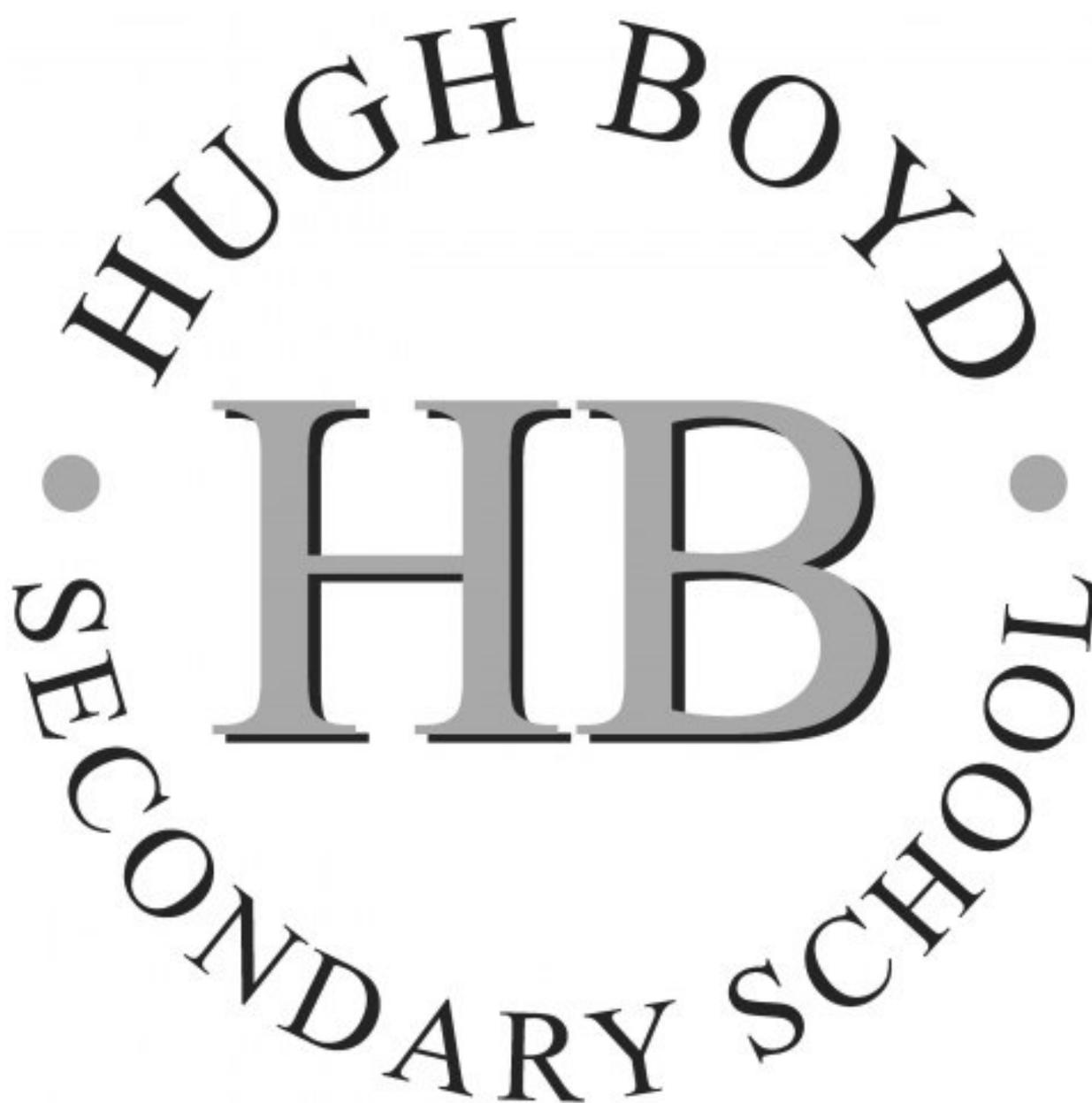


PROGRAM PLANNING GUIDE

2018-19



PROGRAM PLANNING OVERVIEW

This section of our school website is to provide students and parents with an overview of the course offerings at Hugh Boyd Secondary School. It is intended to help students and their parents choose the most appropriate courses for the upcoming school year. Some courses must be taken to meet the requirements of the Ministry of Education, while others will be chosen to meet individual interests and goals.

Please use the separate links on the website, under Students - Program Planning for more detailed course information from each department.

*****ALSO SEE LINKS BELOW IN THIS PDF**

Students' personalized and completed Program Planning forms must be signed by parents and are due in the office by **3pm on Tuesday, February 13th**. Due to timetable and staffing considerations, course changes will be difficult after initial selections and therefore it is very important that the selection of courses be done *thoughtfully*. Students and parents should examine this section of the website carefully and then discuss the choice of courses. **Course and timetable changes in September are not always possible.**

Students in Grades 10 through 12 need to plan their courses with career and/or post-secondary programs in mind. Please check with your counsellor if you have specific questions about options beyond high school.

Please note: courses will be run only if there is sufficient enrolment to justify a class. If a student selects a course for which there is insufficient enrolment, the student will be placed in the first alternative course identified by the student. Therefore, please choose alternate courses with care

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Arts

Arts: Theatre

Drama 8 – Introduction to Drama

Drama 8 is a half-year course that is combined with Art 8. Students will be introduced to drama concepts and performance techniques through theatre games, class exercises and group presentations. Drama will help students develop their confidence and it gives them a safe and creative space to express themselves in new and imaginative ways. In Drama 8, students will work on storytelling through tableau (frozen pictures), how to create a character vocally and physically, mime and creating a re-mixed fairy tale. The skills that students develop in Drama will help them in other subject areas and throughout their lives.

Drama 9 - Intermediate Drama and Performance

Students of Drama 9 will continue to develop the skills they learned in Drama 8. They will learn the skills and attitudes necessary to succeed in a performance group, including teamwork, adaptability, support and leadership. Students will practice new performance techniques and applications through units such as playbuilding, reader's theatre, lip syncs, puppetry, radio plays and theatresports. There will be a strong focus on mutual respect, personal expression and developing one's creative voice within a supportive group environment. Participation and inclusion are major aspects of this course. Students will be evaluated on these skills using rubrics published by the IB Middle Years Programme.

Drama 10 – Intermediate Drama and Performance

Students of Drama 10 will continue to develop the skills they learned in Drama 9. They will learn the skills and attitudes necessary to succeed in a performance group, including teamwork, adaptability, support and leadership. Students will practice new performance techniques and applications through units such as theatre technology, character mask creation, Commedia dell'Arte, theatresports, lip syncs and the production of a one-act play. There will be a strong focus on mutual respect, personal expression and developing one's creative voice within a supportive group environment. Participation and inclusion are major aspects of this course.

Drama 11 and 12: Senior Theatre and Performance Acting

Acting 11 and 12 will allow students to further develop their theatre skills as more complex material is explored and advanced acting techniques are learned. Some of the units this course will focus on mutual respect, personal expression and developing one's creative voice within a supportive group environment. Participation and inclusion are major aspects of this course. Entry into this course may depend on past experience.

Drama 11 and 12: Theatre and Performance - Directing and Script Writing

Directing and Script Writing is a course for students who have drama experience and an interest in creating new theatrical work. Students will have the opportunity to direct already-published works as well as develop and direct their own scenes, monologues and a short one-act play. This course emphasizes the working relationship between actor, director and playwright and the communication and collaboration skills that are necessary when directing one's peers. Students will work in tandem with a Drama 9/10 block or Drama 11/12 block and they will direct in-class student projects as well as their own work. There will also be opportunities for Directing and Script Writing students to direct or assistant direct school productions.

Arts: Music

Please note: your placement in Music courses is dependent on your level of experience. The first Music course you take (excluding Grade 8), whether you are in Grade 9 or 12 is Level 1.

Band 8

This course is designed for students who have some experience playing an instrument already. Students, who have never played but wish to start, should contact Mr. Naso, the Band Teacher. Course expectations include regular home practice and participation in evening concerts throughout the year.

Choir 8 - 12

This course is open to any student in Grades 8 to 12 who loves to sing. Students will develop their vocal technique and overall musicianship and will perform music from styles ranging from Jazz and Concert Choir repertoire to contemporary Pop songs. The ability to read music is an asset, but not essential. Performance is a goal of this group and, therefore, attendance at concerts and festivals is required. Extra rehearsals are sometimes needed in order to prepare for performances, festivals, and possible music tours.

Concert Band 9 - 12

Students should have previous band experience or previous musical background to participate in these courses. A variety of musical styles will be played and students will continue to develop their technique, notation reading, and knowledge of music theory and history. Students will grow as musicians through practice and participating in live performances. There will be opportunities to attend festivals and a Spring music trip.

Drumming 8 - 12

These are hands-on drumming courses designed for students wishing to explore rhythm and hand drumming technique. Drums and percussion instruments will be provided for class use. Students will work with musical elements such as form, dynamics, movement, and rhythmic design. The

ability to read music is an asset, but not essential. Brazilian and African drumming is the focus of course content but other cultures will be included. Evaluation will be based on daily participation, skill development and public performance.

Guitar 8 - 12

In addition to learning how to play the guitar, students will learn about basic music theory, rhythm, chord structure, and improvisation in these courses. Students will acquire a working knowledge of the fret board, chords, scales, and strumming/picking technique. A variety of musical styles will be covered including pop, rock, folk, and blues. Acoustic guitars will be provided in class for student use.

Jazz Band 9 - 12

Students should have previous band experience or previous musical background to participate in these courses. In addition to the standard jazz wind instruments (saxophone, trombone, and trumpet) this ensemble requires drums/percussion, electric guitar, piano, electric bass, and acoustic bass. Space is limited for students playing non-wind instruments so music reading ability and attitude will inform the selection of students for these important roles.

Music Composition 11 - 12

This course is designed for students who are already creatively involved in music and have a desire to produce their own original works. Music Composition is a project-based course that is largely self-directed. Therefore, students should be self-motivated and must use their time, both in and outside of class, efficiently. Use of the music department's recording studio is encouraged in order to document and present one's original musical creations. Learning to work with the technological aspects of the studio is included in the learning outcomes of this course.

Arts: Art

Art 8

Art 8 is a half –year course combined with Drama 8. In Art 8 students are introduced to a variety of 2-D and 3-D materials and processes, especially drawing, painting, and sculpture. With fun, imaginative assignments students explore their creativity and investigate the Elements of Art and Principles of Design. Students develop skills, vocabulary & knowledge to create, communicate, perceive and respond to artworks across a range of art periods, styles and cultural contexts. Students begin an MYP process journal (sketchbook) as a means to document process and develop self- reflective learning. Knowledge & Understanding, Creative Thinking, Developing Skills and Responding will be evaluated based on the IB MYP Arts rubric.

Studio Art 9 and 10 (Art Foundations and Drawing & Painting)

In Studio Art students develop their creative process through a broad range of concepts, materials and techniques. Drawing, painting, printmaking and mixed media concepts are investigated. Elements of Art and Principles of Design vocabulary are taught along with other image development strategies. Students create, communicate, perceive and respond to artworks across a range of art periods, styles and cultural contexts. Students use their MYP process journal (sketchbook) as a means to document process and develop self-reflective learning. Knowledge & Understanding, Creative Thinking, Developing Skills and Responding will be evaluated based on the IB MYP Arts rubric. The aim of the MYP program is to create internationally minded people who recognize their common humanity and role in the creation of a better, more peaceful world. This compliments “big ideas” from the New BC Arts Curriculum: “The arts provide opportunities to gain insight into the perspectives and experiences of people from a variety of times, places, and cultures.” “Creative arts experiences can build community and nurture relationships with others.” “Identity is explored, expressed, and impacted through arts experiences.”

NOTE *New projects are developed each year in all art courses so students can take consecutive years of Art and not repeat any projects even in mixed grade classes.

Studio Art 11 and 12 (Art Foundations and Drawing & Painting)

Senior Studio Art students hone their creative thinking, communication and craftsmanship through a range of design challenges, concepts, materials, techniques and processes. The bulk of the projects fall under the categories: Drawing, Painting, Printmaking and Mixed Media. Students learn how Elements of Art, Principles of Art and Image Development Strategies are used to improve their art. Students create, communicate, document, perceive and respond to artworks across a range of art periods, styles and cultural contexts. Students use a sketchbook for prep work and ongoing process documentation. Students interested in portfolio building or pursuing careers related to the arts can be supported in this class. Students will be assessed considering the “5 C’s:” Creativity, Craftsmanship, Composition, Colour, & Class time. In keeping with the big ideas from the New Arts Curriculum: “Active participation in the visual arts is an essential element of culture and personal identity and reveals insights into the human experience.”

Sculpture 3D - 9 and 10

In Sculpture students develop their creative process through a range of 3D concepts, materials and techniques. Course content includes: Ceramics (clay), paper mache, wire, cardboard, plaster carving, found objects, mixed media and installation. Elements of Art and Principles of Design vocabulary are taught along with other image development strategies. Students create, communicate, perceive and respond to artworks across a range of art periods, styles and cultural contexts. Students use their MYP process journal (sketchbook) as a means to document process and develop self-reflective learning. Knowledge & Understanding, Creative Thinking, Developing Skills and Responding will be evaluated based on the IB MYP Arts rubric. The aim

of the MYP program is to create internationally minded people who recognize their common humanity and role in the creation of a better, more peaceful world. This is in keeping with the big ideas from the New BC Arts Curriculum: “The arts provide opportunities to gain insight into the perspectives and experiences of people from a variety of times, places, and cultures.” “Creative arts experiences can build community and nurture relationships with others.” “Identity is explored, expressed, and impacted through arts experiences.”

Note *New projects are developed each year so students can take consecutive years of Art and not repeat any projects even in mixed grade classes.

Sculpture 3D - 11 and 12

Senior Sculpture students hone their creative thinking, communication and craftsmanship through a diverse range of 3D design challenges, concepts, materials, techniques and processes. Projects may use any of the following: Ceramics (clay), found object Assemblage, paper mache, wire, wood, plaster, fabric, cardboard, installation etc. Form and Function are both explored. Students learn how Elements of Art, Principles of Design and Image Development Strategies are used to improve their art. Students create, communicate, document, perceive and respond to artworks across a range of art periods, styles and cultural contexts. Students use a sketchbook for prep work and ongoing process documentation. Students interested in portfolio building or pursuing careers related to the arts can be supported in this class. In keeping with the big ideas from the New Arts Curriculum: “Active participation in the visual arts is an essential element of culture and personal identity and reveals insights into the human experience.”

Note *New projects are developed each year so students can take consecutive years of Art and not repeat any projects even in mixed grade classes.

Photo 9 - 12 (Level One - Beginner)

For students in Grades 9 through 12, Level One introduces a wide variety of techniques and concepts in photography including: traditional S.L.R. and digital camera basics, developing film, an introduction to the darkroom, photo- composition, history, theory and criticism. This course is also an introduction to digital image manipulation and graphic design basics using an assortment of photo editing and creative software programs such as Adobe Creative Suite and Lightroom. Collage techniques, mixed media and photo journaling will also be used to investigate important image development strategies and the Elements & Principles of Art & Design. Projects will be a mix of individual and small group. Students will have access to school SLR cameras (film & digital) for sign-out, however, their own personal camera is an asset.

Photo 9 - 12 (Level Two – Intermediate)

For students in Grades 9 through 12 who have already completed level one at Boyd. Level two gives students the opportunity to improve on techniques and concepts developed in Beginners Photo. Goals are to continue to explore Digital Photography, lighting and advanced darkroom

techniques and to develop richer photo imagery and strengthen composition. To have a more focused and creative approach to assignments and a strong work ethic. Students will have access to school SLR cameras (film & digital) for sign-out, however, their own personal camera is an asset.

Photo 9 - 12 (Level Three – Advanced)

For students in Grades 9 through 12 who have taken Beginner & Intermediate photo, level three gives students the opportunity to improve on techniques and concepts previously developed. Goals are to continue to explore Digital Photography, lighting and advanced darkroom techniques and to develop richer photo imagery and strengthen composition. To have a more focused and creative approach to assignments and a strong work ethic. Level 3 are expected to be more self-directed with regard to personal artistic goals and themes explored. Artist statements, critique experience, display and Portfolio support will be given. Students will have access to school SLR cameras (film & digital) for sign-out, however, their own personal camera is an asset.

***Photo 9/10 MYP students will be assessed on the following criteria: Knowledge & Understanding, Creative Thinking, Developing Skills and Responding (based on the IB MYP Arts rubric.) All photo students will be assessed in accordance with curriculum guidelines for curricular competency.**

Career Life Education

PLEASE NOTE THAT THE MINISTRY OF EDUCATION IS MAKING CHANGES TO GRADUATION REQUIREMENTS IN THIS AREA. BEGINNING IN 2018-2019, 8-CREDITS IN CAREER LIFE EDUCATION (CLE) and CAREER LIFE CONNECTIONS (CLC) WITH A CAPSTONE PROJECT WILL REPLACE THE 8-CREDITS FOR PLANNING AND GRADUATION TRANSITIONS. PLANNING AND GT WILL CONTINUE TO MEET GRADUATION REQUIREMENTS FOR THE GRADS OF 2019. READ MORE AT:

[https://curriculum.gov.bc.ca/curriculum/10-12#ce\(link is external\)](https://curriculum.gov.bc.ca/curriculum/10-12#ce(link is external))

Career Life Explorations 10

This course is a graduation requirement for all students in British Columbia and replaces Planning 10. Students will explore a variety of learning outcomes that are directly relevant to their future personal wellness, living arrangements, financial planning and career path. Career Life Explorations will invite students to consider the impact of their personal and career choices on themselves and others. Students will explore personal development, connections to the community and career and educational life plans.

Leadership 11

This is a locally developed course intended to assist students in developing leadership skills including taking initiative, delegating, and working cooperatively. Students will have opportunities to apply what they have learned to “real life” situations both within their school and the outside communities. Students will plan and implement several school based events, ranging from formal ceremonies to activities that foster school spirit. The course will also provide an introduction to fundraising initiatives. If you wish to take this course you need to get an application form from a counsellor. There will be an interview process.

Leadership 12

This is a locally developed course intended to build on students’ previous leadership skill-sets. Students will have opportunities to test the skills and strategies learned in the classroom in several “real-life” situations. The course will be based on a great deal of classroom interaction and a cooperative learning environment. Students will have opportunities to act as mentors by assisting with implementing a variety of school and community based initiatives. Students will also develop some topics and projects of interest to them. If you wish to take this course you need to get an application form from a counsellor. There will be an interview process.

GRADUATION TRANSITIONS - G.T. will be replaced with a required 4-credit new course called CAREER LIFE CONNECTIONS (CLC) as well as a CAPSTONE PROJECT. Students entering Grade 11 in 2018-2019 will be required to complete CLC and the Capstone - please keep this in mind in your planning.

The Grads of 2019 will be the final class to complete Graduation Transitions. Graduation Transitions occurs outside of class over three years and is intended to prepare students for a successful transition to life after secondary school. Students begin working on Graduation Transitions outcomes in Planning 10 and they will update and finally complete GT during their Grade 12 year. The final mark will be Requirements Met (RM) and must be done to achieve graduation in B.C.

The key requirements that must be completed to meet the Graduation Transitions program are listed below. Within this framework, students will showcase their unique competencies in grade 12.

1. Personal Health Section:

- Physical Activity Log (s) – 150 minutes/week
- Evidence of Physical Activity
- Personal Healthy Living Plan
- Summary of Health Goals

2. Community Connections Section:

- Work/Volunteer Experience Form(s) – 30 hours
- Evidence of Work/Volunteer Experience
- Safety Orientation Checklist (where applicable)
- Transferring Skills
- Resumé

3. Career and Life Section:

- CareerCruising information
- A, B or C plan for after high school

4. Financial Plan:

- Financial Plan Budget sheet

5. Presentation:

- Preparation Questions
- Preparation Chart

Design - Business and ICT (ADST)

Business Education and Information Technology courses fit under the Applied Design, Skills and Technologies curriculum.

Information Technology 9

Information Technology 9 introduces students to computer applications and implications. Students will be exposed to word processing, electronic communications, multimedia, video editing, computer graphics, programming, computer hardware and desktop publishing. Students will leave this course with a solid foundation in basic technology use.

Information Technology 10

Information and Communications Technology 11 is modular course focusing on 2 core pathways involving computers. Students will develop a working knowledge of the nature, uses and limitations of computers through the use of various software applications and hardware peripherals. This course will cover digital media development (2D Graphic Design and Publishing, 3D Design and Animation, Web Publishing, Desktop Digital Video) and computer programming (Introduction to Programming, Programming Methodology, Programming Structures, Graphics and User Interfaces) as time permits.

Accounting 11

This course is designed for students who desire an introduction to accounting. It is recommended for students who are planning to pursue business or commerce studies. Accounting is also a great course for students who simply have an interest in managing their finances well. It covers the basic accounting cycle, banking procedures, financial statements and payroll accounting. Students will complete exercises that are similar to processes small businesses engage in.

Information Technology 11

In this course students learn more advanced features of graphics rendering, animation, programming, web site development, and video editing. This course will cover advanced topics in digital media development and computer programming.

Marketing 11

This is an introductory activity-based course in the basic concepts of marketing. Topics covered include: marketing strategies, public relations, distribution, advertising, ad design, consumer

motivation, credit, selling techniques, and the “psychology of selling”. This practical course is applicable to many careers. Students will learn about productivity and motivating employees. The units covered include how to start a retail business and how to use advertising and salesmanship to the best advantage.

Keyboarding 11 and 12

Word processing is for everyone. It is strongly recommended that every student acquire keyboarding skills by completing this course. The course is divided into three areas: 1) touch typing with a goal of 30 words per minute; 2) fundamental formatting skills for business and academic applications such as letters and essays; and 3) application of the above two skills while learning to operate the Apple computer in a networked lab setting. A solid foundation in keyboarding and computer skills will be a great asset for future courses.

Accounting 12

This course is a continuation of Accounting 11 for students who wish to further their knowledge of financial procedures.

Entrepreneurship 12

Entrepreneurship 12 is a highly interactive, skill building course. All businesses begin with the ideas of entrepreneurs. Entrepreneurs identify and explore opportunities, research the resulting ideas, locate and organize resources and begin to turn the ideas into reality. Entrepreneurship 12 helps students to gain an understanding of the entrepreneurial spirit in the context of starting a small business. Within a secure and supportive environment, students research, develop, and implement venture plans that link technical and managerial resources and innovation. The course offers students opportunities to develop a business knowledge base. No matter what profession a student wishes to pursue, the skills learned in Entrepreneurship 12 will be beneficial.

Information Technology 12

In this course students learn more advanced features of graphics rendering, animation, programming, web site development, and video editing. This course will cover advanced topics in digital media development and computer programming.

Marketing 12

This course is a continuation of Marketing 11 for students who wish to further their knowledge of marketing procedures.

Design - Home Economics (ADST)

Home Economics courses fit under the Applied Design, Skills and Technologies curriculum.

Food Studies 9

This course will focus on skills in the areas of food preparation and meal planning with an emphasis on nutrition and time management. Students working in cooperative groups prepare a variety of popular foods. The skills and knowledge acquired in this course not only provide students with practical skills for everyday life, but also expose them to future career opportunities in food preparation and the hospitality and tourism industries.

Fashion & Design Studies 9 and 10

This courses will focus on sewing techniques. The first sewing projects are designed to teach the use of the serger in connection with the sewing machine to produce quality work. This course provides practical skills for everyday life and leisure activities and also exposes students to future career options in the clothing and textiles industry.

Food Studies 10

This is an intermediate course designed to broaden the student's experiences in cooking techniques. This course extends students' knowledge of basic baking and cooking methods and incorporates an International Foods component. This includes learning about different cultures and their culinary practices. A study of eating habits, health issues and diets are an integral part of the course. Labs allow for more student-led direction and involve practical skills for successful independent living. **Recommended Preparation: Food Studies 9**

Fashion and Design Studies 11

This is an intermediate course designed to improve and expand sewing skills learned in Textile Studies Level 9 or 10. Students will learn techniques to construct more difficult projects, to speed up construction and to produce quality garments. Students choose their own projects which can include pants/dresses, shirts/jackets, or other coordinated outfits. Students will become more aware of their individual skill levels and will strive to take on new challenging projects. This course provides practical skills for independent living and leisure activities and also exposes students to future career opportunities in the areas of clothing manufacturing, fashion design, merchandising and wardrobe planning. **Recommended Preparation: Fashion and Design Studies 10**

Food Studies 11

This is an advanced course recommended for students with an interest in gourmet cooking and learning about different ingredients and techniques. The course's main components include baking and working with meats and vegetarian alternatives. A wide variety of baked goods and other items are prepared so that students gain practice in meal planning and preparation. Nutrition is an integral part of this course. Students will be given the opportunity to plan and select recipes for use in the lab. **Recommended Preparation: Food Studies 10**

Food Studies: Baking 11 and 12

This is an advanced course is designed for students who enjoy baking as a hobby or as a future career. Emphasis will be placed on baking skills and practices and theory. Students will have the opportunity to exercise their creativity and artistic skills through the exploration of different types of recipes and ingredients. Unit topics will include the preparation of breads, pastries, cookies and cake decorating. **Recommended Preparation: Food Studies 10 or 11**

Fashion and Design Studies 12

This course is designed for those students who would like to expand their sewing skills for both personal and career use. The self-challenging curriculum focuses on professionalism, quality and pride of project construction. Among the units to be covered are specialty fabrics, advanced serger use, and fashion careers. The choice of projects will be determined by the fabric and pattern that the individual chooses. **Recommended Preparation: Fashion and Design Studies 11**

Food Studies 12

This is an advanced course recommended for students with an interest in learning gourmet cooking or who are interested in a career in food services or the food industry. The course is planned around two main components: International Foods and Party Foods and Entertaining. It includes a study of different cultures and their cooking. As well, a study of eating habits, health issues, and diets are an integral part of the course. Labs are more student directed and are more advanced in meal preparation, food costing and presentation. **Recommended Preparation: Food Studies 11**

Design - Technology Education (ADST)

Technology Education courses fit under the Applied Design, Skills and Technologies curriculum.

Technological Education 8

Students will work in a variety of areas to develop and use technology, develop plans and design products within their ability. Learn about technical requirements of various careers and safety. The use of different materials and their possible use in the future. Areas looked at will be in Electronics, Wood Work, Technology Design and Fabrication and CAD.

DRAFTING AND DESIGN

CAD - Design & Drafting 9 and 10

This hands-on course is an introduction to computer-aided drafting (CAD), 3D modeling, animation, photo manipulation, and video production that provide students the opportunity to explore the world of Engineering and Presentation graphics. Students will learn and practice a variety of techniques and styles exploring the diverse capabilities of the computer as required in the industry. This course is strongly recommended for all students interested in the Engineering, Architecture, Graphic design, Industrial design, Interior design, Trades, Technology, Advertising and/or Film and Animated production. The course is divided into different areas of study where the students will create projects such as: common everyday mechanical devices, furniture, 3D animations, photograph manipulations and short films. Programs used in this course include: AutoDesk Inventor, 3D Studio Max, Adobe Photoshop and Adobe Premiere.

CAD - Design & Drafting 11

This hands-on course is a continuation of computer-aided drafting (CAD), 3D modeling, animation, photo manipulation, and video production from level 1. Students will learn and practice a variety of techniques and styles exploring the diverse capabilities of the computer as required in the industry. This course is strongly recommended for all students interested in the Engineering, Architecture, Graphic design, Industrial design, Interior design, Trades, Technology, Advertising and/or Film and Animated production. The course is divided into different areas of study where the students will create projects such as: common everyday mechanical devices, furniture, 3D animations, photograph manipulations and short films. Programs used in this course include: AutoDesk Inventor, 3D Studio Max, Adobe Photoshop and Adobe Premiere.

CAD - Design & Drafting 12: Architecture and Habitat

This is an advanced course suitable for those students bound for a career in engineering, architecture, and related fields. In this course, students explore the basics of architecture. AutoCAD is used to draw a set of working architectural drawings to the permit standards set by the City of Richmond (site plan, floor plan, cross-section and elevations). Students build a scale model of their house.

CAD - Design & Drafting 12: Mechanical

This course is designed for those students who want to continue further studies in technical drafting and who are interested in manufacturing, fabrication, research and development, and service industries. It will prepare students to be able to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. Students will learn 3D AutoCAD. Upon successful completion, students could qualify for entry into advance drafting courses at technical universities.

CAD - Design & Drafting 12: Technical Visualization

Computer animation is a growing industry and is used extensively in film and advertising. Students must be capable of working independently and be motivated to learn. Topics covered are materials, lighting, camera techniques, and character animation all with the use of 3D Studio Max. It is expected that students will produce a CD of their work that can be added to their portfolio. Each student will plan a major final project based on the skills they have acquired and in consultation with the teacher.

Drafting 11

Drafting and design are the backbone of industry. Design is an integral part of every man made object. It is how we communicate our ideas about objects we want built. In this course students will learn the basics of technical drawing. Students interested in any aspect of technology should consider taking this course. Hand drafting and the AutoCAD drafting computer program will be introduced.

Drafting 12: Architecture and Habitat Design

This is an advanced course suitable for those students bound for a career in engineering, architecture, and related fields. In this course, students explore the basics of architecture. AutoCAD is used to draw a set of working architectural drawings to the permit standards set by the City of Richmond (site plan, floor plan, cross-section and elevations). Students build a scale model of their house.

Drafting 12: Engineering and Mechanical Option

This course is designed for those students who want to continue further studies in technical drafting and who are interested in manufacturing, fabrication, research and development, and service

industries. It will prepare students to be able to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. Students will learn 3D AutoCAD. Upon successful completion, students could qualify for entry into advance drafting courses at technical universities.

Drafting 12: Technical Visualization

Computer animation is a growing industry and is used extensively in film and advertising. Students must be capable of working independently and be motivated to learn. Topics covered are materials, lighting, camera techniques, and character animation all with the use of 3D Studio Max. It is expected that students will produce a CD of their work that can be added to their portfolio.

ENGINEERING

Engineering 9

Engineering 9 is a hands-on project based course that introduces students to the concepts of engineering and provides an understanding of technology topics. This course encourages students to develop design skills and technical skills through an applied engineering perspective using a variety of materials and resources. Students will discover how to use technology to make things by learning to design projects, manipulate a variety of materials and experiment with engineering principles.

Engineering 9 meets both prescribed learning outcomes and IB MYP Technology aims and objectives. Students will use the design cycle to investigate an engineering problem, plan a solution to the problem, create and use an evaluation of the students' design. To overcome these engineering challenges, students will work collaboratively to overcome their assigned task. This course will also give students the opportunity to learn a variety of technical skills such as CAD design, fabrication using various material and technical processes to create a multitude of various projects. Through direct instruction, student based inquiry and hands on project based learning, students will engage in solving various technical solutions to technical challenges. Topics of study include Bridge and Car Design, Medieval Weapons and Rockets.

Engineering 10

Engineering 10 is a course that meets both prescribed learning outcomes and IB MYP Technology and objectives. This course builds upon the design and problem solving skills developed in Engineering 9. Further study into the cycle of design and how it can be used to problem solve from an engineering perspective will be the concentrated focus of this course. To overcome these engineering challenges, students will work collaboratively to overcome their assigned task. This course will also give students further opportunities to build upon knowledge of technical skills such as Computer Aided Design (CAD), wood and metal fabrication using various materials and technical processes to create a multitude of projects.

Through direct instruction, student based inquiry and hands on project based learning, students will engage in solving various technical solutions to technical challenges. Topics of study include Structural Building and Car Design, Crash Test Analysis and Robotics.

Engineering 11

This course builds upon the design and problem solving skills developed in Engineering 10. Further study into the cycle of design and how it can be used to problem solve from an engineering perspective with a focus on control, automation and robotics will be the concentrated focus of this course. To overcome these engineering challenges, students will work collaboratively to overcome their assigned task. This course will also give students further opportunities to build upon knowledge of technical skills such as CAD design, wood and metal fabrication using various materials and technical processes to create a multitude of projects. Through direct instruction, student based inquiry and hands on project based learning, students will engage in solving various technical solutions to technical challenges.

Engineering 12: Industrial Design

This advanced course is for highly self-motivated students who have completed at least two years of Technology Education, and would like to further develop their skills in this area in order to pursue a career in a related field. This course is customized with individual projects and content is keyed to specific technical knowledge to match career interests and abilities of the students. Students will use the engineering design process to problem solve, test and evaluate working prototypes. Areas of in-depth investigation may include: building technology, mechanical engineering, civil/structural engineering, industrial design, environmental technology, metal manufacturing, aviation, electronics, and robotics.

METALWORK

Metalworking 11

Metalwork 11 is an introductory course in metal work. Design elements will be discussed along with the importance of project planning. Skills in sawing, brazing, filing and sanding, texturing and polishing, working with machines and other hand tools will be developed. Each student will plan a major final project based on the skills they have acquired and in consultation with the teacher.

Metalworking 12

Metalwork 12 is a continuation of Metalwork 11. Advanced design elements will be discussed along with the importance of project planning. Skills in sawing, brazing, filing and sanding, texturing and polishing, working with machines and other hand tools will be developed. Each

student will plan a major final project based on the skills they have acquired and in consultation with the teacher.

WOODWORK

Woodworking 9 and 10

Woodworking 9 is an introductory course in woodworking. The course will cover the basic principles using a variety of hand and machine tool operations with the care of equipment and safety as a number one priority. Through a variety of projects, students will learn about the design process as well as how to read and develop working drawings, measure, cost and layout material, and learn a variety of joinery skills.

Woodworking 11

Woodworking 11 is an introductory course in woodworking. The course will cover the basic principles using a variety of hand and machine tool operations with the care of equipment and safety as a number one priority. Through a variety of projects, students will learn about the design process as well as how to read and develop working drawings, measure, cost and layout material, and learn a variety of joinery skills.

Woodworking 12

This is a project-orientated course for students who wish to develop their potential in woodwork as a hobby or career. Building on their previous experience, students will learn more advanced methods of joinery (i.e. mortise and tenon), wood finishing (i.e. staining), carving, and the use and maintenance of hand and power tools. Students will also further expand their knowledge of the design process and will have the opportunity to apply it to some of their projects throughout the course.

Woodworking 12 Advanced

This is a senior level course suitable to grade 11 and 12 students bound for a career in woodwork, construction, stagecraft and carpentry or students who enjoy woodworking as a hobby and want to benefit from the skills and techniques learned. Students will be expected to work independently from plans and project books with the opportunity to be able to design and build their own projects with the teacher's permission. Advanced techniques on equipment and hand tools will be taught to further advance your skills in the wood shop.

English Language Learning

Special support is provided to students whose first language is not English. Initial placements to the program are carried out by district ELL staff. Students work through levels 1 through 5. Beginner levels of ELL are 1 and 2 while intermediate levels are 3 and 4. ELL levels 1 and 2 focus on intensive English acquisition in speaking, listening and vocabulary building in the subjects of Science, English Culture Studies, and Social Studies. Levels 3 and 4 focus on more academic writing and reading in the subjects of Social Studies and English.

Students at level 5 continue to enrich their understanding of English in their regular courses and receive support from an ELL specialist teacher.

ELL 1/2 Beginner English Cultural Studies

This course focuses on the four core aspects of English skills: listening, speaking, reading and writing. Language for communication is the emphasis of this course.

ELL 1/2 Beginner Social Studies

This course focuses on Canadian geography, history and government. The provinces, capitals, regions, resources and industries will be studied.

ELL 1/2 Beginner Science

Science vocabulary and the scientific method form the foundation of this course. Students will learn how to read science textbooks and gain confidence for future science courses.

ELL 3 Intermediate English

This course focuses on reading and writing. Authentic reading materials will be used from a variety of sources. Students will extend their vocabulary, reinforce their grammar skills and explore a variety of writing styles.

ELL 3 Intermediate Social Studies

Multiculturalism, global issues and historical content will be discussed in this course. Students will work on research skills and the writing process.

ELL 4 Advanced English

This is the last ELL course students take before full integration into all other courses. The emphasis is on writing. Students will continue to expand their vocabulary, hone their grammatical skills, and become comfortable with a variety of writing styles.

Individuals & Societies

Individuals & Societies 8 (Socials 8)

Students will use geography skills and historical analysis to understand the development of world civilizations. Students will examine factors that have shaped modern society and make connections between the past and the present.

Individual & Societies 9 (Socials 9)

Individuals and Societies 9 builds on themes developed in Individuals and Societies 8. Starting by looking at Canadian foundations in Europe, students will study the building of Canada as a nation through to Confederation. Students will analyze Canadian history through both the European and First Nations lens. Geographic knowledge and skills previously acquired are reinforced and expanded through a study of Canada's present economy. **Recommended Preparation: Individual & Societies 8**

Individual & Societies 10 (Socials 10)

Individuals and Societies 10 deals with fundamentally important topics and issues that are basic to citizenship in Canada and the world. Students will examine the historical background and structure of our federal, provincial, and municipal governments. Another aspect of Individuals and Societies 10 is an in-depth study of current global issues such as population explosion, the food crisis, resource allocation and Third World development. Equally relevant is a thorough study of Canada's development as an independent nation and its role in the world community during the twentieth century. Highlights of this section of the course are World War I, the Depression, World War II, peacekeeping, and the socioeconomic growth of the nation. **Recommended Preparation: Individual & Societies 9**

20th Century World History 11 and 12

This course examines the history of world affairs in the 20th century, concentrating on the time period between 1919 and the present day. There is an emphasis on the West and its relation to world affairs. Included are the effects of the world wars, the decline of European power, the polarization of the Cold War, the end of colonial empires, and the emergence of a new modern era, including an emphasis on human rights. Students should be aware that critical thinking, analysis of historical information and essay writing are important parts of the course. **Recommended Preparation: Individuals and Societies 10**

BC First Peoples 11 and 12

The course focuses on the diversity and depth of the cultures of British Columbia's First Nations. In emphasizing the languages, cultures, and history of First Nations peoples, the course addresses

an important part of the history of British Columbia. Designed to introduce authentic Aboriginal content into the senior secondary curriculum, the course provides an opportunity for BC students to acquire knowledge and understanding of the traditions, history, and present realities of BC Aboriginal peoples, as well as a chance to consider future challenges and opportunities. The course incorporates an important balance of expository and experiential learning. BC First Nations Studies addresses the richness and diversity of First Nations languages and cultures by exploring them within their own unique contexts. It is intended to provide a conceptual foundation for all learners to develop an appreciation and respect for similarities among and differences between the diverse cultures of the world. **Recommended Preparation: Individuals and Societies 10**

Geography (Human & Physical) 11 and 12

Geography is the study of the physical, natural and human elements of the global environment. The course examines many of the characteristics, processes, distributions and interactions among the physical components of the Earth's surface. Studies include: natural disasters, plate tectonics, climate, weather, demography, human and environment interactions, resources as well as future environmental concerns. The course will also allow for an in-depth study on sustainability. Course work will include mapping skills, air photo interpretation and labs. **Recommended Preparation: Individuals and Societies 10**

Law Studies 11 and 12

Law is a survey course, designed to give students an understanding of Canada's legal system. The topics covered include criminal law, civil law (including torts), family law, contracts, the structure of Canada's court system, and the Charter of Rights and Freedoms. Current legal issues are also discussed in class. The course will include visits to the criminal courts, mock trials and guest speakers. Student evaluation will be done through tests, quizzes, presentations and trials. Students should expect to regularly speak in front of the class. There will be unit exams and a final exam at the end of the course. **Recommended Preparation: Individuals and Societies 10**

Social Justice 11 and 12

Social Justice is a course that allows opportunities to make connections between self-identity and an individual's relationship to others in society. Past and present social injustices in Canada and the world are analyzed, looking at the lasting impacts. Students will also study the roles of governmental and non-governmental organizations in issues of social justice and injustice. Students should expect to regularly speak in front of the class, discussing issues relating to human rights and how to responsibly navigate through our world. **Recommended Preparation: Individuals and Societies 10**

Language Acquisition

FRENCH

French 8

In French 8, students will begin to develop their French writing, reading, listening and speaking skills at a basic level. They will begin to build their vocabulary and express themselves in the present tense, focusing on their preferences and their day-to-day lives. Evaluation will be based on writing, reading, oral communication, listening, project work and tests.

French 9

In this course students will continue to develop their writing, reading, listening and speaking skills. Students will be encouraged to express themselves “en français” in the past, present and future tenses and will add to their vocabulary through a variety of themed units. Evaluation will be based on writing, reading comprehension, oral communication, listening, project work and tests.

French 10

In this course students will begin to master certain components of the French language and continue to improve their writing, reading, listening and speaking skills. New grammatical concepts will be learned and students will be expected to communicate at a higher level in both their written work and their speaking. Evaluation will be based on writing, reading comprehension, oral communication, listening, project work and tests.

French 11

In this course students will continue to master several components of the French language and to improve their writing, reading, listening and speaking skills. Expectations for written and oral output will be higher as students will begin to refine their language and be exposed to new and more sophisticated grammatical concepts and reading materials. Evaluation will be based on writing, reading comprehension, oral communication, listening, project work and tests.

French 12

In French 12, students will continue to master elements of the French language and to refine their writing, reading, listening and speaking skills. Students will read and respond to a variety of texts from the Francophone world as well as participate in a novel study. Evaluation will be based on writing, reading comprehension, oral communication, listening, project work and tests.

JAPANESE

Japanese 8

This is an introductory course in the Japanese language. Students will master written hiragana and participate in Japanese conversations used in familiar settings of the home, school and town. Japanese culture will be emphasized through activities and discussions. Evaluation will be based on writing, reading, comprehension, oral communication, listening, project work and tests.

Japanese 9

This course is intended to improve and extend the ability of students who have completed Japanese 8. Emphasis will be given to the further development of oral and written communication. Students will be able to read and write katakana and use it in a variety of contexts. Japanese culture will continue to be studied. Evaluation will be based on writing, reading, comprehension, oral communication, listening, project work and tests. **Recommended Preparation: Japanese 8 or an equivalent first year introductory class from another school**

Japanese 10

This course will further develop the students' ability to communicate effectively in Japanese. They will be expected to read, comprehend, summarize and respond to a variety of texts in both written and spoken Japanese. Some kanji will be introduced. Students will also be encouraged to further analyze the customs, values and other elements of the Japanese culture. Japanese culture will continue to be studied. Evaluation will be based on writing, reading, comprehension, oral communication, listening, project work and tests. **Recommended Preparation: Japanese 9 or an equivalent second year intermediate class from another school**

Japanese 11

This course will further extend students' capabilities to communicate in Japanese in an increasing number of situations and with progressive complexity. More kanji will continue to be learned. Evaluation will be based on writing, reading, comprehension, oral communication, listening, project work and tests. **Recommended Preparation: Japanese 9 or an equivalent second year intermediate class from another school**

Japanese 12

This course will allow students to refine their abilities to communicate in Japanese. They will master complex grammatical structures and many more kanji. Evaluation will be based on writing, reading, comprehension, oral communication, listening, project work and tests. **Recommended Preparation: Japanese 11 or an equivalent fourth year advanced class from another school**

MANDARIN

Mandarin 11

This course is suitable for students who have some knowledge and skill with either Mandarin or Cantonese. The emphasis of the course is listening and speaking skills. Students are expected to expand their vocabulary and to develop proficiency in expressing themselves in everyday situations. In writing, students will be taught Chinese characters in addition to the Pinyin Romanization system. Curricular enrichment such as cultural studies and field trips will be offered. Students should see Ms. Ye, the Mandarin teacher, to determine if they are appropriate candidates for Mandarin 11.

Mandarin 12

Mandarin 12 is an advanced course in the study of the Chinese language and culture. It is a purposeful program allowing students to increase their ability to communicate in oral and written Chinese at a more serious level.

Spanish 8

This is an introductory course in Spanish with an emphasis on listening and speaking as well as reading and writing. A positive attitude toward the learning of a second language and related culture will be fostered. Students will be able to communicate information about themselves.

SPANISH

Spanish 9

This course is intended for those who have successfully completed Beginner Spanish. As with the previous course, emphasis will be on listening, speaking, reading and writing. A positive attitude toward the learning of a second language and related culture will be fostered. Students will be able to communicate in the present and past tenses. **Recommended Preparation: Spanish 8 or an equivalent first year introductory class from another school**

Spanish 10

This course will build on the skills developed in Spanish 8 & 9. Again, emphasis will be on listening speaking, reading, and writing. A positive attitude toward the learning of a second language and related culture will be fostered. Students will be able to communicate in the present and past preterit tenses. **Recommended Preparation: Spanish 9 or an equivalent second year intermediate class from another school**

Spanish 11

This course is not only a selected revision of the most important points covered in Spanish but also a purposeful program allowing the students to increase their ability to communicate in oral and written Spanish at a more serious level. All four language skills will be thoughtfully fostered through units on travel, childhood and health. At the end of Spanish 11, students will be able to communicate in the past, preterit imperfect and present tenses in a variety of situations that they could encounter in a Spanish-speaking country or culture. **Recommended Preparation: Spanish 10 or an equivalent third year advanced class from another school**

Spanish 12

Students will continue to improve and master their communicative skills in Spanish through practice and study of a variety of thematic units. Students will leave Spanish 12 with the ability to communicate using advanced grammar including the conditional, future, and imperfect tenses as well as the imperative and subjunctive moods. They will explore these structures through units on health, travel, and the environment. **Recommended Preparation: Spanish 11 or an equivalent fourth year advanced class from another school**

Language and Literature

English 8

Students will begin an academic development of skills in English. Areas of focus include reading, writing, listening and speaking. Short stories, novels and poetry are major areas of study. Creative writing will also be emphasized. Vocabulary and writing skills will be addressed within units of study.

English 9

Students will continue to develop the communication skills introduced in Humanities 8: reading, writing, listening and speaking. They will explore more challenging works of literature of various genres and write extensively using the writing process. Students will study vocabulary, grammar and language concepts to develop a stronger sense of the way the English language works.

English 10A: Focused Literary Studies/Creative Writing

English 10A is two courses in one. The units in this course will focus on literary studies grouped by theme, author, and/or time period, etc. and the development of personal writing in multiple genres and styles using a variety of models and sources. Students will complete a wide range of readings, literary analysis tasks, presentations and writing tasks over the course of the year, including essay writing.

English 10B: New Media/Composition

English 10B is two courses in one. The units in this course will focus on media studies, including mainstream and social media, film and documentary studies as well as digital literacy. Students will also develop skills in different forms of writing, both personal and formal, from planning to drafting to editing. This will include reading and modelling the writing of others in a variety of styles. Students will complete a wide range of analysis, presentation and writing tasks over the course of the year, including essay writing.

Communications 11

This course is designed for students who found English 10 challenging and might have difficulty passing English 11. The course focuses on the skills of reading, writing, speaking and listening. Students will read a variety of literature including novels, short stories, and nonfiction works. Writing activities will focus on writing for personal use and for career and work related requirements. Students who complete Communications 11 will proceed to Communications 12. Please note: Communications 12 is not accepted for admission to universities and some other post-secondary institutions.

Communications 12

This course emphasizes the appreciation and enjoyment of both language and literature. Speaking, listening and other communication skills will complete the curriculum. Students will continue to develop effective writing skills for the world of work and personal life. Please note: Communications 12 is not accepted at universities and some other post-secondary institutions. There will be a provincial exam at the end of the course that counts for 40% of the final course mark.

English 11

Students will read and analyze literature that is intellectually challenging. The critical analysis of short stories, plays (including plays by William Shakespeare), poetry and novels will be emphasized. Students will work to improve their skills at writing multi-paragraph compositions which incorporate descriptive, narrative and expository writing. The formal study of grammar and syntax is an important component of this course.

English 11 Honors

This challenging academic course prepares students for English 12 or for Advanced Placement English 12. Emphasis is on a concentrated study of literature (plays, novels, poetry, short stories). Students will focus on literary analysis, interpretive reading and critical thinking about literature. An intensive study of language and guided practice in essay writing will help students develop stylistic maturity. Strong work habits and independent learning are essential. **Recommendation: Suggested "B" grade minimum in English 10**

Advanced Placement English 12 Literature and Composition

AP English 12 is taken in place of English 12. AP English 12 is a rigorous and rewarding course for students who have strong English skills. Students will study works of recognized literary merit and will use these studies as a basis for writing expository or argumentative formal essays. Independent projects, examinations and oral presentations will also be a part of the program. The emphasis is on literary analysis, critical thinking and reasoned, well developed expression. There will be a provincial exam at the end of the course that counts for 40% of the course mark. In addition, students may also elect to write the AP examination which gives students an opportunity to demonstrate their mastery of interpretive reading and writing skills. A score of 4 or 5 on the exam gives a student credit for first year English at UBC, SFU, Vic and many other post-secondary institutions. **Recommendation: Suggested "B" grade minimum in English 11 Honors/English 11/Literature 12**

English 12

English 12 focuses on developing advanced skills in speaking, listening, reading and writing while challenging students' intellectual development through the intensive study of literature: short stories, drama, poetry, novels and essays. Students are encouraged to read appreciatively and critically. There will be a strong emphasis on in-class writing to develop sophisticated essay writing skills. Students will work on organization and structure of compositions while they improve sentence style and diction. There will be a provincial exam at the end of the course that counts for 40% of the final course mark.

Journalism 9-12

Students who are interested in producing a school newspaper, newsletters, and other related projects will enjoy this course. Skills include the journalistic writing style, interviewing and reporting, computer work, design and layout. In addition, students learn to analyze and evaluate forms of mass media. **Recommendation: Suggested "B" grade minimum in English 10 or "C+" grade minimum in English 11**

Writing 12

Writing 12 is designed for students who have a special interest in writing in a variety of genres including stage, radio, screenplays, descriptive, monologues, poetry and fiction. Many different writing techniques will be studied and practiced. Students taking Writing 12 will be encouraged to develop their own styles through assigned writings, critiques, and class projects. **Recommendation: Suggested "B" grade minimum in English 10 or "C+" grade minimum in English 11**

Mathematics

Mathematics 8

Mathematics 8 is designed to develop and reflect upon numeracy skills by combining mathematical knowledge, communication skills, problem solving, reasoning, mental math, estimation, visualization, and the use of technology. Students will learn to understand math in meaningful contexts and link concrete and abstract ideas through concrete, pictorial, and symbolic concepts. Students will be encouraged to take risks in their investigations, and will work on their ability to solve more difficult problems. Students will be expected to meet all outcomes of the course in order to successfully complete Mathematics 8.

Mathematics 8/9

Mathematics 8/9 combines the curricula from Mathematics 8 and Mathematics 9. See those corresponding course descriptions. Students must directly apply to take this course. The application process includes a teacher reference and test (to be taken at Boyd at the time indicated on the application form). Please contact the school for more information. Students can move to Mathematics 10 Foundations and Pre-Calculus only upon receiving a minimum level of 5 in all criterion.

Mathematics 9

Mathematics 9 continues to develop and build upon the concepts and numeracy skills developed in the Mathematics 8 curriculum. Students will move from whole and integer number systems into the realm of solving using rational numbers. Students will learn to further their thinking through explanations, drawings/models, visualizations, and discussions with others, in order to create deeper understanding. Students will continue to be encouraged to take risks in their investigations, and will work on their ability to solve more challenging problems. Students will be expected to meet all outcomes of the course in order to successfully complete Mathematics 9.

Mathematics 10 Apprenticeship & Workplace

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. The course will concentrate on algebra, geometry, number sense with practical applications measurement, and trigonometry, and will continue to focus on mathematical processes learned in Math 8 and 9. Students with a credit for Apprenticeship & Workplace Mathematics 10 are eligible to take Apprenticeship & Workplace Mathematics 11.

Mathematics 10 Foundations and Pre-Calculus

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in both the arts and the sciences. The course will concentrate on algebra, number theory and operations, relations and functions, trigonometry, measurement, and logical reasoning, and will continue to focus on the mathematical processes learned in Math 8 and 9. Students with a credit for Foundations of Mathematics 10 are eligible to take Foundations of Mathematics 11 or Pre-Calculus 11.

Mathematics 11 Apprenticeship & Workplace

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. The course will concentrate on measurement, geometry, applications of numbers, algebra and statistics. Students with a credit in Apprenticeship & Workplace 11 are eligible to take Apprenticeship & Workplace Mathematics 12.

Mathematics 11 Foundations and Pre-Calculus

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in programs that DO NOT require the study of theoretical Calculus. This course will concentrate on measurement, geometry, logical reasoning, statistics, and relations and functions. The course also involves a mathematics research project. Students with a credit in Foundations 11 are eligible to take Foundations of Mathematics 12. ****The different Math 11 courses vary in terms of content. As such, students may take more than one Math course at the grade 11 levels. Students planning to go into Sciences/Engineering at university are encouraged to take both Foundations Math 11 as well as Pre-Calculus Math 11.

Math 11 Pre- Calculus

This course is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into post-secondary programs that require the study of theoretical Calculus. This course will concentrate on algebra and numbers, trigonometry, relations and functions. Students with a credit in Pre-Calculus 11 are eligible to take Pre-Calculus of Mathematics 12. **Recommended Preparation: Suggested "C+" grade minimum in Foundations & Pre-Calculus of Mathematics 10**

Advanced Placement Calculus 12

This course is designed for students intending to study Calculus at the college or university level. Topics include: limits, differentiation, and applications to curve sketching, maximum/ minimum problems, rate problems, growth-decay problems, areas and volumes of revolution. Students may elect to write the AP examination. Students achieving a score of 4 or 5 on this exam may apply for standing granted for first semester calculus at many post-secondary institutions.

Mathematics 12 Apprenticeship & Workplace

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. The course will concentrate on measurement, geometry, applications of numbers, algebra and statistics. Students with a credit in Apprenticeship & Workplace 11 are eligible to take Apprenticeship & Workplace Mathematics 12.

Mathematics 12 Foundations

Foundations of Mathematics 12 is a course designed for students who have taken Foundations of Math 11. In this course, students will develop number sense in financial applications, logical reasoning, critical thinking skill related to uncertainty, and algebraic and graphical reasoning through the study of relations and functions. This course also entails a Mathematics Research Project through which students will research and give a presentation on a current even or an area of interest that involves mathematics in order to develop an appreciation of the role of mathematics in society. *Students are reminded that it is their responsibility to research college/University program requirements prior to selecting their math courses, as these are subject to change.

Mathematics 12 Pre-Calculus

Pre-Calculus Mathematics 12 is an academically challenging course designed for students who have been successful in Pre-Calculus Math 11 and are planning to take Calculus in college/university. In this course, students will develop trigonometric reasoning, algebraic and graphical reasoning through the study of functions and relations, algebraic and graphical reasoning through the study of logarithms, and algebraic and numeric reasoning involving combinatorics. *Students are reminded that it is their responsibly to research college/university program requirements prior to selecting their math courses, as these are subject to change. **Recommended Preparation: Suggested "C+" grade minimum in Pre-Calculus 11**

Physical Education

Physical Education 8

PE 8 provides students with a diversified program of activities: weight training, tennis, badminton, basketball, dance, minor games, softball, flag football, wrestling, lacrosse, active health and volleyball. Emphasis is placed on skill development, good sportsmanship and the acquisition of knowledge necessary for the enjoyment and understanding of the activity taught. All students are required to have a T-shirt, gym shorts, socks, and indoor court shoes. Track suits or jogging warm-ups are also fine.

Physical Education 9

Students will continue to develop their skills in Use of Knowledge, Movement Composition, Performance, and Social Skills and Personal Engagement.

Physical Education 10

Physical Education 9 and 10 assist students in developing positive attitudes towards participation in physical activity, attaining competence and efficiency in motor skills, and developing a positive attitude toward active living in the pursuit of lifelong health and well-being. The curriculum in each course is divided into major activity categories selected to provide a balance between the traditional approaches to physical education and the emerging emphasis on leisure-oriented physical activities. These activity categories are: team games, individual and dual activities, dance, fitness and outdoor pursuits. All students are required to have a T-shirt, gym shorts, socks, and indoor court shoes. Track suits or jogging warm-ups are acceptable.

Physical Education 11

Physical Education 11 will provide students with opportunities to develop greater proficiency in a variety of skills and to reinforce the knowledge, attitudes, and strategies learned previously. Students will experience a variety of recreational activities available within the community, and will identify how such activities contribute to fitness, nutrition, and health management. There is an emphasis on the students' development of leadership skills within the school and the community. Career opportunities in recreation and sports-related businesses will also be explored. Students will complete approximately 30 volunteer hours of service in the school and the community; this service should be related to recreational activities and demonstrate growth in leadership skills.

Physical Education 12

Physical Education 12 is an extension of the Physical Education 11 program. While the activity categories include team games, individual and dual activities, and leisure pursuits, the emphasis in

PE 12 is on developing and implementing organizational, management and leadership skills in a recreational setting. Topics to be covered include event management, coaching, first aid, sport strategy and peer teaching. In addition, students will complete approximately 30 volunteer hours of service within the school or community. This service should be in the areas of recreation, athletics or sport. Evaluation will include assessment of organizational and leadership skills, completion of the volunteer hours, and demonstration of knowledge and understanding in written assignments.

Physical Education Basketball 9/10

PE 9/10 Basketball covers the 9 and/or 10 PE curriculum from a basketball perspective with emphasis on the fundamental motor skills required for basketball. The course is for the serious fan of basketball who wants to learn about the game from a number of different perspectives. We will isolate the important physical attributes for the sport and students will embark upon a conditioning program to improve these qualities. Students will learn about the rules of the game and will volunteer at home basketball games as referees and minor bench officials, as well as volunteer as basketball coaches at the school and in the community. Students will also learn about the care and prevention of common injuries associated with basketball, and will analyze and discuss common basketball issues through the use of video.

Physical Education Racquet Sports 11

PE Racquet Sports 11 is an extension of the Physical Education 10 program. However, the emphasis in this course will be on racquet sports, with a particular emphasis on badminton. The course will also cover tennis and table tennis. Emphasis will also be given to maintaining personal fitness and making sound lifestyle choices regarding health. The usual gym attire is required including non-marking court shoes.

Strength and Conditioning 9/10

Students may take this course in place of Physical Education 10. This is a course that will prepare students physically and mentally as athletes. Students will participate in a performance training regime that includes free-weight Olympic lifts, flexibility training, speed training, agility training and cardiovascular endurance. In addition, students will be required to understand and apply the nutritional principles that lead to performance. Leadership and goal setting components will be integrated into the curriculum. Teacher recommendation is required to enroll in this course.

Strength and Conditioning 11

These courses are for highly motivated students who maintain a healthy lifestyle. Students will learn how to design personal programs for strength and muscular training, flexibility, agility and cardiovascular endurance. In addition, students will learn anatomical and physiological function of the body, diet analysis and nutritional planning. Students are expected to participate in many

different types of conditioning exercises. There will also be an in-class unit regarding the use and misuse of nutrition, supplements and drugs. Teacher recommendation is required to enroll in this course.

Strength and Conditioning 12

These courses are for highly motivated students who maintain a healthy lifestyle. Students will learn how to design personal programs for strength and muscular training, flexibility, agility and cardiovascular endurance. In addition, students will learn anatomical and physiological function of the body, diet analysis and nutritional planning. Students are expected to participate in many different types of conditioning exercises. There will also be an in-class unit regarding the use and misuse of nutrition, supplements and drugs. Teacher recommendation is required to enroll in this course.

Richmond Virtual School - Boyd only

DIGITAL MEDIA PRODUCTION

The following 2 course options are intended for students who have an interest in the fields of videography, photography, scripting, digital editing and post production. The courses are off timetable and will be self-directed, giving the flexibility for timetabling.

Grade 10 - 12 (Digital Media Levels 1 & 2)

Skills in photography, videography and digital media will be developed through practical applications on field trips, video competitions and personal interest projects. Attributes of responsibility, reliability and self-motivation are necessary. Level 1 students will be expected to utilize the basic program features of cameras where Level 2 students develop the skills for manual manipulations of the camera, external audio, lighting and a refinement of digital media skills. Registration and course programming is via RVS (Richmond Virtual School) but will be facilitated at Boyd by Mr. Park off timetable. Students in grades 10, 11 and 12 are eligible and will receive an IT 11 & 12 credit.

Grade 11 - 12 (Videography and Photography Production)

After students have completed the RVS Digital Media classes, or possess sufficient digital media skills, students can register for this class. This program allows students to apply their skills in videography, photography and digital media to contracted productions. Weddings, School District initiatives, corporate promotional videos are some examples of the productions. Students will be responsible for strategizing and planning, scripting, capturing, editing and production, thus students of varied skills and interests are valued in this program. Attributes of responsibility, reliability and self-motivation are necessary. The program is facilitated off timetable by Mr. Park. Students in grades 11 & 12 are eligible and will receive an IT 11 & 12 credit.

PEER TUTORING

The following 2 course options are intended for students who have an interest in supporting younger students individually and in small groups. The courses are off timetable and will be self-directed, giving the flexibility for timetabling.

Peer Tutoring 11

This course is intended for students who enjoy supporting younger students with their subject classes. Peer tutors complete tutor training sessions with the Peer Tutoring teacher, and then are placed in an appropriate subject class where they may work with individual and small student groups under the supervision of the subject teacher. Emphasis is placed on peer tutors' organization, communication, interpersonal skills and the ability to help students develop

numeracy, reading and study strategies. If you are interested in this course, you must see a counsellor for an application form. You should have a subject area of strength and a subject area teacher who would support your application. Applicants may be interviewed prior to acceptance into the course.

Peer Tutoring 12

This course is an extension of Peer Tutoring 11. Students must complete an application and interview process. Please see a counsellor for an application form. **Recommended Preparation: Peer Tutoring 11**

PHYSICAL EDUCATION

The following 2 course options are intended for students interested in physical education as well as fields related to community and service.

Recreation and Service 11 - 12

This class is organized around helping students to develop into well-rounded and balanced citizens who make active contributions to their local communities. The course is broken down into four main components, which include: Service, Physical Recreation and Health, Skill of Interest and Adventure Trip. Students will take part in a variety of learning and practical activities, while being responsible for contributing service to their community through volunteerism. Students will also strive to develop a skill of their personal interest throughout the duration of the course. There is an expectation that students will take part in course work as well as a number of active lifestyle activities, including a weeklong trip to Strathcona Park Lodge to develop outdoor skills.

Physical Education 8 - 10

How can you take PE online? Well, the truth is that learning and fitness doesn't just happen at school. With Online PE you will use information about yourself and in the course to set health or fitness goals that are personal and important to you. You will use these goals to set and work through personal daily activities, complete monthly fitness tests, read, learn and improve your health and fitness. For you, PE will be happening at the skating rink, gymnastics, pool, at your martial arts or archery club, in your living room through stretching, plyometrics, pilates, yoga, or even taebo. It will be happening VIRTUALLY everywhere.

Science

Science 8

Science 8 provides opportunities to explore and develop knowledge, skills, and attitudes. Students are introduced to the scientific method and are encouraged to design labs and to analyze data. Students are also encouraged to expand their attributes into relevant topics in everyday life and reflect on questions of "why" and "how". Units covered in this course included basic cell biology, microorganisms, basic chemistry, properties of light and plate tectonics.

Science 9

Science 9 continues to give opportunities to explore and develop scientific knowledge, skills, and attitudes. Students will further develop their skills in using the scientific method to design labs and to analyze data. Units covered in this course include cell biology, reproduction, chemistry, matter cycles and electricity.

Science 10

Science 10 continues to provide opportunities to explore and develop scientific knowledge, skills, and attitudes. It is an intense course that covers units in chemistry, genetics, motion, energy transformation and Earth Science. Students will work on designing labs and analyzing data in most of the units. Our goal is to develop a holistic student who gains scientific knowledge through the process of inquiring, thinking, and communicating.

Biology 11

Biology 11 is an introductory course designed to give students an appreciation for the living world. It addresses a representative sample of organisms and introduces students to a variety of biological skills and scientific processes. It is also expected that the course will contribute to developing scientific attitudes and critical thinking abilities. Students in Biology 11 will investigate:

- scientific methods and principles
- microbiology
- botany
- zoology
- ecology

Laboratory work investigation and classification of organisms, and includes microscopy, dissection of various specimens. A final exam worth 20% of the final grade will be written. **Recommended Preparation: Suggested "C+" grade minimum in Science 10**

Biology 11 Honours

Grade Biology 11 Honours is a class designed to allow students to accelerate and enrich their learning of the Biology 11 curriculum, creating opportunities to investigate additional Biology concepts, lab applications, bioethics and biology related extracurricular activities. This course is highly recommended for students intending on pursuing education in the fields of science at the post-secondary level, as it will develop skills of critical thinking, application of knowledge,

problem solving and intellectual challenge. **Recommended Preparation: Suggested "A" grade minimum in Science 10**

Chemistry 11

Chemistry 11 is an introductory course designed to lay a solid foundation for future studies in higher levels of chemistry. This course emphasizes the proper use and care of laboratory equipment, observation of experimental chemical reactions, and analysis of data and verification of scientific principles. Considerable time will also be spent on problem solving. The major topic areas are: • the nature of matter • mole concept • chemical reactions • atomic theory • solution chemistry • organic chemistry an exam worth 20% of the final grade to be written. **Recommended Preparation: Suggested "C+" grade minimum in Science 10, Math 10**

Earth Science 11

Earth Science 11 is a survey course designed to provide insight into the major branches of Earth and space science and how each branch relates to everyday life. Emphasis will be placed on the tools and activities of current Earth and space scientists. The major topic areas include: - Astronomy - Rocks and Minerals - Geological Time - Internal Earth Processes and the Plate Tectonic Theory - Surface Processes and the Hydrosphere This academic course satisfies the Grade 11 Science requirements for both graduation and university entrance into a non-science program. A final exam will be worth 20% of the final grade.

Physics 11

Physics 11 is a survey course intended to provide insight into the scope, nature, relevance and limitations of physics. Physics 11 is intended to prepare students to better understand the everyday world around them. Topics covered include: • kinematics • dynamics • energy • special relativity • nuclear fission and fusion an exam worth 20% of the final grade to be written. **Recommended Preparation: Suggested "C+" grade minimum in Science 10, Math 10**

Science and Technology 11

Science and Technology 11 explores the relationships between science, technology and our environment. The main focus of this course is to facilitate a learning process whereby science and technology can be interesting, informative and relevant to one's surroundings. Course topics range from: space, global pollution and global warming, technology and health issues, forensics, transportation, and food production, processing and presentation.

Biology 12

Biology 12 focuses on human biology, allowing students to develop an interest in and an understanding of science by looking at themselves and seeing how the diverse body systems are integrated. The following topics are included: Biochemistry • cell compounds and biological molecules Cell Biology • cell organelles • DNA replication • protein synthesis • enzymes and metabolism Body Systems • digestive system • respiratory system • circulatory system • nervous system • urinary system • reproductive system an exam worth 20% of the final grade to be written. **Recommended Preparation: Suggested "C+" grade minimum in Biology 11; recommended that CH 11 taken before or concurrently with BI 12**

Biopsychology 12

Please be aware that Biopsychology 12 does NOT qualify as a science credit for graduation requirements.

Biopsychology 12 is intended for students who are interested in the fields of Neurobiology and Psychology. Students will have the opportunity to investigate many topics such as:

- neurobiology and physiology
- abnormal psychology
- brain damage, diseases and disorders
- learning and memory

Chemistry 12

This course is a detailed study of chemical concepts which will enable a student to gain a more useful perspective of chemistry and its relationship to industrial and environmental processes. The major topic areas are: • rates of chemical reactions • reaction equilibrium • solubility equilibrium • acid-base equilibrium • electrochemistry an exam worth 20% of the final grade to be written. **Recommended Preparation: Suggested "C+" grade minimum in CH 11, Math 11**

Physics 12

Physics 12 expands on topics covered in Physics 11 and challenges the student with a more rigorous mathematical method. Students enrolled in this course will be sufficiently prepared for further study in physics course work. Topics include: • vector kinematics • vector dynamics • work, energy, and power • vector momentum and impulse • static equilibrium • circular motion and gravitation • electrostatics • electric circuits • electromagnetism A final exam worth 20% of the final grade will be written. **Recommended Preparation: Suggested "C+" grade minimum in PH 11, Principles of Math 11**