COURSE DESCRIPTIONS – GRADE 11

TABLE OF CONTENTS

Compulsory Courses

Elective Subjects

GRADE 11 COMPULSORY COURSES

ENGLISH COMPREHENSIVE FOCUS 30S (1 CREDIT)

This course develops students' ability to think critically and to function more effectively within their community. Students will be exposed to materials to further develop their literacy skills and enable them to respond to and interact with a variety of texts: short stories, poetry, drama, film, a Shakespearean text (Macbeth), magazines, newspapers, and the Internet as springboards for reflective and critical thought. Students are immersed in texts that inform, persuade, analyze, foster understanding and empathy, reflect culture, express feelings and experiences. Essay forms are given more prominence at this level to provide a solid foundation for writing at the grade 12 level. The proper use of grammar, punctuation, spelling, and vocabulary in all assignments is emphasized.

CANADIAN HISTORY 30F (1 CREDIT)

The focus of this course is the social and political history of Canada. We examine the development of Canada from its foundation to the present, internally and internationally.

The course is organized thematically according to the following topics:

Peopling of Canada
New Societies to 1867
Government, Federalism, Politics
Social and economic changes since 1850
Western Canada
External Relations

MATHEMATICS 30S

Students are required to take one of the three mathematics courses. Students may opt to take more than one of the following courses in which case one would be considered an elective.

APPLIED MATHEMATICS 30S (1 CREDIT)

The 1999-2000 school year is the first year of full implementation of the new Grade 11 Applied Math Program. The curriculum was developed in response to changing mathematical requirements prompted by the increase in the use of technology, not only in the workplace and post-secondary training, but also, in many aspects of day to day life.

The Applied Mathematics curriculum has been designed for students who are responsible, independent learners. It is the goal of the program to help students gain and maintain essential skills in topic areas that are important in technology-based industries and businesses and in every day life.

The course is divided into nine units. Those units are shown below.

Consumer Math
Technical Communication
Personal Finance
Geometry
Data Management and Analysis
Systems of Equations
Precision Measurement
Linear Programming
Non-Linear Functions

ESSENTIALS OF MATH 30S (1 CREDIT)

This course has been developed to allow students to acquire a basic knowledge of mathematics to enter the world of work and to supplement and add to the knowledge gained in Consumer Grade 10 Mathematics.

Curriculum topics that will be covered are as follows:

1. Problem analysis
2. Relations and formulas
3. Income and debt
4. Data interpretation
5. Measurement technology
6. Owning and operating a vehicle
7. Personal income tax
8. Analysis of games and numbers

The textbook is:
Celia Baron, Don Bradford, Angela Kaisser, David Sufrin and Rick Wunderlich, Essentials of Mathematics 10, National Library of Canada Cataloguing in Publication Data, 2003.

PRE-CALCULUS MATHEMATICS 30S (1 CREDIT)

Grade 11 Pre-calculus Mathematics (30S) is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It builds on the topics studied in Grade 10 Introduction to Applied and Pre-calculus Mathematics and provides background knowledge and skills for Grade 12 Pre-calculus Mathematics. The course comprises a high-level study of theoretical mathematics with an emphasis on problem solving and mental mathematics. The topics include:

Unit 1: Quadratic Equations
Unit 2: Radicals
Unit 3: Quadratic Functions
Unit 4: Sequences & Series

Unit 5: Rationals
Unit 6: Trigonometry
Unit 7: System of Equations and Inequalities
Unit 8: Absolute Value and Reciprocal Functions

PHYS ED/HEALTH 30F IN (1 CREDIT)

This course is designed with the notion of stressing the importance of physical activity on a person's growth. Also, it is designed with the notion of using movement, fitness, and health instruction to give students the tools to become more passionate about being physically active, healthy people.

Students perform a variety of movement-based activities and games, along with sport play, and fitness to complete their credit. The course evaluation is based on an incomplete, complete system. There are no percentage grades given, but students are required to get 70 percent in order to pass the course. Students are required to change, smile, participate, and sweat. Health assignments are based on discussions, lectures, and exit slips, and revolve around healthy relationships, wellness, nutrition, and substance use/abuse.

Note: Proper gym shoes and a change of athletic clothing is required

PHYS ED/HEALTH 30f OUT (1 CREDIT)

This course is designed as an alternative to the IN Physical Education credit. It is a course that is administered through the school but performed on the students own time. The course revolves around the completion of volunteer hours, designated health assignments, and logging physical activity hours. Typically, this is how the course has run in WCI since it was introduced.

Completion of 7 leadership/volunteer hours- preferably done at WCI, but community volunteering is also accepted
Completion of 10-15 designated health assignments (administered by instructor in charge)
Completion of 70 Physical Activity hours performing three different (SAFE) activities. Safety is stressed because the course is done on their own time.

If a student requires motivation to be physically active, it is recommended they take the IN physed program.

GRADE 11 ELECTIVES

BIOLOGY 30S (1 CREDIT)

This course focuses on the human body. Students will explore how the different body systems function and what can happen when they do not function properly. Included are the digestive, respiratory, cardiovascular, blood and immunity, and excretory systems. Students will participate in a wide range of labs and hands-on assignments.

CHEMISTRY 30S (1 CREDIT)

The Grade 11 Chemistry curriculum is concerned with students gaining relevant knowledge and with providing appropriate mathematical treatment of concepts. It is also concerned both with fostering the development of various skills (context-based process skills, decision-making skills, problem-solving skills, laboratory experimental skills, critical thinking skills, independent learning skills). A strong focus of Grade 11 Chemistry is to link science to the experiential life of students. The Grade 11 Chemistry curriculum will build upon what students know and are able to do as a result of their studies in Grade 10 Science. 5 main themes are covered as follows:

Topic 1: Physical Properties of Matter
Topic 2: Gases and the Atmosphere
Topic 3: Chemical Reactions
Topic 4: Organic Chemistry
Topic 5: Solutions

ENVIRONMENTAL SCIENCE 31G (1 CREDIT)

In this course students will focus on three major topics including aquatics, plant science and wildlife. Within each of these areas students will learn about the various environmental issues that are ongoing and how scientists balance the needs of society, industry and the environment. Within aquatics students will create an action project aimed to improve the health of their local watershed. During plant science students will learn the basics of plant biology and biodiversity. Finally, in the wildlife unit students will learn about the variety of life on Earth including mammals, reptiles, amphibians, birds, fish and invertebrates. Students will partake in a variety of labs and learn important microscope skills.

FOODS AND NUTRITION 30S (1 CREDIT)

This is a senior level course on the topics of food and nutrition. Topics covered will be Indigenous foods of Canada, foods across the provinces, nutrition throughout the lifecycle, food preparation and production. In the food preparation lab, students will continue to move towards

becoming independent cooks. Recipe difficulty will increase and more complex techniques will be learned.

MUSIC 30S (1 CREDIT)

This course will include an exploration of the concepts of music and performance through skill development in singing and contemporary rock instruments. Students will build their understanding of musical elements, music theory, structure of songs, lyric writing, and chord function. Students will also research aspects of music for real world application, including audio recording and sound editing. The course may include student-led project-based learning activities and content may vary depending on the interests of the class.

PEER ASSISTANCE 41G (1 CREDIT)

This course introduces students interested in pursuing a career in "human services" to some of the aspects of this field of work. Students develop an understanding of the skills and abilities required to work in human services. Students gain an awareness of various disabilities through instruction and practicum working with students and disabilities. Through one - on - one tutoring, students will be given an opportunity to put into practice theory taught in the instruction portion of the course.

PHYSICS 30S (1 CREDIT)

In Grade 11 Physics, students continue to use scientific inquiry as an important process in their science learning. Their math skills are challenged as they begin to put values equations to concepts that were begun in Grade 10 Science. Four major ideas are covered, and are taught with emphasis on systems and the relationships within these systems.

Topic 1: Mechanics
Topic 1.1: Kinematics
Topic 1.2: Dynamics

Topic 2: Fields
Topic 2.1: Gravitational Fields
Topic 2.2: Electric Fields
Topic 2.3: Magnetic Fields
Topic 2.4: Electromagnetism

Topic 3: Waves
Topic 3.1: Waves in One Dimension
Topic 3.2: Waves in Two Dimensions
Topic 3.3: Sound

Topic 4: The Nature of Light
Topic 4.1: Models, Laws, and Theories
Topic 4.2: Particle and Wave Models of Light

VISUAL ARTS 30S (1 CREDIT)

Further experiences in Art

This course is designed as a preparation for Art 40G/S. Students will explore similar topics from the previous year but in further depth. The course revolves around the completion of two larger projects as well as a continuation of topics from years before.

Topics include:
Designing an artist's suitcase
Painting an artists chair

WOODWORK TECHNOLOGY 30G (1 CREDIT)

This advanced program will cover areas such as advanced wood construction, basic home renovations, and further implementation of the CNC and Laser Engraver.