover an orientation, life skills, health, and career planning module during each of the courses.

SCIENCE

Science 9

Science 9 is a broad look into several key areas of scientific study, including life science, physical sciences, and Earth and space science. The following units will be covered:

- Reproduction and Human Development:
 - Process of and influences on genetic transfer
 - Cellular reproductive processes
 - Processes of sexual and asexual reproduction in plants and animals
 - Human reproduction technologies
- Atoms and the Elements
 - Physical and chemical properties of matter
 - Development of the atomic model
 - Pure substances and the Periodic Table
- Characteristics of Electricity
 - Static charge and current electricity
 - Relationships of voltage, current, and resistance in series and parallel circuits
 - Operating principles of electrical devices
 - Small and large scale production of electrical energy in SK
- Exploring our Universe
 - Motion and characteristics of solar system bodies
 - Formation and evolution of the solar system and the universe
 - Examine how cultures understand and represent astronomical function
 - Technologies and programs for exploring the universe

Science 10

Prerequisite: Science 9 is recommended

This is a general science course that includes topics related to the environment, chemistry and physics.

Course units include:

Chemical Reactions → study of elementary atomic structure and chemical reactions

Sustainability of Ecosystems → study of living & non-living factors that influence ecosystems

Our World in Motion → study of elementary concepts related to the physics of moving objects

Physics 20

Prerequisite: Science 10

The Physics 20 course at Winston Knoll Collegiate begins with a look at the physics of everyday things. The properties of waves and wave phenomena will be studied next, followed by a unit on light, which will discuss the characteristics of light, reflection, and refraction. Finally, a unit on heat will look at heat and temperature, specific heat capacity, and thermodynamics. If time permits, other physics topics may be discussed.

Physics 30

Prerequisite: Physics 20 or Mathematics A30

The Physics 30 course at Winston Knoll Collegiate begins with the study of motion, known as kinematics and dynamics. Topics include vectors, velocity, acceleration, and Newton's Laws of Motion. Related topics may include momentum, frictional forces, projectile motion, uniform circular motion, and universal gravitation. Our second unit deals with mechanical energy, including work, power, and energy. Electricity is studied next with emphasis on current and static electricity. Finally, nuclear physics is studied. Areas here include radioactivity, fission and fusion, and nuclear reactors. The use of technology in Physics 30 is emphasized.

Biology 20

Prerequisite: Science 10

This course is an introductory study of biology.

Course Outline:

- Introduction to biology, including microscopy, cell theory, and basic relationships between matter and energy.
- General ecological principles, including environmental interaction, population dynamics, past and present ecosystems and ecological sequencing.
- The diversity of life, including principles of taxonomy, and a study of the importance of the six kingdoms of life.
- Agricultural botany of Saskatchewan

This course is recommended for Biology 30.

Biology 30

Prerequisite: Science 10; Biology 20 is recommended

This course continues the investigation of various biological systems, concepts and principles. Biology 30 is required for admission into many areas of post-secondary education.

Course Outline:

- An introduction to basic biochemistry, including a study of biological molecules, bond energy and chemical reactions.
- Cell structure and function, including photosynthesis, respiration, reproduction and transport
- A study of the principles, concepts and applications associated with genetics and heredity
- A survey of the animal kingdom, including specific human body systems and the trends in the development of organ systems
- Principles of evolution, including a study of specific mechanisms of change

Chemistry 20

Prerequisite - Science 10

Chemistry involves the study of the structure of matter and the changes matter undergoes. Students will learn the symbols and language of chemistry. The structure of the atom is examined in conjunction with the periodic table. Identifying chemical reactions, writing and balancing chemical equations and solving mathematical problems based on these equations complete the course. Lab activities and independent research are integrated with the course topics.

Chemistry 30

Prerequisite - Chemistry 20

The study of matter is continued with an emphasis on various aspects of chemical reactions. These include energy changes, reaction kinetics, equilibrium, solubility and solutions, acids and bases, and oxidation/reduction. An introduction to organic chemistry may be included. Lab activities and independent research are integrated with the course topics.

MATHEMATICS

Honours Math

Honours Math is a four year accelerated and enriched math program for exceptionally talented math students. Students may apply to be accepted into the program in February of their Grade 8 year. Admission to Honours Math is determined by the results of a written assessment exam, together with Grade 8 Teacher recommendations. In the final semester of Grade 12, students will have the opportunity to take either a University of Regina Math class (depending upon availability at that time) or another Grade 12 elective of their choice.

Mathematics 9

Mathematics 9 is a 200 hour course with the emphasis on helping students to understand concepts rather than manipulate symbols. Problem solving is the central focus of the course with the intent of having meaningful, relevant, real-world problems that students are able to solve. The major topics taught are: numbers and operations, ratio and proportion, geometry and measurement, data management and algebra.

Math 10 Courses (strongly recommend that grade 10 students take both pathways)

Grade 10 Workplace and Apprenticeship Mathematics

This pathway is designed to provide students with the mathematical understanding and critical-thinking skills identified for the entry into the majority of trades and for the direct entry into the work force. Topics include: algebra, geometry, measurement, number, methods of income earning.

Grade 10 Foundations of Mathematics and Pre-Calculus

This pathway is designed to provide students with mathematical understandings and critical-thinking skills identified for entry into post-secondary programs. Topics include: measurement, algebra (relations and function, trig ratios, irrational numbers, rational exponents, factoring, polynomials, slope of lines, systems of linear equations), relating data and graphs.

Workplace and Apprenticeship Mathematics 20

Prerequisite: Workplace and Apprenticeship Mathematics 10

This pathway is designed to provide students with the mathematical understanding and critical thinking skills identified for entry into the majority of trades and for direct entry into the work-force. Topics include: Problem solving involving metric and imperial measurements, scale drawings, models and views of 3-D objects, numerical reasoning, personal budgeting, compound interest, financial institution services, formula manipulation, slope, proportional reasoning and unit analysis and creating and interpreting data.

Foundations of Mathematics 20

Prerequisite: Foundations of Mathematics and Pre-Calculus 10

This pathway is designed to provide students with mathematical understanding and critical thinking skills identified for entry into post-secondary programs. Topics include: Rate applications, scale diagrams, scale factors, perimeter area and volume, properties of angles and triangles, sine law and cosine law, inductive and deductive reasoning, normal distribution, systems of linear inequalities and quadratic functions.

Pre - Calculus 20

This pathway is designed to provide students with mathematical understanding and critical thinking skills identified for entry into post-secondary programs (science and math related areas). Topics include: Absolute value of real numbers, operations on radicals, rational expressions, angles in standard positions, trigonometric ratios of angles, sine law and cosine law, factoring, absolute value functions, quadratic functions and equations, systems of linear functions, linear and quadratic inequalities, arithmetic and geometric sequence and series and reciprocal functions.

Math A30

Prerequisite: Math 20 Core

This course is designed for students who will require mathematics for post secondary institutions. It will fulfill some but not all post secondary entrance requirements. Problem solving continues to be a theme with added emphasis on rigorous mathematical topics. Major topics covered are: permutations and combinations, data analysis, factoring, operations with rational expressions, rational equations, linear functions and equations, quadratic functions, systems of equations and trigonometry.

Math B30

Prerequisite: Math A30

This course has a focus on algebraic and statistical topics. It will fulfill most post-secondary entrance requirements. Topics of study include probability, distributions and z-scores, matrices, complex numbers, quadratic equations, polynomial and rational functions, exponential and logarithmic functions. For students not taking calculus, this course should be taken in the Grade 12 year.

Math C30

Prerequisite: Math A30 & B30

This course expands on the previous study of trigonometry in addition to the study of rigorous mathematical proof. It is necessary for some post-secondary entrance requirements. Topics include mathematical proof, conic sections, and circular functions, applications of trigonometry, trigonometric identities and trigonometric equations.

**Note: Math B30 & C30 may be taken concurrently
Math C30 can be taken concurrently with calculus**

Calculus

Prerequisites: Math B30 & Math C30 must also be taken before or concurrently with Calculus.

Calculus is an advanced mathematics class designed for students who plan to attend a post-secondary institution that requires additional math preparation. This course is an introduction to the basic concepts of calculus. Topics of study include limits, derivatives, integrals and their applications to solve problems and graphing. This course should be considered by students who achieve at a high level in mathematics or who will be taking calculus in university.

Modified Mathematics 11

This course is intended for students who have difficulty achieving all of the objectives in the regular Math 10 course but require math credits for graduation. This course is accepted by some post-secondary institutions. Students who elect to take this course will go on to take Math 21. There is no 30 level course in this stream. The topics studied include: basic algebraic skills, budgeting and wages, linear equations, linear functions, variation and angles and polygons.

Modified Mathematics 21

Prerequisite: Math 10 or Math 11

This course is intended for students who have difficulty achieving all of the objectives in the regular Math 20 course but require math credits for graduation. This course is accepted by some post-secondary institutions. There is no 30 level course in this stream. Topics of study include polynomial and rational expressions, irrational numbers, credit, loans, taxes, probability, angles and polygons and circles.

SOCIAL STUDIES

Social Studies 9

The grade 9 course deals with an awareness of the roots of our society. Inquiring skills along with an understanding of such concepts of time, change, causality, technology and culture are the basis for the course.

Social Studies 10

Prerequisite: Social Studies 9 recommended

The goal of grade ten social studies is to help students understand the basic organizations of industrialized, democratic societies. The social studies program outlines the basic organization of Canadian society and then provides some other examples to give students a basis for comparison. Units include: political decision-making, economic decision-making, ideologies and decision-making, international economic decision-making and international political decision-making.

Native Studies 10

Prerequisite - Social Studies 9 recommended

The aim of Native Studies 10 is to help all students develop their knowledge, positive attitudes and cultural understanding about First Nations, Metis and Inuit peoples. The unique history of Aboriginal peoples is part of our collective past and present reality. Native Studies focuses on social organizations of First Nations, Metis and Inuit peoples in Canada. Within the context of these organizations important concepts may be developed including: identity and worldview, community and kinship, governance and economics.

Social Studies 20

The goal of grade eleven social studies is to help students understand the major issues facing humanity in the 21st century. The social studies program examines issues such as human rights, population growth, wealth creation, environmental change, and world governance. The program examines the current state of these issues and alternative viewpoints for dealing with these issues.

Native Studies 20

The aim of Native Studies 20 is to help all students develop their knowledge, positive attitudes and cultural understanding about Indigenous peoples world wide. Native Studies focuses on contemporary issues of concern to Indigenous Peoples world wide. Within this context important concepts may be developed including: self determination/self government, social justice, and treaty relationships.

Social Studies 30

The goal of social studies 30 is to help students understand the major issues facing Canadians in the 21st century. The social studies program examines issues such as social change throughout Canadian history, people-land relationships, cross-cultural relationships, the governance of Canadian society, and Canada's relationship with the global community. Canadians have had to deal with issues stemming from the environment and from working out ways of living with each other. The social studies program examines the current state of these issues and alternative viewpoints for dealing with these issues within Canadian society.

Native Studies 30

Native Studies 30 identifies aboriginal issues that have evolved from the Fur Trade, North-West Rebellion, European settlement and implementation of the Indian Act. Students will learn about the consequences of the Residential Schools, verification of Aboriginal Title and Aboriginal Rights, the implications of treaties and land claims, Self-Government and other contemporary issues. Students will participate in a variety of group presentations, circle talks, independent projects and a traditional craft.

Psychology 20

Psychology 20 is the study of human behaviour and mental processes in social context. It is a course designed to guide the students to a better understanding of themselves as individuals in their own right, and as part of the larger social context of their families, friends, and citizens of their country in a global community. Psychology 20 is a course that emphasizes the application of concepts about behaviour in a variety of social contexts and situations.

Psychology 30

Psychology 30 is the study of human development across the time spans of human life. Students will learn about human growth and changes in behaviour associated with age, including the various stages of development from conception to old age, and apply such knowledge to investigate issues in their everyday lives.

Law 30

The Law 30 course is designed to assist students to become active, informed and productive citizens who know and understand their legal rights and responsibilities. The abstract nature of law is made relevant through study of the concrete application of law to current legal issues in Canada and the global community. Topics addressed will include several of but not all of the following: foundations of Canada's legal system, criminal and civil law, family law, employment and labour law, contract and consumer law, environmental law and international law.

ENGLISH

Grade 9 English - Language Arts

In grade 9 students will be expected to build on their skills across the continuum of the eight essential outcomes.

Listening -

Students will listen to understand, analyze and evaluate oral information and ideas.

Speaking -

Students will use oral language to interact with and express information and ideas in a variety of situations.

Reading –

Students will demonstrate comprehension and interpretation at grade level to develop insightful response.

Writing –

Students will experiment with a variety of writing forms and techniques to describe, to narrate, to explain, to inform, and to persuade using the writing process.

Viewing –

Students will view and demonstrate comprehension and interpretation of grade-level appropriate visuals or multi-media to develop insightful interpretations and response.

Representing –

Students will communicate meaning through a variety of representing activities.

Assessing and Reflecting –

Students will assess their own language skills, discuss the skills for effective viewers, representers, listeners, speakers, readers, and writers; and set goals for future improvement.

This course is planned around five units for the year with at least one unit based on each of these contexts: personal philosophical: social, cultural, and historical; imaginative and literary; communicative; and environmental and technological.

Suggested themes and issues include: All That I Am – The Search for Self; Conflicts, Challenges, Issues, and Choices – Doing the Right Thing; Indigenous and Norse narratives; Exploring Love, Loyalty and Relationships; Surviving and Conquering; Looking Beyond – Imagining New worlds and the Future.

English Language Arts A10

This course is organized thematically and will include at least two of the following three units of study:

1. Challenges - Winners and Losers
The resources in this unit examine the nature of various life challenges including possible sub themes of sports, quests and adventures, war, courage, and power.
2. The Unknown - Hopes and Fears
This unit examines many of life's mysteries and seeks answers and explanations for those questions which are difficult to understand. Possible sub themes include Faith and Belief, Mystery and Suspense, The Unexplained, Science Fiction, Fantasy, and the Future.
3. Frontiers - Canadian Journeys and Discoveries
The resources of this unit investigate those people who have extended their frontiers and, subsequently, influenced our lives. Possible sub themes include Roots, Traditions, Struggle and Settlement, and Clash of Cultures.

English Language Arts B10

This is an issue-based course which will include at least two of the following three units of study:

1. Equality - Pain and Pride?
The resources of the unit will examine the issues of justice and rights recognizing that, in our society, we need to balance personal needs with the responsibilities and demands required of citizens. Possible sub themes include Justice and Fairness, Judging Others, Rights and Responsibilities, Inequalities, and Racial Tensions.
2. Decisions - Action or Apathy?
The resources of this unit examine values, beliefs, and pressures that surround decision-making. Possible sub themes include Life Pressures, Values, Consequences, and Career Decisions.
3. Environment and Technology - Reality and Responsibility?
The resources of this unit explore the relationships and responsibilities to the world of which we are a part. Possible sub themes include Survival, Disasters, Animal Rights, Urban and Rural Issues, Ecology, and Technology.

English Language Arts 20

Prerequisite: English Language Arts A10 & B10

This course focuses on the issues that students will experience on life's journey - the rites of passage and the transitions of life. The two units of work that comprise this course are as follows:

1. Recollections - A Journey Back
Students will look back at the children they were and those they knew, to get a sense of their roots and an opportunity to understand who they have become. Possible sub themes include: innocence and experience, family and peer relationships, school and education, wonder and imagination.
2. Anticipation - On the threshold
Students will examine the journey of life as young adults standing on the threshold of their futures. Life affords them the opportunities and challenges to make decisions about their future directions, their values, their relationships, and their dreams. Possible sub themes include: roles and responsibilities, choices and commitments, perspectives and passages, values and goals.

Media Studies 20

Prerequisite: English Language Arts A10 or B10

This course is designed to help students better understand and cope with perhaps the most powerful influence on their lives - mass communications. Students will explore the impact of the mass media on the individual and society, including advertising, popular novels, magazines, photography, radio, film, and video. Students will have an opportunity to read, view, write, and discuss critically as they examine the media which influence their lives.

- Unit I - Popular Culture
- Unit II - Television
- Unit III - Advertising, Radio and the Recording Industry,
Print (Newspaper, magazines, etc.), Film and Video
- Unit IV - Media Project

Creative Writing 20

Prerequisite: English Language Arts A10 or B10

Creative Writing 20 provides opportunities for students to refine their expressive writing skills and abilities beyond those developed in the required English language arts courses. The course presupposes that expressive writing is a unique way of thinking, and is a means of constructing and conveying meaning.

Students in Creative Writing 20 are encouraged to explore and develop their own ideas. They are also encouraged to explore many different ways of conveying meaning through writing, and to see how methods and styles vary within cultures and time periods. Through experiences in creative writing, students are encouraged to see connections between their own writing, the writing of others, and the broader world around them.

English Language Arts A30 and B30

General Statements:

As at other grade levels, students will be expected to show competence in all eight essential outcomes of language use: listening, speaking, reading, writing, viewing, representing, assessing and reflecting. Evaluation will be accomplished in a variety of ways, and will be continuous throughout the semester. Most items relating to the study of the English language will spring from the literature being studied. As a rough guide, resource selection will be as follows for each course:

- 5-10 short stories
- 2-5 essays
- 5-10 poems
- 1 or 2 plays
- 2 novels
- some use of other media: film, newspaper, magazine, Internet

English Language Arts A30

Prerequisite: English Language Arts 20

The English Language Arts A30 course is organized around themes that focus on Canadian literature and society. The intent of the course is to make students aware of the impact of society on the literature of a country but more importantly to make them aware of the growing canon of Canadian literature, especially that of Saskatchewan.

The course is divided into two broad themes with sub themes:

- I. Canada – Diverse Landscapes and Peoples
 - A vast and varied land
 - Nature and the seasons
 - Regional landscapes
 - Identity and diversity
 - Personalities and values

- II. Canada – Diverse Voices
 - Aboriginal voices
 - Voices through time
 - Regional voices
 - Multicultural voices
 - Female and male voices
 - Marginalized voices

Within these units of study, students move along the continuum of the eight essential outcomes (listening, speaking, reading, writing, viewing, representing, assessing and reflecting) begun in Kindergarten.

English Language Arts B30

Prerequisite English Language Arts 20

The English Language Arts B30 course is an issue-oriented course which is organized around the human concerns in a global society. English Language Arts B30 examines global perspectives using traditional and contemporary world literature in a comparative manner.

The course is divided into two units of study with accompanying sub themes:

- I. The Human Condition – In Search of Self
 - Identity and sense of self
 - Human qualities and ideals
 - Human relationships
 - Joy and fulfillment
 - Doubt and fear

- II. The Social Experience – Beyond Personal Goals
 - Individual and social responsibility
 - Truth and Justice
 - Ambition
 - Power and the common good
 - Social criticism
 - Causes and crusades

The eight essential outcomes continuum begun in Kindergarten, is continued within the units of study for the course.

University of Regina

University of Regina Courses at Winston Knoll Collegiate: 2011-2012

Jump-start your university career while still in high school!

Fall Term 2011: (tentative)

Sociology 100 – Instruction to Sociology

This course introduces students to basic sociological concepts, debates, and modes of analysis. Through discussion of issues such as the cultural development of humans, the socialization process and the structures of global society, students will be introduced to distinctive approach of sociology.

Winter Term 2012: (tentative)

English 100 – Critical Reading and Writing

This course develops students' proficiency in critical reading and writing through the study of a wide range of non-literary and literary texts, and the study of composition, with emphasis on connections between modes of reading and writing.

Math 110-Calculus I: (tentative)

(Scheduling to be confirmed)

An introductory class in the theory and techniques of differentiation and integration of algebraic and trigonometric functions. Topics include limits, optimization, curve sketching, and areas. Prerequisite: Mathematics B30 and C30 with a grade of at least 65% in each. It is recommended that students with an average of less than 80% in Math B30 and C30 should register in Math 104.

Application & Registration:

Any student, 16 years old and older, who has permission from the high school principal can apply and register for a course. If you are interested in signing up for University while still in high school, please contact the guidance office.

Costs:

Tuition and fees for a U of R course are approximately \$500. Textbooks are not included in this cost.

Accelerated Student Program FAQ's

1. Will I be a University of Regina student if I take a U of R course at Winston Knoll?

Students enrolled in U of R courses at WKC are University of Regina students enrolled through Credit Studies Division and the Student Accelerated Program. If you decide to attend the U of R in the future, you will **not** have to pay the admission fee again, but you **will** need to apply to the faculty of your choice.

2. What do I do if I am having trouble with the course?

Speak to the instructor as soon as you are having difficulty or are unclear about anything in the course. Your instructor is willing to assist you with the material, in finding you a tutor or getting you other extra help. If you are unable to contact the instructor, please contact the Credit Studies program advisor at 585-5827 for assistance.

3. Can I drop this course later?

If you feel it necessary to discontinue a course, please be aware of the following:
The University of Regina will not assume that you have dropped the course if you merely stop attending. You must contact the Credit Studies Division office in writing (fax or email is acceptable) to discontinue the course. Include the course name, your student number and your birth date in the communication. Please call to confirm the office has received your request.

4. Will I get my money back if I drop?

Students who are considering dropping the course should contact the office immediately. The amount of reimbursement depends on when the course is dropped. In addition students who drop late will receive a grade of W on their transcript.

5. Can my parents or my teacher contact the instructor to see how I am doing?

It is University of Regina policy that all information about our students is strictly confidential and may be released to another individual only with the student's written permission. Parents and guardians should be aware that we cannot release information about grades or amounts owing on account, even though they may be paying your university tuition fees!

6. Will my grade in this university course affect my average or my chance at scholarship?

No. Your high school average does not include courses taken at U of R and will not be considered when you apply for admission. Taking a course now however, may improve your grades in your first semester at university by making the transition from high school easier.

Any questions?

We want to ensure your first experience at the University of Regina is a positive one. If you have any questions, please contact me at the Credit Studies Division Office:

Darrel Lawlor (585-5870)

Credit Studies Division, Centre for Continuing Education

CB 104, College Building, College & Scarth

University of Regina, S4S 0A2

T: 585-5807, F: 585-5825, E: darrel.lawlor@uregina.ca