

COURSE HANDBOOK

2010-2011



Olds High School
PO Box 3709
4500 50 Street
Olds, AB
T4H 1P5

OLDS HIGH SCHOOL

Mandate

“To ensure that Olds High School provides educational opportunities that enable students to become responsible and productive members of society.”

Mission

“To foster learning in a safe, challenging, and diverse environment.”

Vision

Olds High School offers a vital educational program. We are committed to:

1. Reinforcing the values of honesty, integrity, and respect for self, others, and property.
2. Providing a progressive environment with a choice of educational programs that motivate students and staff to meet their individual potentials as lifelong learners.
3. Recognizing the importance of personal responsibility and mutual accountability by students, staff, and parents in the educational process.
4. Offering dynamic curricular and extra-curricular opportunities in a disciplined setting.
5. Nurturing a co-operative relationship between the school and the community.
6. Using technology effectively to support learning and communicating.

INTRODUCTION

This booklet has been assembled to provide students and parents with some basic information that may help in selecting the most appropriate courses for a viable high school program. Diploma requirements for each year of your program should be considered carefully. It is expected that 40-42 credits be taken both in grade ten (10) and in grade eleven (11). This will provide the necessary foundation of prerequisites as well as allowing for some flexibility in the selection of courses for the grade twelve (12) year. In grade twelve (12), a minimum of 35 credits should be taken. Grade twelve (12) students must be enrolled in at least 35 credits at Olds High School to be eligible to participate in the graduation exercises.

Career High Policy– Occasionally students are unable to fit a course into a timetable because of a course conflict or the need to complete a failed course. Decided on a case by case basis, the Principal may grant approval for such students to take a course at the Olds Career High School. If the student is able to fit the course into their schedule at Olds High School, permission to take the course at the Olds Career High School may not be granted.

Parents and students should discuss course choices before the pre-registration form is completed and submitted. The decisions made will directly influence future course eligibility and indirectly even career possibilities following high school. The course offerings for next year are directly linked to the information gathered from these forms.

Our school is committed to providing a course offering that can best serve the needs and interests of our students while maximizing the utilization of our staff expertise. Please consider the diploma requirements and the course descriptions herein cautiously. If you have questions or concerns, call us at (403) 556-3391. Final registration will happen in late April. Working copies of the course registration forms are included in this booklet and should be prepared in consultation with parents before the final registration date. Students need to come to the registration process prepared. Should you have questions about your program, make an appointment to see the Guidance Counsellor before the registration day.

ALBERTA HIGH SCHOOL DIPLOMA REQUIREMENTS

To earn an Alberta High School Diploma, a student must:

- earn a minimum of 100 credits.
- meet the standards and complete the following courses:
 - English 30-1 or 30-2
 - Social Studies 30-1 or 30-2
 - Pure Mathematics 20 and/or Applied Mathematics 20 and/or Mathematics 24
 - Science 20 and/or Science 24 and/or Biology 20 and/or Chemistry 20 and/or Physics 20
- successfully complete the following:
 - Physical Education 10 (minimum 3 credits)
 - Career and Life Management (CALM - 3 credits)
 - 10 credits, in any combination, from Career and Technology Studies (C.T.S.) OR Fine Arts OR Second Languages
 - 10 credits in any 30-level courses (including locally developed/acquired and authorized courses) in addition to English 30-1 or 30-2 and Social Studies 30-1 or 30-2.

NOTE: For those going to 30-1 level and 30-2 level courses, successful completion of a Provincial Diploma Examination (PDE) is required.

RETROACTIVE CREDITS

A student who fails a course in a subject 10, 20, 30 or 10-1, 20-1, 30-1 series with a final mark no lower than 45% may proceed to the next higher course in the alternate series 10-2, 20-2, 30-2. (e.g. For example if a student earns 47% in English 10-1 they may move into English 20-2).

Upon successful completion of the next level course in the alternate series, a student is eligible for retroactive credits in the prerequisite course at the 10-2, 20-2 level provided credits have not already been granted in any course at the prerequisite level in any of the 10, 20 or 10-2, 20-2 series.

ALEXANDER RUTHERFORD SCHOLARSHIP

The Alexander Rutherford Scholarship for High School Achievement recognizes and rewards exceptional achievement at the senior high school level and encourages students to continue their studies. The scholarship is based on scholastic achievement in grades 10, 11, and 12 to a maximum value is \$2500.

Grade 10

(\$400) Average of 80.0% or higher in five (5) subjects including:

(\$300) Average of 75.0% to 79.9% in five (5) subjects including:

- ✓ English 10-1 or 10-2
- ✓ At least two (2) of the following:
 - Pure Mathematics 10 or Applied Mathematics 10
 - Science 10
 - Social Studies 10-1 or 10-2,
 - a language other than English at the Grade 10 level
- ✓ Any two courses with a minimum three credit value at the grade 10 level including those listed above and combined C.T.S. introductory courses.

Grade 11

(\$800) Average of 80.0% or higher in five (5) subjects including:

(\$500) Average of 75.0% to 79.9% in five (5) subjects including:

- ✓ English 20-1 or 20-2
- ✓ At least two (2) of the following:
 - Pure Mathematics 20 or Applied Mathematics 20
 - Science 20
 - Biology 20
 - Chemistry 20
 - Physics 20
 - Social Studies 20-1 or 20-2
 - a language other than English at the Grade 11 level
- ✓ Any two courses with a minimum three credit value at the grade 11 level including those listed above and combined C.T.S. intermediate courses.

Grade 12

(\$1300) Average of 80.0% or higher in five (5) subjects including:

(\$700) Average of 75.0% to 79.9% in five (5) subjects including:

- ✓ English 30-1 or 30-2
- ✓ At least two (2) of the following:
 - Pure Mathematics 30
 - Applied Mathematics 30
 - Science 30
 - Biology 30
 - Chemistry 30
 - Physics 30
 - Social Studies 30-1 or 30-2
 - a language other than English at the Grade 12 level
- ✓ Any two courses with a minimum three credit value at the grade 12 level including those listed above and combined C.T.S. intermediate courses

GUIDELINES FOR STUDENTS ENTERING GRADE X

You should select courses related to your interests, abilities, and your future occupational preferences. The following are suggested guidelines:

1. A student who has secured a 65% standing or greater in all Grade IX subjects should succeed in most subjects.
2. A student who has secured a 50% to 64% standing in Grade IX may succeed in Grade X subjects but might have difficulty with the 10-1, 20-1, 30-1 program.
3. A student who has received some grades below 50% in Grade IX must make course selections with care or consider the Knowledge and Employability Program.

GUIDANCE COUNSELLOR

The role of the guidance counsellor is to provide assistance to the students of Olds High School in the following areas:

1. Having a positive attitude towards learning—"A student who thinks he can, will."
2. Using a decision making process that will enable students to assume personal responsibility for the choices they make.
3. Program and courses selection, course changes, and some tracking of student academic progress.
4. Planning for post secondary education, scholarships, and financial assistance.
5. Career High or Alberta Distance Learning courses.
6. Study skills, world of work skills.
7. Occupation interest inventories.
8. Guidance Centre—display materials on occupations and post secondary choices.

ACADEMIC TEAM PROGRAM (Green Quad)

Academic Team is an alternative education program that is aimed at students who wish to take a more active role in directing their own studies. Academic Team concentrates on encouraging students to manage their time and goals, and is intended to offer students more control of their own education through self-direction and project-based learning. The program which occupies the Green Quad operates in a non-traditional classroom setting under the direction of two teachers. Academic Team is rooted in the belief that students will become better learners if given more responsibility for their education. The Academic Team program is committed to providing a quality education in an environment that encourages personal growth through the development of responsibility, maturity, self motivation, and dedication.

Students must successfully complete the application process at the end of grade 9 in order to enter the Academic Team program in September of their grade ten year. Most students remain in A.T. for all three years of high school, although they always have the option of returning to the regular classroom stream. Entrance to the program is not possible in grades 11 and 12.

An Academic Team presentation is held every spring immediately following the grade nine high school registration evening.

GRADE X COURSE DESCRIPTIONS

English 10-1&10-2

5 credits

These programs are based on five General Outcomes that are consistent for both Program levels with some differences in the specific outcomes between General Outcomes 2 and 4.

General Outcomes 1, 3, and 5 focus on process while 2 & 4 are product oriented. In the Process Outcomes of 1, 3, & 5, students will listen, speak, read, write, view, & represent to:

1. Explore thoughts, ideas, feelings and experiences.
3. Manage ideas and information.
5. Report, support, and collaborate with others.

The Product Outcomes will have students:

2. Comprehend and respond personally, critically, and creatively to literature and other texts in oral, print, visual, and multi-media forms.
4. Create oral, print, visual, and multi-media texts and enhance the clarity and artistry of communication.

Social Studies 10-1

5 credits

Students will explore globalization, the process by which the world's citizens are becoming increasingly connected and interdependent. Students will explore the origins of globalization, the implications of economic globalization, and the impact of globalization on lands, cultures, human rights, and quality of life. The infusion of a multiple perspectives approach will allow

students to examine the effects of globalization on peoples in Canada and throughout the world, including the impact on Aboriginal and Francophone communities. Students will explore responsibilities associated with local and global citizenship and formulate individual responses to emergent issues related to globalization.

Social Studies 10-2

5 credits

Students will explore globalization, the process by which the world's citizens are becoming increasingly connected and interdependent. Students will explore historical aspects of globalization as well as the effects of globalization on lands, cultures, human rights, and quality of life. Through a multiple perspectives approach, students will examine the effects of globalization on peoples in Canada and other locations, including the impact on Aboriginal and Francophone communities. Students will develop skills to respond to issues emerging in an increasingly globalized world.

Physical Education 10

5 credits

Development of body management, coordination, and control through a variety of activities involving team, pair, and individual sports. Emphasis will be placed on recreational and fitness activities. Activities may include: soccer, badminton, team handball, ice skating (hockey, broomball), tennis, curling, basketball, and volleyball. Fitness will be a component of each unit

to help to better the general well-being of the students.

The High School Mathematics Program of Studies

The high school mathematics program has a number of benefits for students.

- Greater opportunity for conceptual understanding because there is less content—students can study topics in greater depth.
- Course sequences are designed to prepare students for their future goals.
- All the mathematics course sequences encourage students to:
 - become creative problem solvers
 - use mental mathematics skills
 - gain more confidence in their mathematics skills
 - make connections between mathematical concepts and their lives.

Mathematics 10C 5 credits

Mathematics 10C is a course designed to provide students with the mathematical understandings, rigour and critical-thinking skills that have been identified for specific post-secondary programs.

Students choosing 10C have two sequence options out of Grade 10: 20-1 and 20-2. These sequences are ideal for students considering post-secondary studies in most colleges and universities.

Students are expected to have a graphing calculator for the course, preferably the Texas Instrument TI-83 Plus.

Successful completion of Math 9 is a prerequisite.

Mathematics 10-3 5 credits

This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into the majority of trades and for direct entry into the work force.

Students choosing 10-3 follow the 20-3 and 30-3 course sequence through Grade 11 and Grade 12. This course sequence is ideal for students entering trades or the workforce immediately after high school.

SENIOR HIGH SCIENCE(S)

The senior high science programs will help all students attain the scientific awareness needed to function as effective members of society. Students will be able to pursue further studies and careers in science, and come to better understand themselves and the world around them. To achieve this, appropriate curriculum components are identified and approached from a common philosophical position in each science course. These components include expected student knowledge, skills, and attitudes.

The senior high science programs place students at the centre. Students are active learners and will assume increased responsibility for their learning.

Science 10 5 credits

This academic science course is designed to be a foundation for the

Biology, Physics, and Chemistry courses in grades 11 and 12. Many concepts learned in Science 10 are vital as background for success at the next level.

Unit A: The Fundamentals of Chemistry
Atomic theory and molecular nomenclature are studied in combination with historical development, lab applications, and mathematical problem solving.

Unit B: The Fundamentals of Physics
An in depth study of motion and types of energy are studied in combination with historical development, technological applications and problem solving skills.

Unit C: The Fundamentals of Biology
A close look at cellular biology includes microscope work and the connection of cell physiology to a plant system's anatomy and physiology.

Unit D: The Fundamentals of the Biosphere

This unit focuses on the Earth as a whole system involved in energy transfer with reference to climatic patterns and humans influencing climate change.

Science 10 is a prerequisite for all the 20 level science courses. It is strongly suggested that students have a 65% minimum in BOTH Science 9 and Math 9 for success in Science 10.

Science 14 5 credits

Each unit of study in the Science 14 course emphasizes and identifies an area of context for study.

Unit A, Investigating Properties of Matter, will have a Nature of Science emphasis. In this unit, student attention is focused on the processes by which scientific knowledge is developed and tested, and on the scientific knowledge itself. Skills emphasized in these units are the skills of scientific inquiry.

Unit B, Energy Transfer Technologies, and Unit C, from Life to Lifestyle, will have a Science and Technology emphasis. In these units, students seek solutions to practical problems by developing and testing prototypes, products and techniques to meet a given need. The skills emphasized are those of problem solving, in combination with the skills of scientific inquiry.

Unit D, Matter and Energy in the Biosphere, will have a Social and Environmental Context emphasis. In this unit, student attention is focused on issues and decisions; students seek and analyze information and consider a variety of perspectives.

French 20 (taken at Grade 10 level) 10 credits

This class explores five (5) themes. Teamwork and creativity are an integral part. Acquisition of vocabulary and mastery of basic grammatical structures are the main objectives. Prerequisite: Successful completion of Grade 9 French and a strong desire to learn a second language.

Spanish 10 (via VC) 5 credits**

This course is designed to introduce non-Spanish speakers to Spanish using a variety of technologies. It has no prerequisites and can be taken by students in Grade 10, 11, or 12. After English, Spanish and Japanese are the next two languages rising in popularity and use, so understanding Spanish will be an asset to students in the 21st century. Students will be exposed to Spanish language and culture throughout the course, and will take part in a field trip

to Calgary to interact with other Spanish speakers in a Spanish restaurant.

** The instructor will deliver the course in Olds, Cremona, and Bowden simultaneously through videoconferencing (2-way real-time audio and video interaction)

Art 10 5 credits

Art 10 is an introductory level study of the visual arts in which students will explore the elements and principles of art and design. This course emphasizes the creative development of the mind along with development of techniques using a variety of media. Some of the art concepts and media covered in this course include:

- drawing skills and techniques.
- color theory and painting.
- sculpture with clay and plaster.
- pottery and glazes.
- animation.

Stained Glass 10/20/30 5 credits

Using the medium of glass, students with or without previous experience will learn the process of creating sun catchers, mosaics, a garden stone, and a 3-dimensional project. Some projects are completed using lead came, although the tiffany method of stained glass is the norm.

Music 10 (Instrumental) 5 credits

This full year course will develop instrumental playing (Band) in a performance ensemble setting. All band instruments will be taught. There will be

a theory component dealing with notation, articulation, rhythm, scales, and music terminology. Many styles of music will be performed (rock, pop, Latin American, ballads, overtures, classical). Concerts will be performed during the year. These are required for course completion.

Requirements: previous music experience or permission of the instructor.

Guitar 10 5 credits

This is an introductory course in which students learn to read and play guitar through notes and chord symbols as well as TAB. Students will learn various picking and strumming techniques and a variety of styles ranging from Blues, Pop, Rock, country and Classical.

Choral Music 10 3 credits

Provides students an opportunity to express, perform, and create vocal music. Musical skills such as reading music and correct vocal technique will be reinforced.

Music 15 (Jazz Band) 3 credits

This full year course will be taught outside of the regular schedule. It will involve instruction during lunch periods through the term. Frequent public performances may also be anticipated. Performance participation is mandatory!!! Requirements: Registration in Music 10 or permission of the instructor.

C.T.S. Financial Management 10
3 credits

Financial Management 10 provides an introduction to the principles of accounting. Students will learn basic bookkeeping skills from business startup, through a month of daily transactions, to month-end financial statements. Cash-only business examples will be used. Each course successfully completed earns you one credit.

C.T.S. Information Processing 10
5 credits

At the grade 10 level, students will take pre-requisite courses which will allow them to choose either an Office Administration route, or a Graphics/Web Design route when they continue with this course in Grade 11. All students will be expected to complete courses in Graphics, Digital Presentation, and complete an E-folio. Additional credits will be in various areas such as Word Processing, Spreadsheets, Web Authoring and Keyboarding. Each course successfully completed earns you one credit.

C.T.S. Computer Graphics 10
5 credits

At the grade 10 level, students will take prerequisite courses which are fully focused in the area of computer graphics. No Office type application courses will be offered within this course. You can expect to work in areas such as photo editing, digital presentation, web authoring, yearbook design and video editing. Each course

successfully completed earns you one credit.

C.T.S. Fashion Studies 5 credits

Fashion Studies is designed for students with an interest in fashion and sewing. Fashion design and illustration, construction, fashion merchandising, and textile arts are a few areas covered. Students are able to individualize the course by selecting 3, 4, or 5 modules from ten (10) areas for 3, 4, or 5 credits. Some materials will be supplied.

C.T.S. Foods 10 5 credits

Foods at the grade 10 level allows students, through skill development in the kitchen lab, to investigate the physical and chemical properties of foods. Students work on a variety of modules that focus on food groups and allow the student to be able to apply nutrition and consumer knowledge to the food and meal preparation that they do in the lab. This course emphasizes learning that can help students improve the quality of their everyday lives. The first module in CTS Foods is a prerequisite for all other Foods modules.

Drama 10 5 credits

This participatory course includes the fundamental aspects of drama—artistic exploration, theory, and performance. The student will receive a comprehensive introduction to the major elements of Alberta Education’s High School Drama Program including: scene study and analysis, acting, improvisation, design, movement,

speech, and media creation. The student will also attend at least one professional play production at a cost of approximately \$25.

C.T.S. Cosmetology 10 5 credits

Cosmetology Studies is a strand of C.T.S. introducing skills and practices for personal use or use in a related career field. Specific areas covered include braiding, manicures, hair techniques, curling iron and blow drying, make up, facials, and skin care. Student centered learning is encouraged, and client work is incorporated into the course.

C.T.S. Cosmetology 20 5 credits
Theatrical Makeup

Students will describe the purpose and scope of theatrical makeup. They will apply makeup to create images of selected characters and to enhance personal appearances for theatrical purposes. Students will construct and apply two and three dimensional makeup prostheses to recreate images of characters. Cosmetology 20 students will be expected to design and apply makeup for Olds High School Drama productions as part of this course. Prerequisite course is cosmetology 10.

CAREER & TECHNOLOGY STUDIES (Shop) 5 credits

CTS-Shop provides an opportunity for the student to develop skills that can be applied in their daily lives, when preparing for entry into the workplace, or in future post secondary opportunities. The focus of the CTS-Shop program is

to provide a safe environment so that students may identify and explore their interests while developing basic competencies. In all CTS-Shop programs the development of safe attitudes and practices are emphasized. There are two choices for grade 10:

Introduction to Woodworking 5 credits

(CON1010, CON1120, CON1130, CON2150, CON1910.)

This is your chance to learn about woodworking. Learn how to make basic wood joints and use basic woodworking tools and materials. Learn basic finishing techniques. This course provides the foundation for more advanced cabinetry or furniture making projects. Major projects include stools and the wooden roadster project.

Construction and Fabrication 5 credits

(CON1010, CON1070, CON2045, CON2050, FAB1010, FAB1040, FAB1910, FAB1048, FAB1050)

Experience working with both wood and metal. This course focuses on the skills used to fabricate buildings. Due to lab availability the semester one course will focus on basic carpentry skills where we will lay out wood frame walls and roofs for a garage or shed. The semester one metalworking component will incorporate basic metal working and oxy-acetylene welding. Semester two courses will have a shortened carpentry section and the addition of MIG or stick welding to the metalworking section.

**Radio and Television Broadcasting
(Media Arts) 5 credits**

This course is open to grade 10, 11 and 12 students and there will be advanced students in the class at the same time as those who have not taken the class before. Radio and Television Broadcasting includes both theory and practical use of cameras. Topics will include cinematography, editing, equipment operation, radio and television announcing, storyboarding, news, weather and documentary writing, directing, advertising, and station management. The goal is to provide video services for most events taking place in the school. We will video, edit, and produce DVD's as often as possible. Students taking this course must be prepared to commit time outside the regularly scheduled classes to participate in production schedules to record school activities such as drama productions, assemblies and sports events.

Physical Education 10 5 credits

A "module" approach has been implemented into the physical education program at the senior high level. This approach allows students to experience a variety of teaching styles and strategies,

changing classroom dynamics, a high level of participation, and most importantly the opportunity to select sports and activities that appeal to the individual student. Students have reported an extremely high level of satisfaction with this style of P.E. program.

The activities available within the modules are not prescribed or mandatory activities but have been chosen to achieve the intent of the four general and grade specific outcomes. Decisions about the activities offered are based on many considerations including safety, jurisdictional policy, student needs, facilities, equipment resources, teacher expertise and time allocation for the selected activities. Areas covered may include: terminology, history, selection and care of equipment, skills and techniques, rules and officiating, team play or game strategy (where applicable), lead up games, game variations and conditioning. Some of these areas will be incidentally taught while others will be taught directly.

GRADE XI COURSE DESCRIPTION

English 20-1

5 credits

English 20-1 is an academic course intended to promote the student's ability to interpret literature and to communicate effectively. Class activities fall into the areas of reading, writing, listening, speaking, viewing, and presenting. Representative works from each of the major genres of literature—the short story, poetry, drama, the novel, and the essay—will be examined. Thematically related literature will be integrated as appropriate. This course is the prerequisite for English 30-1 and has several major assignments.

English 20-2

5 credits

Though this course explores and studies several genre, the emphasis remains on communication skills. A recent addition to the course is the inclusion of a visual component, and text creation. The overall purpose of the course remains the same - improvement of the students' communication skills in preparation for the world of work.

Social Studies 20-1

5 credits

The modern world has been largely shaped by the advent, development and pursuit of nationalism. In Social Studies 20-1 students will examine the origins of nationalism, the implications of nationalism as a driving force of identity and the future of nationalism in our drastically evolving world. Major themes will include: nationalism as a source of identity; the pursuit of national

interests; internationalism; and Canadian national identity.

Social Studies 20-2

5 credits

Social Studies 20-2 will explore the development of nationalism and examine how nationalism finds expression in the modern global and Canadian contexts. Other key concepts to be explored include: ultranationalism; supranationalism; internationalism; citizenship; and identity. Emphasis will be placed on developing an appreciation and awareness of what it means to be Canadian in a world of multiple national perspectives.

Pure Mathematics 20

5 credits

Students are expected to have a graphing calculator for the course, preferably the Texas Instrument TI-83 Plus. Pure Math emphasizes math theory and the testing of mathematical hypothesis. The Pure Math approach, which is often deductive and symbolic, endeavors to show that concepts are valid all the time, or valid within a well defined set of restrictions. Real life problems are then presented in order for students to apply previously learned math procedures and concepts. Students will make use of algebra and graphing to solve problems. Algebra is taught both on a “when needed basis” and for its own sake.

Pure Math 10 is a prerequisite for Pure Math 20, and it is recommended that students choosing Math 20 Pure have a Math 10 Pure mark of 60%+.

Applied Mathematics 20 5 credits

Students are expected to have a graphing calculator for the course, preferably the Texas Instrument TI-83 Plus. The Applied Mathematics stream is designed for students who plan on post secondary education that is not mathematics intensive. The course emphasizes the application of mathematics and the use of numerical and geometric approaches to solve problems. The general approach is to solve a problem to lead to an understanding of the algebra involved.

Applied Math 10 is a prerequisite for Applied Math 20, and it is recommended that students choosing Math 20 Applied have a Math 10 Applied mark of 60%+.

Mathematics 24 5 credits

Mathematics 24 is based on practical applications of mathematics in everyday life. Topics include income and income tax, banking, purchasing a home, mortgages and household insurance, budgets and getting value for money spent, life and health insurance, and an elective component.

Biology 20 5 credits

Biology 20 is an academic course focused on the study of living things. A significant portion of the course includes a detailed study of the circulatory, respiratory, excretory, immune and digestive systems. The second unit, biochemistry, involves the concepts of photosynthesis and cellular respiration in a very thorough way. The last unit is ecology, and will include the topics of

biogeochemical cycles, biomes, biodiversity and evolutionary forces.

Chemistry 20 5 credits

Students will build on knowledge obtained in the Chemistry unit of Science 10 throughout this course. Three major outcomes will carry on throughout the 4 units of the Chemistry 20 course:

1. Use atomic theory and the periodic table to classify, describe explain, and predict the properties of elements.
2. Use atomic, ionic, and bonding theories to describe, explain, and predict the properties and chemical formulas for compounds.
3. Use reaction generalizations to describe explain, and predict chemical reactions.

Unit A: The Diversity of Matter and Chemical bonding – Students will describe the role of modeling, evidence, and theory used in explaining and understanding the structure, chemical bonding, and properties of ionic and molecular compounds.

Unit B: Matter as Gases – Students will explain molecular behavior of gases through gas laws, theories and mathematical relationships.

Unit C: Matter as Solutions, Acids, and Bases – Students are asked to investigate solutions, describing their physical and chemical properties, This will include describing acidic and basic solutions both qualitatively and quantitatively.

Unit D: Quantitative Relationships in Chemical Change – In many lab experiments, students will learn various lab skills, while being asked to balance chemical equations and indicate the quantitative relationship between

reactants and products using stoichiometric analysis.

To be successful in Chemistry 20, a student should have a least 65% in Science 10, as well as very strong math skills at either the Pure Math 10 or Applied Math 10 level.

Physics 20 **5 credits**

Energy is the science theme common to all units in Physics 20, with change, diversity, equilibrium, matter and systems also playing a role. Energy in its many forms causes change and determines the kind of change matter and systems undergo. The major concepts allow connections to be drawn among the four units of the course and among all eight units in the two courses in the program.

Physics 20 consists of four units of study:

Unit 1: Kinematics

In this unit, students investigate changes in the position and velocity of objects and systems in one and two dimensions.

Unit 2: Dynamics

In this unit, students investigate causes of change in the position and velocity of objects and systems in a study of dynamics and gravitation.

Unit 3: Circular Motion, Work and Energy

In this unit, students extend their study of kinematics and dynamics to uniform circular motion and to mechanical energy and power.

Unit 4: Oscillatory Motion and Mechanical Waves

In this unit, students investigate simple harmonic motion and mechanical waves.

To be successful in Physics 20 a student should have at least a 65% average in Pure Math 10 and Science 10.

Science 24 **5 credits**

Science 14-24 is a course designed to make the study of science and technology more meaningful to students and more relevant to their everyday lives now and as citizens of the future. The two course sequence satisfies the science requirements for the General High School Diploma. Topics include.

1. Body Systems
2. Disease
3. Household Science
4. Energy Consumption
5. Investigating the Environment
6. Materials We Use
7. Understanding the Technology
8. Safe Transportation

French 30 **5 credits**

(Taken at Grade 11 level but open to any student who has completed the French 20 pre-requisite)

This class revisits previous learning in Core French classes and builds on this knowledge to develop practical communication skills. Students are expected to express their ideas in French at all times during the class. Oral and written abilities are developed through exploration of more complex language structures, enhanced vocabulary and verb tenses. A multi-media approach is used to teach different aspects of the program, including a cultural component about the Francophone world.

Marine Biology**3 credits**

This course is offered to students who have a genuine interest in science, specifically marine biology, and wish to improve their understanding of the related topics. Concepts covered will be the physical characteristics of Canada's west coast, including the tides and aspects of the coastal temperate rainforest. A significant portion of the course will be marine biodiversity, and will focus on the behaviours, anatomy and physiology of several representative species. The course will culminate in a six-day trip to Bamfield Marine Research Station, located on Vancouver Island. Please note that there is a cost for the trip, which was approximately \$1,200 in 2008/2009. (Enrollment limited due to space restrictions at Bamfield Station)

Spanish 20 (via VC)****5 credits**

This course is designed to continue on from where Spanish 10 left off. It will explore the language at a higher level than Spanish 10 by introducing past and future tenses, as well as a much wider variety of speaking situations. Students will continue to be exposed to Spanish language and culture throughout the course, and will take part in several video conference sessions to other Spanish-speakers around the world.

** The instructor will deliver the course in Olds, Cremona, and Bowden simultaneously through videoconferencing (2-way real-time audio and video interaction)

Art 20**5 credits**

Art 20 is an intermediate level study of the visual arts in which students will examine various approaches to art and design. This course emphasizes the creative development of the mind along with development of techniques using a variety of media. Some of the art concepts and media covered in this course include:

- drawing skills and techniques
- portraiture with ink and charcoal
- painting techniques with acrylics and watercolor
- sculpture with clay, plaster, and wire.
- pottery and glazes
- mosaic design

Career & Life Management - Career Transitions**5-6 credits**

C.A.L.M. 20 is a six-credit core course required of all senior high school students. Included in the six credits are First Aid, and two other CTS modules. The aim of the C.A.L.M. course is articulated through three general outcomes:

1. Personal Choices: Students will apply an understanding of the emotional, psychological, intellectual, social, spiritual and physical dimensions of health and the dynamic interplay of these factors in managing personal wellbeing.
2. Resource Choices: Students will make responsible decisions in the use of finances and other resources that reflect personal values and goals and demonstrate commitment to self and others.
3. Career & Life Choices: Students will develop and apply processes for managing personal, lifelong career development.

The Career Transitions component of this program guides the student through the process of seeking employment, preparing résumés, completing applications, employment legislation, job safety, and other related topics. A personal portfolio will be prepared by each student for use as a potential employer information package. Career transitions provide valuable, practical preparation for employment following graduation. It is also a necessary prerequisite or co-requisite for work experience courses.

Leadership 15, 25, 35 3 or 5 credits

The general outcomes span all three T.E.A.M. Leadership courses 15, 25, and 35. The T.E.A.M. Leadership Program encourages students to practice the key elements of citizenship and servant leadership through peer and mentorship learning opportunities. Students are given the opportunity and encourages to develop their own leadership skills and to take risks and grow in positive and productive ways. It is experiential learning while making a difference within their leadership class, school and the extended community. Prerequisite is a positive attitude and a desire to be involved.

Credit allocation/instructional hours:

Level 15: 3 credits/75 hours or 5 credits/125 hours

Level 25: 5 credits/125 hours

Level 35: 5 credits /125 hours

Music 20 (Instrumental) 5 credits

Music 10 is the prerequisite. See Music 10.

Choral Music 20 3 credits

Provides students an opportunity to express, perform, and create vocal music. Musical skills such as reading music and correct vocal technique will be reinforced.

Music 20 (Instrumental) 5 credits

Music 10 is the prerequisite. This full year course will develop instrumental playing (band) in a performance ensemble setting. All band instruments will be taught. There will be a theory component dealing with notation, articulation, rhythm, scales, and music terminology. Many styles of music will be performed (rock, pop, Latin American, ballads, overtures, classical). Concerts will be performed during the year. These are required for course completion.

Music 25 (Jazz Band) 3 credits

See Jazz 15. Requirements: Registration in Music 20 or permission of the instructor.

Guitar 20 5 credits

Guitar 10 is the prerequisite. This is the second course in which students learn to read and play guitar through notes and chord symbols as well as TAB. Students will improve on various picking and strumming techniques in a variety of styles ranging from Blues, Pop, Rock, Country and Classical.

C.T.S. Fashion Studies 5 credits

Designed to build on Fashion Studies, grade 10 level, students choose three, four, or five modules from eleven (11) areas. Students work at an individual pace in such areas as fashion design, illustration, construction, pattern design, and specialty fabrics. This course can be offered for 3, 4, or 5 credits depending on the demand. Students will need to supply their own materials.

C.T.S. Foods 20 5 credits

In Foods at the grade 11 level, students work on a variety of modules such as rush hour cuisine, cake and pastry, and international cuisine. Throughout the course students develop an understanding of personal, family, cultural, environmental, and economic factors related to food behavior and choices. In all modules, that knowledge will be applied to cooking situations in the kitchen lab. This course is excellent for students who have enjoyed Foods at the grade 10 level and want to learn more!

CAREER & TECHNOLOGY STUDIES (Shop) 5 credits

Career and Technology Studies (C.T.S.) is designed to help students develop practical knowledge, skills, and attitudes appropriate to their personal or future work lives. Students select modules to explore careers or interests in trades, technologies and communications. Students are required to complete at least five (5) modules from seventy-five (75) modules offered in three levels

(introductory, intermediate, and advanced). Module levels are not limited to specific grades; you can begin at any time and progress at your own pace. Each completed module will earn the student one credit and the opportunity exists to earn 6, 7, or more credits during the course. (See Career and Technology Studies category descriptions in the Grade X section. They apply to all high school grade levels.)

Modules are grouped into general categories or strands. The strands presently offered are:

- Construction Technology
- Fabrication
- Design

Radio and Television Broadcasting (Media Arts) 5 credits

This course is open to grade 10, 11 and 12 students and there will be advanced students in the class at the same time as those who have not taken the class before. Radio and Television Broadcasting includes both theory and practical use of cameras. Topics will include cinematography, editing, equipment operation, radio and television announcing, storyboarding, news, weather and documentary writing, directing, advertising, and station management. The goal is to provide video services for most events taking place in the school. We will video, edit, and produce DVD's as often as possible.

Students taking this course must be prepared to commit time outside the regularly scheduled classes to participate in production schedules to record school activities such as drama productions, assemblies and sports events.

R.T.B. is not open to graduating grade 12 students in the second semester as a major portion of our time will be working in the grad production.

Drama 20 **5 credits**

This is a continuation of the skills explored in Drama 10 with more of a focus on acting and play production. The second year drama course also introduces playwrighting and theatre criticism. The student will also attend at least one professional play production at a cost of approximately \$20. Drama 10 is a prerequisite.

C.T.S. Legal Studies **3 credits**

Students will study a wide variety of topics including an introduction to the history and nature of law, contract law, family law, and law relating to basic rights and obligations. The civil and criminal law systems will be dealt with through study of case scenarios covering contract, tort, wills and estates, and crime fact situations. Common law and statute law will be examined. Guest speakers and a field trip to local or Calgary courts are possible additional features of the course.

General Psychology 20 **3 credits**

This introductory course is designed to give the student an insight into how and why we behave the way we do. Specific areas of study include: theories, learning

and learning strategies, adolescent behavior, abnormal behavior/treatment, and career options in Psychology.

Film Studies 20 **5 credits**

This course is designed to facilitate students' understanding of film as a distinct form of art, technology and visual media. Students will identify and explore social, cultural, and historical forces as represented in film. They will develop critical viewing techniques by interpreting the literary, dramatic, and cinematic aspects of film and other visual media. Students will be exposed to the concept of "books on film" and case study analysis to assess the connections that exist between the literary world and cinema. While viewing films will be a large part of the program, the range of activities will include: note-taking; written response; class discussion; internet research; essay and, oral and visual multimedia production and presentation.

Registered Apprenticeship Program (R.A.P.)

Students with an interest in pursuing technical programs requiring apprenticeship may register in these courses in grade eleven or grade twelve. They must consult with the principal prior to selecting these courses in order to learn the program requirements. Opportunities exist for students pursuing work in any approved trade.

Work Experience 25 5 credits

This course refers to employment undertaken as an integral part of a planned school program in Alberta that is under the cooperative supervision of a teacher coordinator and the employer. Students may obtain five (5) high school credits per course providing they have completed a minimum of 125 hours respectively in each course.

The program may be a career guidance or exploratory program wherein the student is given the opportunity to work at different occupations. The experience provides a basis, through observation and supervised participation, for an informed career choice. These courses are recommended for the grade eleven or twelve levels.

Students enrolled in work experience will have to complete a prerequisite career transition course.

Special Projects 20 5 credits

This course is for a student to pursue an area of interest not within the scope of the regular curriculum. Special projects are subject to approval of the coordinator. Students are required to submit a carefully structured proposal to the Coordinator of Special Projects. Special Projects proposals must be submitted and approved at the time of registration for the course. The

proposals should have approval before the end of June in the preceding school year. These courses are recommended for grade eleven or grade twelve students.

Health Pathways Initiative

Chinook's Edge School Division will be involved in implementing three health pathways courses: Sports Medicine, Early Childhood Development and Health Care Aide. The courses will be offered in CESD schools, and where possible will utilize the video-conferencing capabilities of the Community Engagement Sites. With the partnerships in the CLC, students could possibly transition to post-secondary or the workforce without leaving the region. If you are interested in pursuing a career in the health field and would like to learn more about this opportunity contact Mrs. Statchuk.

Sports Performance 3-5 credits

Sports Performance 15 will encompass all aspects of competitive sport training associated with individual and team play. The student athlete based aspects of functional training, physical conditioning, psychological strategies, technical skills, and game concepts will be key components of this curriculum.

GRADE XII COURSE DESCRIPTIONS

English 30-1

5 credits

English 30-1 is an academic course. At this level, the course is demanding of the student's effort and time—success depends on the student's commitment to do work outside of the classroom. The course is primarily a literature course with emphasis on reading, writing, and classroom discussion. Without strong study skills, good work habits, and self-directed learning, students may find they will face some difficulties. This course is recommended for those wishing to enter university and for those with a strong academic background.

English 30-2

5 credits

English 30-2 is for the student pursuing the General Diploma. The primary emphasis in the course is on improvement of some basic language and writing skills. Much of the work consists of short written assignments, language exercises, reading exercises, and thinking skills. New to the course is a variety of text creation and an emphasis on student responsibility. Students should be prepared to do a considerable amount of homework on a regular basis.

Social Studies 30-1

5 credits

This course explores the origins and complexities of ideologies and examines multiple perspectives regarding the principles of classical and modern

liberalism. An analysis of various political and economic systems will allow students to assess the viability of the principles of liberalism in the modern context. Students will be exposed to the roles and responsibilities associated with citizenship and will be encouraged to respond to emergent global issues.

Social Studies 30-2

5 credits

This course explores the origins, values and components of competing ideologies. Students will explore multiple perspectives regarding relationships among individualism, liberalism, common good and collectivism. An examination of various political and economic systems will allow students to determine the viability of the values of liberalism. Students will develop an understanding of the roles and responsibilities associated with citizenship and will be encouraged to respond to current global issues.

Pure Mathematics 30

5 credits

Students are expected to have a graphing calculator for the course, preferably the Texas Instrument TI-83 Plus. Pure Math emphasizes math theory and the testing of mathematical hypothesis. The Pure Math approach, which is often deductive and symbolic, endeavors to show that concepts are valid all the time, or valid within a well defined set of restrictions. Real life

problems are then presented in order for students to apply previously learned math procedures and concepts. Students will make use of algebra and graphing to solve problems. Algebra is taught both on a “when needed basis” and for its own sake.

It is recommended that students choosing Math 30 Pure have a Math 20 Pure mark of 60%+.

Mathematics 31 **5 credits**

All students who plan on attending a university to pursue a math, science, or business related degree should consider taking Mathematics 31. Pure Mathematics 30 is a prerequisite for Mathematics 31. Students will be permitted to take Pure Math 30 and 31 concurrently. Topics covered in the calculus section include derivatives of relations, maximum and minimum problems, graphing, application of derivatives and integration. Problem solving is an important part of this course. There is no diploma examination for this course.

Applied Mathematics 30 **5 credits**

Students are expected to have a graphing calculator for the course, preferably the Texas Instrument TI-83 Plus. This course is the completion of the Applied Math courses. It primarily is a course that is data driven, using numerical and geometrical problem solving techniques. Algebra is used, but not to the extent of the Pure Math course. Applied math tasks are designed to develop student flexibility and responsibility. Technology is an integral

part of applied mathematics. It is recommended that students enrolled in this course have 60%+ in Applied Math 20.

Biology 30 **5 credits**

This is an academic course with a Diploma Final Exam worth 50% of the student’s grade. The first unit of the course continues the study of Anatomy and Physiology of the human body with development of the nervous, endocrine, and reproductive systems. The unit of the course focuses on the biochemistry of human cells with the study of cellular knowledge leading to an understanding of protein synthesis, cellular reproduction, and genetics. The final and third unit of the course summarizes and applies the knowledge of genetics to populations and ecology.

Chemistry 30 **5 credits**

The themes of systems, energy, and change are central in Chemistry 30. The components of a system influence each other by the transfer of energy and matter, changes to one part result in changes to other parts of a system. Chemistry 30 consists of these units: Organic Chemistry, Thermochemical Changes, Electrochemical Changes, and Equilibrium: Acids and Bases in Chemical Changes.

Many of the concepts learned in Chemistry 20 will be used and expanded upon in this course. Chemistry 20 is a prerequisite for Chemistry 30. Lab skills will continue to be developed for practical chemical and analysis applications.

Physics 30 **5 credits**

The diversity of matter and energy are the predominant themes of the Physics 30 course. Physics 30 consists of four units:

Unit 1: Momentum and Impulse:

In this unit, Newton's second law of motion is linked to concepts of momentum and impulse.

Unit 2: Forces and Fields:

In this unit, students investigate electric and magnetic forces and fields and their applications in technological devices.

Unit 3: Electromagnetic Radiation:

In this unit, students study the nature and characteristics of electromagnetic radiation (EMR), using the wave and photon models of light.

Unit 4: Atomic Physics

In this unit, students study the development and modification of models of the structure of matter.

Physics 20 is a prerequisite for Physics 30. Pure Math 20 is also a suggested prerequisite.

Art 30 **5 credits**

Art 30 is an advanced level study of the visual arts in which students will focus on art appreciation as well as various techniques in art and design. This course emphasizes the creative development of the mind along with development of techniques using a variety of media. Some of the art concepts and media covered in this course include:

- advanced drawing techniques.
- portraiture with plaster.

- art history research and canvas painting.

- advanced painting techniques with acrylics & watercolor.

- pottery and glaze techniques.

Choral Music 30 **3 credits**

Provides students an opportunity to express, perform, and create vocal music. Musical skills such as reading music and correct vocal technique will be reinforced.

Music 30 (Instrumental) **5 credits**

Music 20 is the prerequisite. This full year course will develop instrumental playing (band) in a performance ensemble setting. All band instruments will be taught. There will be a theory component dealing with notation, articulation, rhythm, scales, and music terminology. Many styles of music will be performed (rock, pop, Latin American, ballads, overtures, classical). Concerts will be performed during the year. These are required for course completion.

Music 35 (Jazz Band) **3 credits**

See Jazz 15. Registration in Music 20 or permission of the instructor.

Guitar 30 **5 credits**

Guitar 20 is the prerequisite. This is the second course in which students learn to read and play guitar through notes and chord symbols as well as TAB. Students will improve on various picking and

strumming techniques in a variety of styles ranging from Blues, Pop, Rock, Country and Classical.

Drama 30 **5 credits**

This third year extension of the high school drama curriculum has particular focus on directing a short play as well as furthering the student's understanding of: acting, design, speech, movement, theatre criticism, and the media. Drama 20 is a prerequisite. This course may be used towards satisfying the arts requirement needed for college and university entrance. The student will also attend at least one professional play production at a cost of approximately \$25.

Physical Education 30 **5 credits**

The P.E. 30 curriculum will also be designed in the "module" approach to physical education (as outlined under the description for P.E. 10) with a greater focus in the dual and individual activities. There is a strong emphasis on the fitness aspect and its importance. Some theory will be presented to create a better understanding of nutrition, functional fitness and sports medicine concepts. The course has a strong flavour of recreational activities that may be pursued; or the participant will at least have the base to be able to participate in the future. Activities may include: badminton, cycling, skating, volleyball, archery, track and field, golf, tennis, swimming, curling, dance, racquetball, resistance and functional fitness training, etc.

There may be a variety of outdoor trips planned to cover areas of the curriculum. These trips are planned and designed to meet the interest of the groups involved. These trips may include downhill skiing and/or cross country skiing, cycle trips, camping trips and further educational trips in the Physical Education environment. On all trips, participation of the parents is welcome. Activities are selected at the instructor's discretion and the interest of the group.

C.T.S. Financial Management 30
5 credits

Financial Management at the grade 12 level places emphasis on the accountant's role in the use and preparation of financial reports, as well as a look into personal financial planning. Business adjustments studied would include depreciation, bad debt allowances and prepaid expenses. The basic general accounting concepts include: inventory control, notes, interest, departmental, partnership and budgeting. Computerized accounting simulations use the software Simply Accounting. Students must have completed Financial Management at the grade 11 level to take this course. Each course successfully completed earns you one credit.

C.T.S. Information Processing 30
5 credits

At the grade 12 level, students will continue in either the Office Administration route or the Graphics/Web Design/Multimedia route. Courses will depend on the route chosen. The Office Administration route

includes Word Processing, Spreadsheets, and Graphic Integration. The Graphics Route includes Photo editing, Web Page Design, and Multimedia presentations, including some Computer Animation. Each course successfully completed earns you one credit.

Computer Graphics 30 5 credits

Pre-requisite: Computer Graphic 20.

Students will continue their graphics/multimedia courses at the Advanced level. This is a dedicated graphics course allowing for more teacher instruction than in the general Information Processing course. Topics will include Graphic editing, Multimedia presentations, Web Page Design, Computer Animation, and Video Editing. The Adobe Suite is the main software used throughout this course. Each course successfully completed earns you one credit.

C.T.S. Fashion Studies 5 credits

Fashion Studies at the grade 12 level is designed for the self-motivated student, interested in expanding his/her skill and knowledge level. Advanced techniques in design and knowledge of specialty fabrics are covered. Individuals work at their own pace, on projects of their choice. This course is designed so students choose 3, 4, or 5 modules from eight (8) specialized areas.

C.T.S. Foods 30 5 credits

In Foods at the grade 12 level, students can significantly improve their skills and knowledge by working on a variety of

modules such as advanced preparation techniques, creative baking, entertaining with food, food presentation, and stages of the life cycle. This is an excellent course for students who have a real love and interest in foods and for their preparation. Students are encouraged to apply the knowledge gained in Foods to improve the quality of their everyday lives.

**CAREER & TECHNOLOGY
STUDIES (Shop) 5 credits**

Career and Technology Studies (C.T.S.) is designed to help students develop practical knowledge, skills, and attitudes appropriate to their personal or future work lives. Students select modules to explore careers or interests in trades, technologies and communications. Students are required to complete at least five (5) modules from seventy-five (75) modules offered in three levels (introductory, intermediate, and advanced). Module levels are not limited to specific grades; you can begin at any time and progress at your own pace. Each completed module will earn the student one credit and the opportunity exists to earn 6, 7, or more credits during the course. (See Career and Technology Studies category descriptions in Grade X section. They apply to all high school grade levels.)

Modules are grouped into general categories or strands. The strands presently offered are:

- Construction Technology
- Fabrication
- Design

**Radio and Television Broadcasting
(Media Arts) 5 credits**

This course is open to grade 10, 11 and 12 students and there will be advanced students in the class at the same time as those who have not taken the class before. Radio and Television Broadcasting includes both theory and practical use of cameras. Topics will include cinematography, editing, equipment operation, radio and television announcing, storyboarding, news, weather and documentary writing, directing, advertising, and station management. The goal is to provide video services for most events taking place in the school. We will video, edit, and produce DVD's as often as possible.

Students taking this course must be prepared to commit time outside the regularly scheduled classes to participate in production schedules to record school activities such as drama productions, assemblies and sports events.

**Registered Apprenticeship Program
(R.A.P.)**

Students with an interest in pursuing technical programs requiring apprenticeship may register in these courses in grade eleven or grade twelve. They must consult with the principal prior to selecting these courses in order to learn the program requirements. Opportunities exist for students pursuing work in any approved trade. Entry into the RAP program can begin the summer after grade 10 is completed.

Work Experience 35 5 credits

This course refers to employment undertaken as an integral part of a planned school program in Alberta that is under the cooperative supervision of a teacher coordinator and the employer. Students may obtain 5 high school credits per course providing they have completed a minimum of 125 hours respectively in the course.

The program may be a career guidance or exploratory program wherein the student may be given the opportunity to work at different occupations. The experience provides a basis, through observation and supervised participation, for an informed career choice. These courses are recommended for the grade eleven or grade twelve levels.

Special Projects 30 5 credits

This course is for a student to pursue an area of interest not within the scope of the regular curriculum. Special projects are subject to approval of the coordinator. Students are required to submit a carefully structured proposal to the Coordinator of Special Projects. Special Projects proposals must be submitted and approved at the time of registration for the course. The proposals should have approval before the end of June in the preceding school year. These courses are recommended for grade eleven or grade twelve students.

Sports Performance 3-5 credits

Sports Performance 15 will encompass all aspects of competitive sport training

associated with individual and team play. The student athlete based aspects of functional training, physical conditioning, psychological strategies,

technical skills, and game concepts will be key components of this curriculum.