

Langley Fundamental Middle and Secondary School



Grade 9 – 12
Program Planning Guide
2025 – 2026

CONTENT GUIDE:

PRINCIPAL'S MESSAGE..... 2

HOW TO USE THIS GUIDE..... 3

STUDENT SUPPORT SERVICES..... 4

LIBRARY LEARNING COMMONS (LLC) 4

LEARNING ASSISTANCE - RESOURCE 5

RCMP SCHOOL RESOURCE PROGRAM 5

HEALTH SERVICES 5

ABORIGINAL SUPPORT AT LFMSS 6

INTERNATIONAL STUDENTS' PROGRAM (ISP)* 6

STUDENT PLANNING GUIDE 7

GRADE 9-12 COURSE ELECTIVES 8

GRADUATION PROGRAM..... 9

GRADUATION ASSESSMENTS 10

GETTING ADDITIONAL CREDITS TO GRADUATE 11

SCHOLARSHIPS AND FINANCIAL AID 11-12

GR. 9-12 COURSE DESCRIPTIONS 13-46

REFERENCE GUIDE - GRADUATION CHECKLIST 47

CAREER ADVISOR - APPOINTMENT REQUEST 48

PRINCIPAL'S MESSAGE

Dear LFMSS Students and Families:

This Course Planning Guide reflects our school's course offerings for students in Grades 9 through 12. As you progress through school, the number of choices and the range of alternatives become wider. This guide is a resource to help plan the direction you will take along the way.

Making course choices and planning for your future can, at times, feel daunting. Please know that our counsellors, administrators, and teachers are here to assist you in your decision making. Use this guide as a basis for discussion. Talk to your teachers and use our counselling service to assist in setting your goals beyond secondary school. Don't forget to discuss your choices with your parents. If they would like to join you in a meeting with the counsellor, call the school and make an appointment.

In Grade 9, you may choose electives that have captured your interest. Please remember when selecting your electives not to be swayed too much by what your friends are doing because their interests may be quite different from your own ambitions. Selecting the same course based on a friendship could lead to disappointment as you may discover that you have missed out on an opportunity that would have been particularly meaningful for you.

Grade 10 will be the first year of your Graduation Program. Students are required to accumulate 80 credits between Grades 10 and 12 with a number of required courses or course credits in specific subject areas. Check out the following website for a full and comprehensive description of this new Graduation Program: <https://www2.gov.bc.ca/gov/content/education-training/k-12/support/graduation>

The Grade 11/12 years should bring a focus to your elective selections and hopefully, your choice of electives will be guided by your interests, passions, and career ambitions. It is highly recommended to keep your options open for post-secondary training at a college, university, or other technical schools. Please carefully examine the information in university and college calendars, which specifically identify the requirements needed for entry. Making the right decisions now may save you a great deal of frustration after you graduate. Also, please be aware of other education opportunities provided to Langley students. Youth Train in Trades Program and the Youth Work in Trades are education options that should be considered and may position you well for post-secondary and career placements.

Also, as part of the Province of British Columbia's commitment to truth, reconciliation, and anti-racism, the Ministry of Education and Child Care has implemented a mandatory Indigenous-focused graduation requirement for all students, as of the 2023/24 school year. The new requirement builds on integrating Indigenous perspectives and content across the K-12 provincial curriculum and into professional development and standards for BC educators.

Finally, remember to stay connected to our school community, get involved in extra-curricular opportunities, and enjoy the journey!

Ms. Carla Clapton – LFMSS Principal

HOW TO USE THIS GUIDE

Use this guide to make informed decisions and to plan the direction you will take in planning your future. Students in the Graduation Program need to plan their courses with career and/or post-secondary programs in mind. If students are in doubt about future academic and/or career directions, they should choose courses that allow them as many options as possible. As you go through the program planning process, there are several things we encourage you to keep in mind.

Please consider the following questions in making your decisions:

- **Am I developing my full potential?**

BUILD ON YOUR STRENGTHS

Acknowledge your strengths and limitations. Choose courses that will allow you to accomplish your academic goals as well as develop your personal interests.

Use high school as an opportunity to expand your interests through different classes and build your potential as a well-rounded educated citizen.

- **What courses must I take to meet Graduation Requirements?**

CHOOSE YOUR COURSES WISELY AND CAREFULLY

Make sure you are doing the best that you can do in your current courses so that you build a strong foundation of knowledge and skills for future courses.

Ensure you review the Ministry of Education graduation program requirements to make sure you have enough credits to graduate.

- **Do I have the courses to meet entrance requirements for colleges, technical schools, and universities?**

TAKE TIME TO RESEARCH POST SECONDARY EDUCATION PROGRAMS

Seriously think about where you want to be 2 – 3 years from now and make sure you have done your best to be prepared. Review post-secondary program prerequisite requirements online or book an appointment with our Career Advisor.

NOTE:

- **There is very little chance, if any, to make changes in September. Late changes may not be possible due to a class being full or in conflict with other courses.**
- **NOW is the time of year when your Counsellors, Principal, Vice-Principal, Career Advisor and Teachers are available for guidance.**
- **NOW is your best opportunity to plan, select, and complete the courses you need.**

STUDENT SUPPORT SERVICES

The goal of student services at LFMSS is to assist students in being successful in all aspects of their schooling. As a result of successful and meaningful experiences in school, it is our belief that students will be better prepared to meet life challenges after graduation. Support services include Counselling, Career Advising, Library Learning Commons, Learning Resource Program, RCMP School Resource Program, Health Services, English Language Learners, the International Students' Program, and the Aboriginal Support Program.

COUNSELLING

Counselling services include the following:

EDUCATIONAL

- Course planning leading to graduation, post-secondary education and employment.
- Arranging for assistance for students related to academics.
- Providing scholarship information and applications.
- Helping students with the registration process for some post-secondary institutions.

PERSONAL

- Crisis counselling involving home or school issues and provide referrals to appropriate agencies.
- Resolution of problems arising from difficulties related to class or school policies and procedures.

Students may schedule a time to meet with a counsellor during school hours or before/after school. Parents are also welcome to contact counsellors to book an appointment if they have any questions or concerns regarding their child.

CAREER CENTRE

- Our Career Advisor is available to meet individually with students (with an appointment only).
- Our Career Advisor supports students with career goals and provides assistance with establishing a POST-SECONDARY plan.
- Our Career Advisor checks for prerequisite courses and requirements for various occupations and post-secondary institutions.

LIBRARY LEARNING COMMONS (LLC)

The Library Learning Commons staff will help students find information, evaluate resources, generate questions and ideas, learn strategies for being successful learners, develop a love of reading and curiosity of mind, as well as navigate the technology of the times. The LLC is a place of inquiry, imagination, information, and innovation, where meaningful learning occurs in a plethora of ways. It may be a place to read, study, conduct research, complete homework, plan a project with classmates, all while developing the skill set of an educated citizen.

The LLC collection contains over 7,000 resources. Technology is available for word processing, database searching, accessing online magazines/newspapers and of course, the internet.

The LLC provides access to the Catalogue (the list of all our books, etc.), valuable internet resources for student learning, many tips for developing solid research skills, and numerous links to resources that students will need in their research process.

Be sure to check out all the resources and tools that the Library Learning Commons has to offer!

LEARNING ASSISTANCE - RESOURCE

The Resource Program serves students who have learning exceptionalities as it relates to academics, behaviour, social and emotional needs. This service operates on an integrated model of support and intervention. Placement for learning support (i.e. Resource Block) will be based on the student's previous educational history as well as referrals from teachers, parents/guardians, administrators, and counsellors. The primary goal is to help a student achieve greater success thereby building confidence and self-esteem. This is accomplished by focusing on organizational skills, assignment completion, study skills, project planning and developing beneficial learning strategies and teacher accommodations in the classroom. Some students in this program may have an Individualized Education Plan (IEP), which provides them with individual programming, based on teachers, administrators, parents/guardians, counsellors, school psychologists, and District Based staff input. Special Education Assistants support students within the classroom setting.

If your child is struggling academically in their classes, a good starting point is to contact their teacher directly. With support and guidance from the teacher, a plan is established providing parents/guardians with strategies to assist their child with learning at home. If a child continues to struggle, parents may ask the teacher to provide some adaptations to their course work. At this point, the Classroom Teacher (CT) may approach the Resource Teacher (RT) with concerns about the academic ability and achievement of a child. The CT and RT will work together to determine some accommodations for a child to succeed in the classroom. If there is little or no evidence of improvement in a child's progress, the CT may make a referral to our School Based Team where the CT (along with parental consent), will present a child's case describing their difficulties. This meeting is followed by discussions where additional strategies and solutions are examined and a plan of action is formulated which may include an academic assessment to decide appropriate interventions. The results from the assessment will determine whether or not a child qualifies for a Learning Assistance or a Resource block in their timetable.

RCMP SCHOOL RESOURCE PROGRAM

LFMSS participates in the RCMP School Police Resource Program. The purpose of the program is to enhance the working relationship between the police force, school, and community. The School Liaison Officer is available as a resource person for staff, students, and parents/guardians and can provide general information regarding police related matters. If you would like to contact our liaison officer, please see one of our Administrators.

HEALTH SERVICES

A community health nurse from the Langley Health Unit provides health promotion services. The nurse acts as a resource to counsellors, staff, parents/guardians, and students around different health issues. Students receive their immunization during their grade 6 and grade 9 year. Information is provided and our community health nurse is available to answer any of your questions or concerns.

ABORIGINAL SUPPORT AT LFMSS

The Ministry of Education defines an Aboriginal student as one who is identified by their family as having Métis, Inuit or First Nations ancestry. It is not necessary to have “status” to be considered an Aboriginal student. The Aboriginal Program in the Langley School District has been around since 1993 and the goal of the program is to offer all learners an opportunity to gain awareness of Aboriginal culture and history. At LFMSS, we have an Aboriginal Support Worker who is available to offer social/emotional, academic, and cultural support. The Aboriginal Support Worker services include:

- Guidance for career choices
- Student support by providing social/emotional help and care along with arranging for academic support (if requested)
- Offer home/school liaison support
- Organize cultural opportunities
- Cultural awareness activities are offered in two formats:
 - Inclusive Cultural Programs - bringing Aboriginal Presenters into the classroom to share their culture with all students, through a variety of hands-on experiences. Specific presentations are available for each grade level and are tied to the prescribed learning outcomes of the regular school curriculum.
 - Cultural Enrichment Programs - are available which provide students of Aboriginal Ancestry with an opportunity to come together to learn about their culture and history.

INTERNATIONAL STUDENTS’ PROGRAM (ISP)*

Every year at LFMSS, we welcome a diverse group of students from countries around the world. We offer small English Language Learner classes, in-class ELL support, after-school peer tutorials, and monthly special activities and field trips to integrate our ISP students with English-speaking students and Canadian culture. An ISP School Coordinator is always available to help with home stay issues or other concerns.

***Please refer to the ISP Website: www.studyinlangley.com for further information or contact the School ISP Coordinator Johnson Yang (JYang@sd35.bc.ca) with any questions you may have.**



STUDENT PLANNING GUIDE

Grade 9 Program (Choose 3 Electives)	Grade 10 Program (Choose 2 Electives)	Grade 11 Program (Choose 4 Electives)	Grade 12 Program (Choose 6 Electives)
English 9	English First People's 10 Eng 10: Literary Studies and Creative Writing	English First People's 11 Creative Writing 11 Composition 11	English Studies 12 (Required)
Social Studies 9	Social Studies 10	20 th Century History 12 Human Geography 12 Law 12 Physical Geography 12 Social Justice 12	Elective 12
Math 9	Foundations & Pre-Calculus 10 Workplace Math 10	Foundations of Math 11 Pre-Calculus 11 Workplace Math 11	Elective 12
Science 9	Science 10	Chemistry 11 Earth Science 11 Life Science 11 Physics 11	Elective 12
Physical Health Education 9	Physical Health Education 10	Elective	Elective 12 (Recommended)
Elective (Applied Design, Skills & Technologies, or Fine Arts)	Career Life Education 10	Elective	Career Life Connections 12 and Capstone required)
Elective	Elective (Applied Design, Skills & Technologies, or Fine Arts)	Elective	Elective
Elective	Elective	Elective	Elective

Electives should be carefully chosen keeping career and post-secondary goals in mind. Students in some programs (International Student Program or Learning Assistance/Resource) can have adjustments made to accommodate academic needs.

GRADE 9 TO 12 CORE COURSES & ELECTIVES (*Course is taught outside the regular school timetable)

APPLIED SKILLS			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Computer Studies 10 Drafting & Design 10 – Level I Entrepreneurship & Marketing 10 Textiles 10	Computer Studies 10 Drafting & Design 10 – Level I Entrepreneurship & Marketing 10 Textiles 10	Computer Information Systems 11 Digital Media Development 11 Drafting & Design 11 – Level II Marketing & Promotion 11	Computer Information Systems 12 Digital Media Development 12 Drafting & Design 12 – Level III E-Commerce 12
ENGLISH			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
English Language Arts 9	EFP Literary Studies & Writing 10 Literary Studies & Creative Writing 10	EFP Literary Studies & Writing 11 Composition 11 Creative Writing 11	English Studies 12 (required)
FINE ARTS			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Concert Band 9 Drama 9 Visual Arts 9 *Concert Choir 9 *Jazz Band 9	Concert Band 10 Drama 10 Art Studio 10 *Concert Choir 10 Musical Theatre / Production 10 *Jazz Band 10	Concert Band 11 Art Studio 11 Studio Arts 3D 11 Digital Photography 11 *Concert Choir 11 Musical Theatre / Production 11 *Jazz Band 11 Film & Television 11	Concert Band 12 Art Studio 12 Studio Arts 3D 12 Digital Photography 12 *Concert Choir 12 Musical Theatre / Production 12 *Jazz Band 12 Film & Television 12
CORE FRENCH			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Core French 9	Core French 10	Core French 11	Core French 12
MATHEMATICS			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Mathematics 9	Workplace Math 10 Foundations & Pre-Calculus 10	Workplace Math 11 Foundations of Math 11 Pre-Calculus 11	Foundations of Math 12 Pre-Calculus 12 Calculus 12
PHYSICAL & HEALTH EDUCATION			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Physical & Health Education 9	Physical & Health Education 10 Strength & Conditioning 10	Active Living 11 – Boys Active Living 11 – Girls *Athletic Leadership 11 Strength and Conditioning 11 - Coed	Active Living 12 – Boys Active Living 12 – Girls *Athletic Leadership 12 Strength and Conditioning 12 - Coed
SCIENCE			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Science 9	Science 10	Chemistry 11 Physics 11 Life Science 11 Earth Science 11	Chemistry 12 Physics 12 Anatomy & Physiology 12
SOCIAL STUDIES			
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 & 12 Course Name	GRADE 11 & 12 Course Name
Social Studies 9	Social Studies 10	20 th Century World History 12 Human Geography 12 Law Studies 12	Physical Geography 12 Social Justice 12
CAREER EDUCATION & OTHER		OTHER	CAREER EDUCATION & OTHER
GRADE 9 Course Name	GRADE 10 Course Name	GRADE 11 Course Name	GRADE 12 Course Name
Career Education 9 (embedded)	Career Life Education 10 *Yearbook Production 10	Game Theory & Design 11 Peer Mentoring 11 *Leadership 11 *Media Design 11 – Yearbook	Career Life Connections & Capstone (required) Peer Mentoring 12 Psychology 12 *Media Design 12 – Yearbook

GRADUATION PROGRAM

To be awarded a B.C. Certificate of Graduation (Dogwood Diploma), students must earn a minimum of 80 credits and write the Grade 10 Numeracy Assessment along with the Grade 10 and Grade 12 Literacy Assessments. More information about the Graduation Program can be found at the following link:

<https://www2.gov.bc.ca/gov/content/education-training/k-12/support/graduation>

In addition, the B.C. Graduation Program Policy Guide providing the policies of the program can be found on our school website: <https://lfmss.sd35.bc.ca/programs-courses/course-planning/>

Effective July 1, 2023, all students must complete at least 4 credits in **Indigenous-focused coursework**. For more information about the new Indigenous-Focused Graduation Requirement, visit the following link:

<https://www2.gov.bc.ca/gov/content/education-training/k-12/support/indigenous-focused-graduation-requirements>

The B.C. Certificate of Graduation or “Dogwood Diploma: is granted to students who successfully complete the provincial graduation requirements. **Graduation is based on a total of 80 credits over a student’s Grade 10, 11 and 12 years.** One course is equivalent to 4 credits. Credits are only given for Grade 10, 11 and 12 level courses.

<u>REQUIRED COURSES</u> (TOTAL = 52 Credits)	<u>CREDITS</u>
Language Arts 10	4
Language Arts 11	4
Language Arts 12	4
Mathematics 10	4
Mathematics 11 or Mathematics 12	4
Physical Health Education 10	4
Two Career Education Courses	8
Social Studies 10	4
Social Studies 12 Course	4
Science 10	4
Science 11	4
One Applied Design Skills & Technology 10, 11 or 12 and/or Fine Arts , Indigenous Focused Course	4
Indigenous-focused Course	

ELECTIVE COURSES (A minimum of **28 Credits**)

These courses are selected by students during Grades 9 - 12. When planning course selection, consider the following:

- A minimum of 16 credits (4 Courses) must be at a Grade 12 level, including a required Language Arts 12 and Career Life Connections 12 and Capstone.
- A minimum 28 credits (7 Courses) must be elective course credits.
(Some of these credits may come from the required courses while others can be from elective courses at the Grades 10, 11 or 12 level).
- Students may also earn credits towards graduation by recognizing other learning opportunities through external credits, equivalency, or challenge.

IN ADDITION, students must also complete three Graduation Assessments:

- Grade 10 Numeracy Assessment
- Grade 10 Literacy Assessment
- Grade 12 Literacy Assessment

GRADUATION ASSESSMENTS

The Grade 10 Numeracy Assessment:

This is a graduation requirement and students complete this online assessment in their Grade 10 year. This provincial assessment assesses student proficiency in numeracy and focuses on the application of mathematical concepts learned across multiple subjects from kindergarten to Grade 10. It requires students to solve problems by using five numeracy processes (different ways of thinking and working): interpret, apply, solve, analyze, and communicate.

Parent brochure: <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:f4a16355-3c79-4677-97cc-88f913700fa7>

Sample Numeracy Assessment:

<https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:c423afbd-f371-3a90-9d60-a7bda5917bf9>

Answer Keys:

Questions 1-4: <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:499899bc-09dc-340a-b297-b146de9f9261>

Question 5: <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:57303983-44c8-3c76-9fd7-e17b20f65486>

A sample Grade 10 Numeracy Assessment along with Assessment Design Specifications can be found at the following website: <https://curriculum.gov.bc.ca/provincial/grade-10-numeracy-assessment>

The Grade 10 Literacy Assessment:

This is a graduation requirement and students complete this online assessment in their Grade 10 year. This provincial assessment assesses student proficiency in literacy and assesses student ability to use critical thinking and analysis to make meaning from a diverse array of texts. It also assesses the ability of students to communicate their ideas.

This is not based on a particular course, but on learning across multiple subjects, from kindergarten to Grade 10. There are three parts: analysis of different types of texts; read and answer selected response questions along with a written response to communicate understanding; and a self-reflection.

A sample Grade 10 Literacy Assessment along with Assessment Design Specifications can be found at the following website: <https://curriculum.gov.bc.ca/provincial/grade-10-literacy-assessment>

The Grade 12 Literacy Assessment:

This is a graduation requirement and students complete this online assessment during their Grade 12 year. This is a provincial assessment that assesses student proficiency in literacy and students' ability to use critical and reflective thinking and analysis to make meaning from a diverse array of texts. It also assesses the ability of students to communicate their ideas, or those found in the texts. This is not based on a particular subject matter or course, but rather on learning across multiple subjects from kindergarten to Grade 12.

There are three parts: thinking critically about texts; going beyond the texts; and a self-reflection.

A sample Grade 12 Literacy Assessment along with Assessment Design Specifications can be found at the following website:

<https://curriculum.gov.bc.ca/provincial/grade-12-literacy-assessment>

GETTING ADDITIONAL CREDITS TO GRADUATE

Students may also earn credit towards their graduation by:

- Career and Skills Training*
Example: Secondary Apprenticeship Program, Career Preparation (Work Experience) and Youth Train in Trades Programs.
- Independent Directed Studies (IDS)*
Under teacher supervision, students can earn credits by pursuing course curriculum in more detail often focusing on additional learning outcomes. An IDS study plan is created as a guide to learning and assessment.
- Equivalency *
Example: A student has completed a course at another institution or in another province. The school will determine if the course is equivalent to a B.C. course.
- Challenge*
Example: A student whose first language is Korean can challenge the Korean 11/12 examination to obtain full credit for a second language. Students must apply in October and the exam is written in February the following year. Please see your counsellor to obtain more information.
- External Credit *
An external course is an organized set of learning activities that is developed or offered outside the regular school system. Students may earn graduation credit for successfully completing an External Course approved by the Ministry of Education. The Ministry has reviewed and declared as creditable certain credentials from institutions that include, but are not limited to:

For more information about External Courses and others that may have been recently added, please take a look at the Ministry of Education web site: <https://www2.gov.bc.ca/gov/content/education-training/k-12/support/graduation/getting-credit-to-graduate/external-credentials>

For more information about earning credits visit the Ministry of Education website:

<http://www2.gov.bc.ca/gov/content/education-training/k-12/support/graduation/getting-credit-to-graduate>

SCHOLARSHIPS AND FINANCIAL AID

There are many scholarships and bursaries available to students graduating and continuing in post-secondary education.

The Langley School District offers several scholarships to students enrolled in a Langley secondary school.

Applying for scholarships involve commitment, persistence and organization.

Visit the following websites for information and resources to help with scholarship applications:

<https://www.sd35.bc.ca/students-parents/scholarship-information/>

<https://www.sd35.bc.ca/students-parents/scholarship-information/scholarship-handbook/>

The Provincial Government offers numerous scholarships in academic achievements, Secondary School Apprenticeships, teacher education, fine arts, applied skills, languages, leadership/service and physical activity. To be eligible for these Provincial Scholarship Awards, a student must be enrolled in Grade 12 in a program leading to graduation in the Spring, have a social insurance number, and be a Canadian Citizen or a landed immigrant. More information on these awards can be found at www.bced.gov.bc.ca/awards

In addition to funds available from the Provincial Government, businesses, unions, service clubs and philanthropic organizations (both with Langley and outside our community), donate scholarship money annually for deserving students. Post-secondary institutions also award some scholarships directly.

A number of these scholarships can be found on our school district scholarship database at the following link:

<https://www.sd35.bc.ca/students-parents/scholarship-information/scholarships-awards>

Scholarship information is subject to change and we do our best to update data upon receipt on the Langley School District website. When in question, you may contact the organization or donor directly. Many scholarship applications require supporting documentation and letters of reference. Students need to make sure that they start applying early so that they have time to gather all the necessary materials before published deadlines. **READ THROUGH ALL THE INFORMATION CAREFULLY!**

Additional Key Websites

Government of Canada Student Financial Resource

<https://www.canada.ca/en/services/benefits/education/student-aid/grants-loans.html>

Student Aid BC

<http://www.aved.gov.bc.ca/studentaidbc/welcome.htm>

Scholarships Canada

<http://www.scholarshipscanada.com>

Important Note for Students Entering Grade 11

Keep in mind that scholarship averages are often based upon achievement over both grade 11 and 12. Students who want to be considered for scholarships need to maintain a solid academic performance in both of their senior years. In addition, many scholarships have a citizenship component. As a result, it is helpful if the student can identify a degree of involvement (both inside and outside of the school community), in a variety of volunteer activities.

GRADE 9 – 12

COURSE DESCRIPTIONS



GR. 9-12 COURSE DESCRIPTIONS - INFORMATION & COMMUNICATIONS TECHNOLOGY

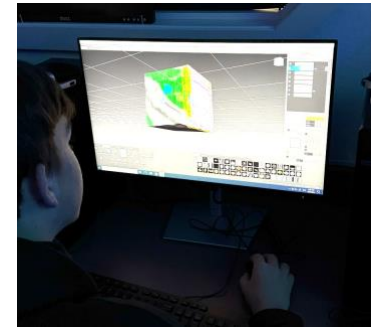


The LFMSS ADST Department has diverse course opportunities for students. Students have the unique opportunity to choose from industry-level courses specific to computer and digital technology.

Entry to computer courses is determined by prerequisites, not your grade level. Students who want to take a course without the required prerequisite must have the permission of the department. For more information on stand-alone courses, see individual course description.

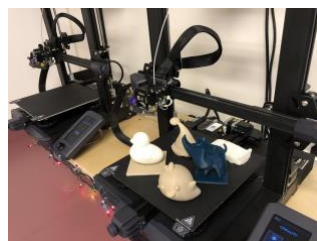
COMPUTER STUDIES 10

This exciting introductory course is open to grade 9 or 10 students interested in computers. You do not need to be a computer whiz to take this course. Students will learn to use a variety of skills and computer applications, including Video Game design and creation, Augmented Reality, Programming, Photo Editing, Video Editing and much more. Much of the course centers on using computers to enhance the ability to access and share information.



Highlights from this course include:

- Designing and pressing your own pin
- Creating your own app
- 3D printing
- Exploring design programs
- Exploring puzzles and games
- Some basic coding

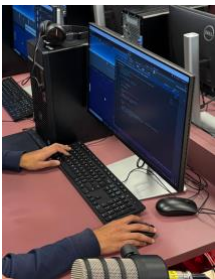


COMPUTER INFORMATION SYSTEMS 11

The emphasis of this project-based course is computer literacy, the effective use of the computer and the development of problem-solving techniques. The curriculum is divided into these main components: programming, electronic communications and formatting using multimedia tools. Students will have the opportunity to explore topics such as augmented reality, robotics, filmmaking, circuitry, and 3D modelling.

Highlights from this course include:

- Controlling robots
- Creating games
- Basic circuitry
- Animation & video making
- 3D Modelling

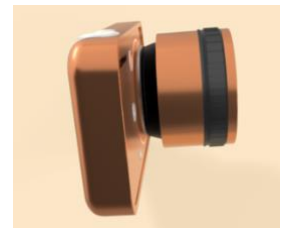
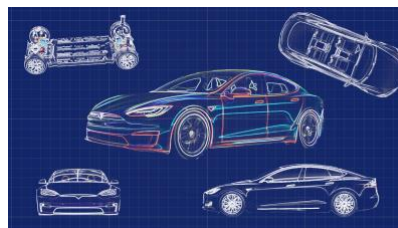


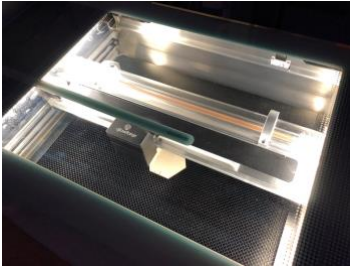
COMPUTER INFORMATION SYSTEMS 12

This course will expand on the material covered in Computer Information Systems 11. The components of the course include:

- Computer Programming
- Digital Media Development
- Applied Digital Communications
- Computer Information Systems
- Laser Engraving

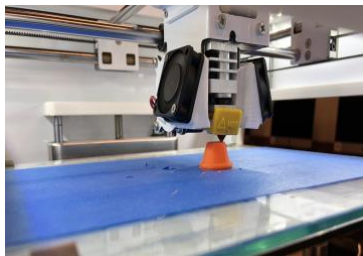
Projects will include creating games using Unity and Blender 3D game engine. Students will also have the opportunity to develop professional websites using HTML, CSS, Dreamweaver, Adobe Animate. The Digital Media component will focus on Blender 3D, Photoshop, and opportunities to do 3D printing and Robotics. Students may have the opportunity to create a major project in their area of preference.





DIGITAL MEDIA DEVELOPMENT 11

This is an introduction to media design concepts featuring digital media hardware and software tools and techniques, survey of media design applications, and issues relating to the use of media. Students plan media-based projects using text, graphics, audio, video, animation, and interactivity and follow a development process to create projects. Topics of study include video production and editing using Adobe Premiere, document publishing and design using Adobe In-Design and Photoshop, web page creation in Dreamweaver, animation and 3-dimensional animation using Sketch-Up, Character Animator, and Blender.



DIGITAL MEDIA DEVELOPMENT 12

This course builds on the learning outcomes introduced in Media Design 11. The course covers the four main areas introduced in Media Design 11 in greater detail and a higher level of complexity.

- Desktop Digital Video – Learn and use the processes of each stage of video production: pre-production, production, and post-production to produce digital video using the computer.
- Graphic Design and Desktop Publishing – Use digital cameras, scanners, and imaging tools such as Photoshop to produce complex documents featuring graphic design concepts and page layouts.
- Design and Animation – Plan, design and create animation content using a variety of animation tools and media elements.

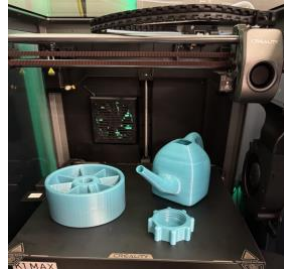
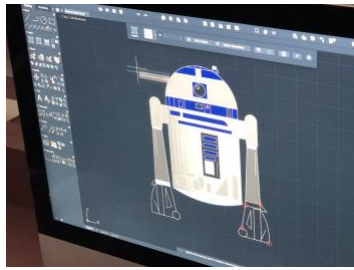
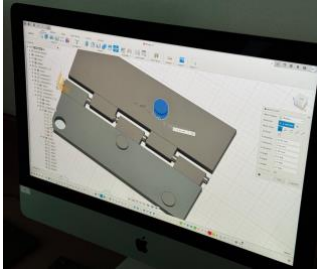
Highlights from this course include:

- Designing & pressing your own t-shirt designs
- Creating stickers and mugs
- Digital sculpting
- Movie making and special effects
- Laser Engraving your designs



DRAFTING & DESIGN

If you are thinking about a career in Architecture, Engineering, Drafting, Interior design, Fashion Design, Urban Planning, or in any of the Skilled Trades, then you should consider these courses. Every product, from an iPhone to an airplane, started out as an idea in someone's head. The field of Drafting and Design provides the means to communicate ideas to others, through technical drawings, 3D models, and animations.

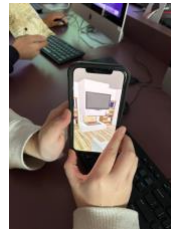


DRAFTING & DESIGN 10 Level I

This is an entry level course open to all grade 9 – 12 students and will begin with basic sketching procedures, but will primarily be focused on CADD, (Computer Assisted Drafting and Design) and SketchUp. A variety of industry standard software will be used to produce practical, real-life 2-D and 3-D projects, models, and animations. Topics such as building construction standards and manufacturing techniques will also be covered. You will get hands on experience with 3D printing and create your own house design. The goal of Drafting and Design is be able to take what is in your mind and create a set of drawings that someone could build your idea from.

Highlights from the course:

- Creating your own phone stand or chess piece
- Designing a house plan
- Making models
- Interior design projects
- Exploring building codes & standards
- Manufacturing projects

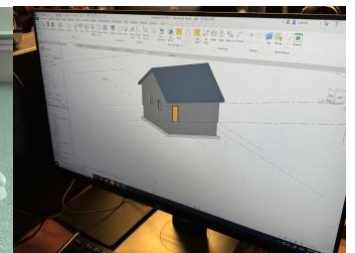
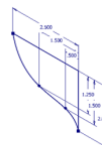
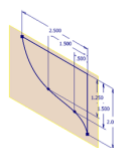


DRAFTING & DESIGN 11 Level II

This is a continuation of DRAFTING 10 Level I. More complex projects may include an actual working set of House Plans, and 3D "Walk-through" of a house. Topics such as building construction standards and manufacturing techniques will also be covered.

DRAFTING & DESIGN 12 Level III

Using advanced Architectural design programs such as Fusion 360 and Revit, Drafting 12 will let you show your skills through a series of design challenges and Independent studies. This course will focus on building a portfolio to show to future employers, or for university entry requirements.



GR. 9-12 COURSE DESCRIPTIONS- APPLIED DESIGN, SKILLS & TECHNOLOGIES - BUSINESS

ENTREPRENEURSHIP & MARKETING 10 (For Grades 9 & 10)

How many times have you seen a Tesla today? What about an iPhone? These products, and the businesses that created them, were born out of the innovative minds of entrepreneurs who wished to challenge the status quo and make a difference in the world. In this course, students will learn about what it takes to be a successful entrepreneur and will have the opportunity to develop their own entrepreneurial skillset through hands-on and authentic learning activities. By learning about business planning, marketing, market research, product development, finance, and economics, students will not only be able to develop their own business and product ideas in class, but they will gain valuable knowledge and skills that could help them with their entrepreneurial endeavors in the future.

MARKETING & PROMOTION 11 (For Grades 10 & 11)

This project-based course is designed for students who wish to explore the exciting world of marketing. Students will learn the basic concepts of Marketing, including why and how businesses conduct market research. They will be introduced to the Marketing Mix (**Product, Price, Promotion and Place**), will learn how to identify target audiences, and they will also learn the role of branding, product packaging, pricing strategies, sales promotion, advertising, and product placement in the operation of a successful business. As they progress through the course, students will have the opportunity to design and brand their own products, as well as advertise and merchandize their work using real products. They will also have the opportunity to apply their knowledge and skills by designing, managing, and running a marketing campaign for real clients within the school community. Classes are held in a Computer Lab and students will have access to a variety of technological resources (including a 3D Printer) that will augment their learning in the class.

E-COMMERCE 12 (For Grades 11 & 12)

Over the last decade, the business world has been changing at an alarming rate. Online transactions have become commonplace, and it is not unusual for entire businesses to be created and operated successfully without ever opening a physical store. This shift from traditional commerce to e-commerce has only been accelerated by the COVID-19 pandemic, and so it is crucial for anyone interested in business to understand the implications that e-commerce has for business success. This course is designed for students who are interested in pursuing business at the post-secondary level, or for those students who are interested in working for a business or even opening their own business in the future. This course introduces and explores the fundamentals of online business creation and operation, and it will equip students with the knowledge and skills to navigate the ever-changing business environment of the future.

GR. 9-12 COURSE DESCRIPTIONS - APPLIED DESIGN, SKILLS & TECHNOLOGIES - HOME ECONOMICS

INTRODUCTION TO CLOTHING AND TEXTILES

Learn the basics of how fabrics differ, how to lay out and read a commercial pattern, and how to operate a sewing machine. Create projects that you can use with pride and say, "I made it myself".

TEXTILES 10

Students will explore the various areas of the clothing and textiles industry. Students will learn basic hand and machine sewing techniques and then choose their own fabric to make a variety of projects which may include a cuffed pillowcase, a zippered toiletries bag/pencil case, pajama bottoms, and a gym bag. In addition to sewing, students will also learn the basics of some other textile crafts such as crocheting and embroidery. In order for students to ensure enjoyment of their projects, they will be asked, if possible, to provide approximately 1 m of fabric each for the three major projects.

GR. 9-12 COURSE DESCRIPTIONS- CAREER EDUCATION

Career Education Curriculum

The Career Education Curriculum supports students in the process of becoming successful, educated citizens by providing them with opportunities to explore a variety of skills, values, and interests to develop a personalized transition plan for life post-graduation. Career Education helps students to discover the bridges between classroom learning, the workplace, and post-secondary realities; and is intended to help make learning meaningful and relevant. Career Education K-12 focuses on the competencies and content that are needed for successful career development and transitional skills. Career Education is an ongoing process that recognizes three major phases of career development: Foundation and Awareness, Exploration, and Experience and Application. This curricular strand is an intentional and ongoing process in developing skills, tools, and experiences for students to have a successful transition plan in place post-graduation.

For more information on our Langley district Career Education program can be found on the following link:

<https://careered.sd35.bc.ca/welcome/>

CAREER EDUCATION 9

Career Education 9 builds on the knowledge from the Career 8 Curriculum and will create a foundation for the Career Life Education Course in grade 10. Students will further explore the knowledge, skills and attributes which are needed as transition skills. Students will further refine their studies into personal identity, digital footprints, motivations, goal setting and will begin exploring career options in more depth. The content of this course is embedded in the students' regular classes, and the concepts started in Career 9 will build toward the knowledge needed to start the Capstone project process in Grade 10. Students will continue to collect artifacts of learning for their Capstone as well.

Big ideas:

- Reflecting on our preferences and skills helps us identify the steps we need to take to achieve our career goals.
- The value of work in our lives, communities, and society can be viewed from diverse perspectives.
- Achieving our learning goals requires effort and perseverance.
- Adapting to economic and labour market changes requires flexibility.
- Our career paths reflect the personal, community, and educational choices we make.

CAREER LIFE EDUCATION 10

Career Life Education (CLE) is a course that further recognizes three major phases of career development—Foundation and Awareness, Exploration, and Experience and Application. As students move through Grade 10, they will further refine their understanding of the links between personal development and their career decisions. They will consider regional and global trends to reflect on occupational possibilities, refine their understanding of safety requirements associated with occupational areas and related technologies, and further develop and refine their understanding of career possibilities through planning, practice, and application of competencies and knowledge. Through the CLE course, students will also complete a mini-capstone project in which they will either build, design, model, or plan a passion project that will help them to develop competencies and passions that could be further explored in the grade 12 Capstone project, which is required for graduation.

Big Ideas

- Finding a balance between work and personal life is essential to good physical and mental health.
- A network of family, friends, and community members can support and broaden our career awareness and options.
- Learning how to learn prepares us to be lifelong learners who can adapt to changing career opportunities.
- Effective career planning considers both internal and external factors.

- The global economy affects our personal, social, and economic lives and prospects. Successful career and education paths require planning, evaluating, and adapting.

GR. 9-12 COURSE DESCRIPTIONS- CAREER EDUCATION

CAREER LIFE CONNECTIONS 12 & CAPSTONE

As students move through Grades 11-12 the links between personal development and their career and transition plans are explored in deeper detail. Students will consider educational plans, work plans, finance, scholarships, lifestyles and well-being, the importance of mentorship and support networks, and transitional skills. All students will create a personalized transition plan for post-secondary life.

Throughout this course, students will continue to explore a variety of learning outcomes that are directly relevant to their future plans. All Grade 12 students will prepare and present a **Capstone Project** where students will reflect on a personal passion or interest and share how they have grown and what they have learned in the core competencies and as a global citizen.

Big Ideas

- Well-being requires finding a balance of personal health, relationships, work, learning, community engagement, and committed citizenship.
- Being in the world and walking in the world are supported, broadened, and deepened through community involvement and the social experience of building personal networks.
- Careers, education, and life opportunities change over time.
- Building the skills of lifelong learning can help us adapt and thrive.
- Global economies, culture, and sustainability impact and are impacted by personal choices, social choices, and the availability of personal opportunities.
- Career and education paths require ongoing exploration, planning, evaluation, and adaptation.

WORK AND VOLUNTEER EXPERIENCE 12A/B (WAVE)

Work and Volunteer Experience (WAVE) 12A and 12B are intended to provide students in grade 10, 11, or 12 with the knowledge and skills to be successful in the world of work and the opportunity to explore career options and pathways. This program is designed to link classroom knowledge and activities to knowledge, skills and attitudes that are required in the workplace. Essentially, WAVE gives students the ability to earn credits from a work and volunteer experience placement. As part of this process, students are expected to complete approximately 30 hours of pre-placement instruction, followed by approximately 80 (for 12A) or 90 (for 12B) hours of work or volunteer experience in their placement.

Students are recommended to complete [Career Life Education \(MCLE\)](#) prior to enrolling in WAVE 12A. Students can apply by completing the WAVE Application form by September 30th of the year they wish to enroll, though it is possible for students to register through the Langley Education Center after that date. Students must complete all the necessary forms and legal documents before they can begin their placement or counting hours.

Wave 12A/B can be paid or unpaid. If the experience is paid, it must be in the students focus area and involve skill development that will assist them in a future career in that area. (Ex: a student with a career goal of becoming a paramedic would not be able to complete Work Experience for working at Tim Hortons).

Wave 12A is the first course a student would enroll in for Work Experience. If the student wishes to continue with Experience after they have completed Wave 12A, they may continue by enrolling in Wave 12. Wave 12B may be at the same employer as Wave 12A or a new one.

GR. 9-12 COURSE DESCRIPTIONS- CAREER EDUCATION

Benefits of WAVE:

- Receive four Ministry authorized credits for every 100 hours
- Explore career choices
- Gain valuable experience with workplace situations and equipment
- Increase self-confidence and self-awareness
- Potentially leads to a [Youth Work in Trades \(YWIT\)](#) in trades technical areas
- Possibility of paid work after placement
- Gather references and contacts to assist with future job searches

ENGLISH LANGUAGE LEARNING SUPPORT

English Language Learners are those whose primary language(s) of the home is/are other than English, and who therefore require additional services in order to develop their individual potential within British Columbia's school system. Some students speak variations of English that differ significantly from the English used in broader Canadian Society and in school.

At LFMSS, an ELL specialist teacher works collaboratively with classroom teachers to provide the additional support services needed for these learners to acquire social and academic language fluency in English. This support can be in the form of consultation with the classroom teacher, in-class support from an ELL teacher assistant, or enrollment in adapted ELL courses. An ELL specialist teacher will test the student regularly and determine their annual individual learning plan.

The goal of English Language Learning education is to assist students to become proficient in English, to develop intellectually and as citizens, and to enable them to achieve the expected learning outcomes of the provincial curriculum [at their age/grade level]. Support for ELL students requires attention to language proficiency, intellectual development, and citizenship. At LFMSS, such support is provided in a school environment that values diversity, bridges culture and works to eliminate racism.

***For further information or to contact the school ELL School Coordinator please contact Johnson Yang (JYang@sd35.bc.ca) with any questions you may have.**

GR. 9-12 COURSE DESCRIPTIONS - ENGLISH LANGUAGE ARTS

OVERVIEW

The English Language Arts curriculum is designed to empower students by providing them with strong communication skills, an understanding and appreciation of language and literature, and the capacity to engage fully as literate and responsible citizens in a digital age. Students are guided in their learning to think critically, creatively, and reflectively; to construct a sense of personal and cultural identity; and to be respectful of a range of perspectives and worldviews.

ENGLISH LANGUAGE ARTS 9

In this course, students continue to improve their written and oral communication skills, while building their awareness of audience, form, and voice. Emphasis will be placed on literature as a source of understanding, connection, and enjoyment. Students will engage with a variety of texts, including fiction, poetry, drama, and non-fiction; effective use of reading strategies will be practised throughout.

ENGLISH LANGUAGE ARTS 10 – The various strands are offered in these combinations:

- English 10 - Literary Studies and Creative Writing 10
- English First Peoples (EFP) - Literary Studies and Writing 10

LITERARY STUDIES 10 (combined with Creative Writing 10)

Literary Studies is for students who are interested in delving more deeply into literature and who want to develop higher level thinking and learning skills. As they explore specific time periods, specific themes, and specific authors from a variety of genres, students will improve their literacy skills through close readings of challenging texts. They will learn to respond to text critically to prepare them for more academic writing in the future, and creatively to appreciate the artistry of literature. Students are also given the choice of a range of literary topics to allow them to follow their passion and interests.

CREATIVE WRITING 10 (combined with Literary Studies 10)

This course is designed for students who enjoy exploring thoughts and ideas in more creative ways and who would like to become more innovative thinkers. As students read and study a variety of texts, including novels, poetry, and film, they will be given assignments that teach them to respond in traditional ways, such as essays, but they will also be given assignments that encourage creative expression. Students will focus on studying how language shapes ideas and how the exploration of texts deepens our understanding of complex concepts, including First Peoples' perspectives, values, beliefs, and points of view.

ENGLISH FIRST PEOPLES (EFP) LITERARY STUDIES 10 (combined with EFP Writing 10)

EFP Literary Studies 10 is designed for students who are interested in exploring First Peoples' literature in a variety of contexts, genres, and media. This area of choice provides students with opportunities to explore personal and cultural identities, histories, stories, and connections to land/place. This course is grounded in the understanding of how texts are historically and culturally constructed. Students will work individually and collaboratively to broaden their understanding of themselves and the world. In studying Indigenous literature in a variety of genres, students will develop their competencies in reading, writing, speaking, listening, viewing, and presenting.

ENGLISH FIRST PEOPLES (EFP) WRITING 10 (combined with EFP Literary Studies 10)

EFP Writing 10 is designed for students who are interested in writing for a variety of purposes and contexts. Within a supportive community, students will work individually and collaboratively to develop their writing skills and create coherent, purposeful, and engaging compositions. This course is grounded in the exploration and application of writing processes, inviting students to express themselves as they experiment with, reflect on, extend, and refine their writing.

ENGLISH LANGUAGE ARTS 11

Students must choose a minimum of one of the following courses below to satisfy the Ministry Graduation Program Language Arts 11 requirement. Students who are passionate about learning more about English are welcome to take more than one course as an elective. For students interested in taking Advanced Placement English in grade 12 in future years, it is highly recommended that you choose a combination of the **Focused Literary Studies** and **Composition** strands.

COMPOSITION 11

As students read and study a variety of texts, including novels, poetry, and films, they will develop their critical thinking skills and improve their ability to express themselves in writing. Composition 11 is designed to support students as they refine, clarify, and adjust their written communication through practice and revision. Students will read and study compositions by other writers and be exposed to a variety of styles as models for the development of their writing. The course provides opportunities for students to, with increasing independence, study, create, and write original and authentic pieces for a range of purposes and real-world audiences. They will develop confidence in their abilities as they consolidate their writing craft.

CREATIVE WRITING 11

How does conflict shape identity? Students will study a variety of genres including poetry, film, prose, drama, historical fiction, social media platforms and even graffiti as they explore responses to that question. They will improve their analysis of various texts that include traditional forms such as the novel but also emerging forms that include social media, looking specifically at the relationship between form and function. Throughout the courses, students will be invited to express themselves creatively. Students will develop their writing skills for a variety of purposes including fiction, script writing, documentaries, and poetry, but they will also develop the writing skills needed for academic courses.

ENGLISH FIRST PEOPLES (EFP) LITERARY STUDIES & WRITING 11

EFP 11 is designed for students who are interested in studying First Peoples literature, using writing for self-expression and communication in a variety of contexts. Students delve deeply into oral and written literature, exploring First Peoples' traditional and modern cultural beliefs. The main themes in this course are our relationship with nature and the power that words have in influencing our behaviour. This course provides students with a foundation for them to think critically and creatively as they continue to explore, extend, and strengthen their own writing. Within a supportive community, students work individually and collaboratively to express their ideas and create their own compositions.

ENGLISH STUDIES 12

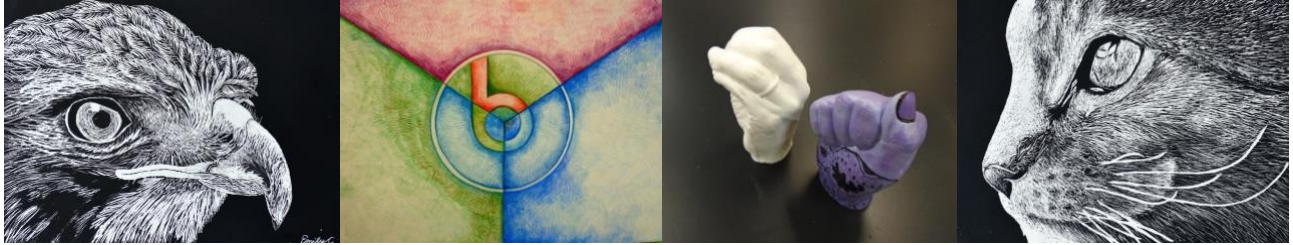
This course is a mandatory course for grade 12 students.

What are the challenges facing our freedom as democratic citizens in an increasingly globalized world? This is the essential question students will explore as they study the influences of media on our beliefs and our culture. Studying film, visual, written, and digital texts, the students in this course will work individually and collaboratively to improve their literacy skills and become well educated citizens. This, as defined by the BC Ministry of Education, is someone who is able to think critically and creatively, and someone who is able to adapt to change. It is someone who is tolerant of the multi-faceted nature of our society and motivated to participate actively in our democratic institutions. In order to accomplish this, students will work to improve their ability to think critically about what they read and improve their ability to articulate and write effectively.

GR. 9-12 COURSE DESCRIPTIONS - FINE ARTS

VISUAL ARTS 9

Develop your creativity in this dynamic project-based course. Advance your skills or learn new ones in drawing, painting, three-dimensional projects and more. This is an introductory course designed for students with an interest in Art.



ART STUDIO 10

It is recommended, but not necessary that students should have Visual & Performing Arts 8 and/or Visual Art 9 before enrolling in Art Studio 10. All students will review or be introduced to the elements and principles of design and encouraged to develop original imagery. This course is designed to expose students to various experiences in drawing, painting, collage, and sculpture. Emphasis will be placed on drawing from observation, memory, and imagination as well as refining technical skills.



ART STUDIO 11

Recommended: Any previous secondary art class.

This is a comprehensive course designed to facilitate a broad range of experiences in 2-D and 3-D visual arts. Students will create personally meaningful images and develop critical thinking skills. They will increase their level of sophistication, complexity, and independence as they explore a range of art forms. Instruction will be given in a variety of media including drawing, design, painting, sculpture, and Art History.



ART STUDIO 12

Recommended: Art Studio 11

This course gives students experience with a wide variety of techniques and processes and will build on the skills acquired in Art Foundations 11. The focus will be on developing an awareness of the elements and principles of design, developing personal imagery, exploring various media and techniques, and increasing an awareness of historical and cultural contexts. Instruction will be given in a variety of media including drawing, design, painting, sculpture, and Art History. This is a project-based course and assignments completed in this course may form part of a developing student portfolio for use in future employment or further arts education at the post-secondary level.

STUDIO ARTS 3D 11

This course is designed to introduce students to the creation of three-dimensional art pieces. Students will develop their skills with three-dimensional media starting with basic hand building skills for clay gradually acquiring the skills to do more independent and advanced projects. Emphasis will be placed on the design and production of both functional and decorative objects using a variety of finishing materials (glazes, stains, paints etc.). Although clay will be the principal medium explored, other three-dimensional methods and materials such as paper mâché and mixed media will also be introduced.

STUDIO ARTS 3D 12

Recommended: Studio Arts 3D 11

This course explores in greater depth the concepts and skills introduced in SA3D 11. Students will incorporate the elements and principles of design using a variety of materials which may include clay, metal, papier mâché, collage and assemblage.



DIGITAL PHOTOGRAPHY 11

This is an entry level course that will cover the traditional aspects of photography such as exposure, aperture, and shutter control, composition, and lighting. Students will learn the difference between taking pictures and creating photographs through lectures, studio workshops, digital photo presentations and critiques.



DIGITAL PHOTOGRAPHY 12

Prerequisite: Digital Photography 11

This course is for those interested in pursuing a more advanced study of digital photography. Students will refine their technical abilities building on skills previously learned in Digital Photography 11. There will be a greater focus on photographic history, more challenging assignments, and the creation of a strong final portfolio submission. Portraiture, product photography and documentary work will be but a few of the areas covered.

A personal DSLR camera would be an asset but is not mandatory.

YEARBOOK PRODUCTION 10

This course is open to students in grade 10. Students will be responsible for creating the LFMSS Yearbook. In creating the book, students will learn computer graphic layout skills, photography skills, sales skills, and organizational skills. Students may be asked to attend a weekend workshop in September as part of their course work. Students will have to attend, take photos of, and report on various events outside of the regular school day to meet the requirements of the course.

Note: This class is taught outside of the timetable.

MEDIA DESIGN 11 (YEARBOOK)

This course is open to students in grades 11 and 12. Students will be responsible for creating the LFMSS Yearbook. In creating the book, students will learn computer graphic layout skills, photography skills, sales skills, and organizational skills. Students may be asked to attend a weekend workshop in September as part of their course work. Students will have to attend, take photos of, and report on various events outside of the regular school day to meet the requirements of the course. **Note: This class is taught outside of the timetable.**

MEDIA DESIGN 12 (YEARBOOK)

Prerequisite: Media Design 11

Yearbook 12 students take on responsibility in assigned editorial leadership positions. Editors oversee the publication's operation: make key decisions in all yearbook domains regarding them, design, articles, photographs, and communicating ideas to teacher/advisor, editorial staff, and yearbook staff. Students learn the roles of editors and become fluent with all areas of production; they learn how to assign tasks and carry out assignments for deadlines and assist yearbook staff. The positions demand very responsible, dedicated, and organized leaders. Students may be asked to attend a weekend workshop in September as part of their course work. Students will have to attend, take photos of, and report on various events outside of the regular school day to meet the requirements of the course.

Note: This class is taught outside of the timetable.

GR. 11/12 COURSE DESCRIPTIONS - DRAMA/THEATRE

DRAMA 9/10

If you enjoy an active and creative class where you get the chance to work collaboratively with other students, then Drama 9/10 is for you!

The common goal in Drama is to create a safe space for all to develop, explore, and express their creativity and individuality through drama. In its various forms, drama exists to delight, entertain, challenge, and reveal to its audience insights into our shared human experience.

Our course will include the following units:

1. Building Community
2. Movement and Pantomime
3. Voice and Readers Theatre
4. Improvisation
5. Developing Character
6. Working with Scripts

Typical classes consist of warm-up games; solo, paired, and group activities; and full-class instruction. Emphasis is placed on working purposefully and effectively with all class members. A positive and accepting attitude is an asset. Topics and themes of interest to the class may be explored throughout course units.

FILM & TELEVISION 11/12

The Film & Television course will provide students with a basic understanding of the technology behind film as an information medium, and some of the ways in which it is created to achieve its desired effect on an audience.

Upon completion, students should demonstrate a variety of production skills and techniques as it relates to producing a variety of video formats. Example formats include producing, School News Feature Stories, Short Film, Documentary Video, Biography Video, Music Video, Instructional Video, Advertising Commercials, and Public Service PSA Commercials. Students will learn skills in story design, script writing, video editing, lighting and sound, and studio production. To meet assignment deadlines and production schedules, students will need to rely on: good reading and writing skills, good time management, a positive attitude, and the ability to work in a team setting.

GR. 9-12 COURSE DESCRIPTIONS - FINE ARTS: MUSIC

Building on the strength of the Elementary music training, the Langley Fundamental Music Department offers a full program of instrumental and choral music from Grade 7 onwards. Following Band 7 we encourage students to continue their instrument or try the more exotic instruments available in the concert bands such as oboe, bassoon, bass clarinet, baritone sax, French horn, and low brass. Some courses are offered outside of the timetable, before or after school, and students are assessed as with all elective courses. Being involved in a course outside of the regular timetable allows students to take a well-rounded program of band, choir, and jazz courses. Extended day courses may be in addition to a full load, that is, students may take 9 or 10 courses rather than the normal 8 in a school year.

Performing Ensembles

All band and choir courses are performing ensembles which take part in a number of concerts and festivals during the school year. Students may also expect to take part in a yearly concert tour where they have the opportunity to travel and perform for audiences from outside their local community. Emphasis is on developing both group and individual performing skills to a high calibre while teaching students to become competent, independent, and creative musicians in the future. Concert and festival participation are considered to be part of the commitment to this group.

INSTRUMENTAL MUSIC: CONCERT BAND 9

Intermediate Concert Band continues to build on the areas of instrumental development, musical elements and concepts, attitudes and disciplines introduced in Junior Concert Band 8. This course is an important bridge to the very challenging music of the Senior Band. Students will be involved in developing skills and performance disciplines on their instrument as well as doing music theory, listening, history and ear training. See note re: performing ensembles.

INSTRUMENTAL MUSIC: CONCERT BAND 10-12

Recommended: A previous grade level of Concert Band or permission of the teacher.

Senior Concert Band continues to build on the areas of instrumental development, musical elements and concepts, attitudes and disciplines developed in Grade 8 Band. Concert Band concentrates on the performance of Concert Band repertoire ranging from traditional repertoire to pop music. Students will be involved in developing skills and performance disciplines on their instrument as well as doing music theory, listening, history and ear training. See note re: performing ensembles.

INSTRUMENTAL MUSIC: JAZZ BAND 9

Recommended: A previous grade level of band or permission of the teacher.

Junior Jazz Band 9 is an extended day credited courses scheduled on Tuesday after school 2:45pm – 4:30pm and Thursday mornings 7am – 8:15am. All students enrolled in this course must be enrolled in one of the Concert Band courses. Junior Jazz Band concentrates on the performance of jazz repertoire (swing, Latin, blues, rock, funk, fusion styles, etc.) and jazz improvisation skills. Students will direct their efforts in developing the skills and disciplines for performance in this idiom.

INSTRUMENTAL MUSIC: JAZZ BAND 10-12

Recommended: A previous grade level of Jazz Band or permission of the teacher

Senior Jazz Band is an extended day credit course scheduled on Tuesday mornings 7am – 8:15am and Thursday afterschool 2:45pm - 4:30pm. All students enrolled in this course must be enrolled in one of the Concert Band courses. Senior Jazz Band concentrates on the performance of jazz repertoire (swing, Latin, blues, rock, funk, fusion styles, etc.) and jazz improvisation skills introduced in Junior Jazz Band. Students will direct their efforts in developing the skills and disciplines for performance in this idiom. See note re: performing ensembles.

CHORAL MUSIC: CONCERT CHOIR 9-12

Concert Choir is a course offered out of the regular timetable that focuses on the development of a student's understanding of musical elements and concepts, attitudes, and disciplines through participation in a vocal performing group. The repertoire will range from traditional choral literature through pop and show music. Students will be involved in developing skills and performance disciplines as a singer as well as learning music theory, listening, history and ear training. The Concert Choir performs, and sometimes rehearses, separately as Junior (8-9), Senior (10-12), and together as a larger choir (8-12). See note re: performing ensembles.

This course is scheduled on Monday afterschool 2:45pm – 4:30 pm and on Wednesday mornings 7am – 8:15am.

MUSICAL THEATRE / PRODUCTION 10/11/12

Prerequisite: this course is open to any student in grade 10-12 with an interest / passion to write songs.

NOTE: This course is scheduled after school/outside the timetable. Final schedule to be determined.

GR. 9-12 COURSE DESCRIPTIONS – Core French

CORE FRENCH 9

Prerequisite: Core French 8

In this course, students will continue to develop their language proficiency through scaffolded, contextualized, and authentic language exposure in class. By the end of the course, they will be able to spontaneously understand, speak and write about a variety of familiar topics about themselves such as their interests, preferences. This course is grounded in Second Language Acquisition theory and as such, most of the instruction will be surrounding listening and reading a variety of texts such as short stories, videos, and a novel.

Note: Second language courses are a requirement for many post-secondary programs. This course is not offered in Summer School.

CORE FRENCH 10

Prerequisite: Core French 9

This course is available for all students who have previously completed French 9. Students will continue to develop their language proficiency through scaffolded, contextualized, and authentic language exposure in class. By the end of the course, they will be able to spontaneously understand, speak and write about a variety of familiar topics about themselves, their opinions and the world around them. This course is grounded in Second Language Acquisition theory and as such, most of the instruction will be surrounding listening and reading a variety of texts such as short stories, videos, and a novel.

Note: Second language courses are a requirement for many post-secondary programs. This course is not offered in Summer School.

CORE FRENCH 11

Prerequisite: Core French 10

This course is available for all students who have previously completed French 10. Along with further developing their communication skills, students will dive deeper into francophone culture around the world and develop their intercultural competence. This course is grounded in Second Language Acquisition theory and as such, most of the instruction will be surrounding listening and reading a variety of texts such as short stories, articles, videos, and a novel.

Note: Second language courses are a requirement for many post-secondary programs. This course is not offered in Summer School.

CORE FRENCH 12

Prerequisite: Core French 11

This course is available for all students who have previously completed French 11. This year, students will focus on adding detail and elaboration in order to effectively communicate about a variety of topics. Students will also continue to dive deeper into francophone culture around the world, reflect on how their own cultural context relates to their learning and continue to develop their intercultural competence. This course is grounded in Second Language Acquisition theory and as such, most of the instruction will be surrounding listening and reading a variety of texts such as short stories, articles, videos, and a novel. Students will have the option of completing the DELF junior exam. The Diplôme d'études en langue française (DELF or Diploma of French Language Studies) is an internationally recognized French Language Proficiency Certificate awarded by France's national Ministry of Education. This is a great opportunity for students to recognize and celebrate their language growth as well as a great addition to their resume.

A second language is not a graduation requirement but may be necessary if a student plans on meeting a second language requirement for admission to a university following high school graduation. Check post-secondary admission requirements on their website.

GR. 9-12 COURSE DESCRIPTIONS - Mathematics

MATHEMATICS 9 – FOUNDATIONS

Prerequisite: Math 8

The Math 9 curriculum is an extension of the concepts started in Math 8. The Big Ideas include work around the principles and processes underlying operations with numbers, computational fluency and flexibility, representations of continuous linear relationships, proportional relationships, and the analysis of the validity, reliability, and representation of data. The course will be taught with inclusion of problem solving throughout and will employ the use of mathematical modeling in the learning process. Math 9 is a required course for all grade 9 students.



MATHEMATICS 10

As students enter Math 10, they will need to decide which math pathway is appropriate for their future goals. Below is a list describing the 3 pathways:

WORKPLACE MATHEMATICS – Grade 10/11

This pathway is specifically designed to provide students with the mathematical understanding and critical-thinking skills identified for entry into the majority of trades and for direct entry into the work force post-secondary.

FOUNDATIONS OF MATHEMATICS - Grade 10-12

This pathway is designed for entry into post-secondary programs such as Arts or Humanities that do not require the study of theoretical calculus.

PRE-CALCULUS - Grade 10-12

This pathway is designed to provide students with the mathematical understanding and critical-thinking skills identified for post-secondary programs such as Science or Engineering that require the study of theoretical calculus.

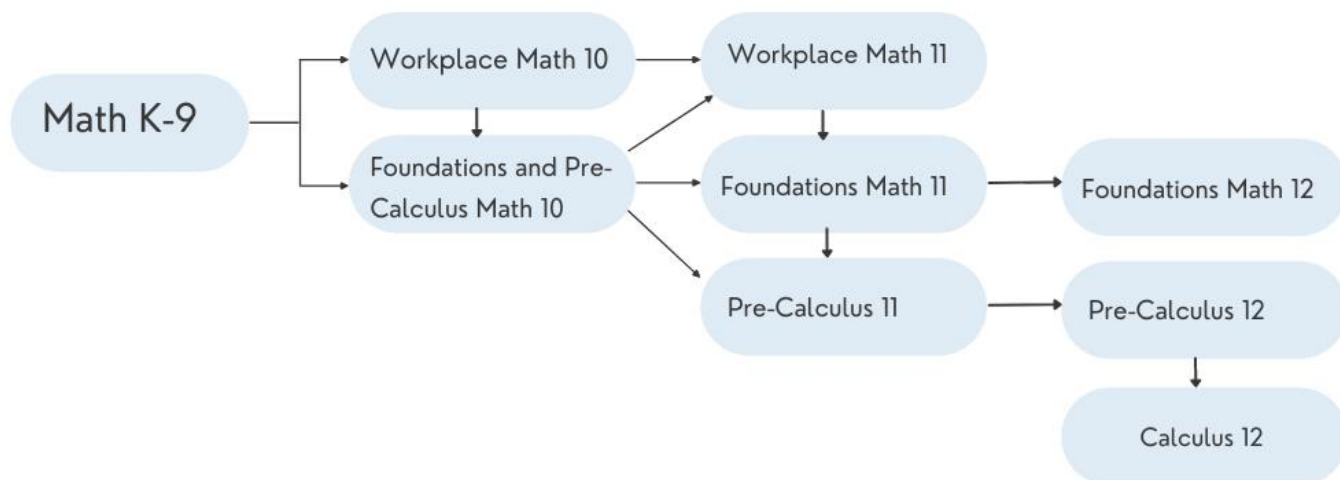
Post-Secondary Expectations Regarding the New Mathematics Curriculum

It is important students carefully research the expectations required for a program of study for any given post-secondary institution they may be interested in enrolling in. Be aware of the different requirements for general admission and the entrance to a specific program of choice. Each institution will have their own sets of requirements regarding mathematics.

GR. 9-12 COURSE DESCRIPTIONS - Mathematics

MATH PATHWAYS

The following chart describes the choices available to students taking math in grades 9-12. It is important to complete the course that complements your current skill level and ability in order to ensure your best math learning experience. The path does not have to be linear, and students can take additional grade 10-12 math courses to meet post-secondary requirements.



FOUNDATIONS AND PRE-CALCULUS MATH 10

For Foundations of Mathematics and Pre-Calculus Pathways

This course is for students who have chosen either the Foundations pathway or the Pre-Calculus pathway. Topics include right triangle trigonometry, operations on algebraic expressions and polynomials, and linear relationships. Specific topics include integral exponents, graphing relationships in data, linear relations and linear systems, multiplication and factoring of polynomials, trigonometry, and financial literacy.

It is strongly recommended that students who take this course have achieved at least a Proficient in Math 9 and have good work habits.

WORKPLACE MATH 10

This course is for students who have chosen the Workplace Pathway. Topics include proportional reasoning, operations, mathematical modeling, angle relationships and data analysis. Specific units include computational fluency through puzzles and games, graphing, trigonometry, unit conversions, surface area and volume, central tendency, experimental probability, and financial literacy.

FOUNDATIONS OF MATH 11

Prerequisite: Foundations and Pre-Calculus 10

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 like Economics, Geography, Arts or Humanities. Topics in this Pathway include scale models, mathematical reasoning, angle relationships, quadratic functions, systems of equations, statistics, and financial math.

PRE-CALCULUS 11

Prerequisite: Foundations and Pre-Calculus 10

This course is designed to provide students with mathematical understanding and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus like Sciences or Engineering. Topics include algebra and numbers, measurement, relations and functions, trigonometry, and finance. A small number of students will choose this pathway because of the higher-level topics included in it.

WORKPLACE MATH 11

Prerequisite: Workplace Mathematics 10

This course is specifically designed to provide students with the mathematical understanding and critical-thinking skills identified for entry into the majority of trades at post-secondary and for direct entry into the work force. Topics include algebra, geometry, measurement, number, statistics, and probability.

FOUNDATIONS OF MATH 12

Prerequisite: Foundations of Mathematics 11

This course is a continuation of the Foundations Pathway that began with FOM 11. Students continue to work towards preparing for fields like Economics, Geography, Arts or Humanities. Topics include logical reasoning, combinatorics, probability, constructions, relations and functions, finance, and research in mathematics.

PRE-CALCULUS 12

Prerequisite: Pre-Calculus 11

This course is a continuation of the Pre-Calculus Pathway that began with PREC 11. Students continue to work towards preparing for fields in the Sciences or Engineering. Topics include algebra and number, relations and functions, trigonometry, and conics.

CALCULUS 12

Prerequisite: Pre-Calculus 12 (with a high B and excellent work habits)

Topics offered include the theory of limits, differentiation and integration of functions, and practical problems involving these skills and techniques. Students who succeed will be very well prepared for any University entry level Calculus course.

GR. 9-12 COURSE DESCRIPTIONS - OTHER COURSE OFFERINGS

GAME THEORY & DESIGN 11

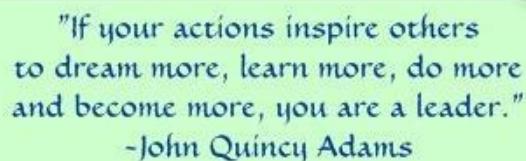
This course is for students in Grade 11 and 12 only. Game Theory & Design is a course about strategy games, and the theory/mechanics behind them. Throughout the course, students will be introduced to a number of games that use different kinds of systems. By playing a variety of different types of games, students will develop their ability to evaluate these products, refine their strategy and prediction skills and understand how game technology is adapted to each game. The course has three main goals: (1) to have fun, and (2) to learn about different aspects of games, game playing, and game design, and (3) to encourage students to have positive face-to-face interactions with their peers.

LEADERSHIP 11

This elective course is designed for students who are committed to the role of unifying and inspiring others in our LFMSS community. Students should have a passion for service and be excited about creating a collective vision towards their prescribed goals. Some of these goals may include motivating others to become active participants in our school community. Students will gain self-confidence as they learn to identify their individual strengths and weaknesses and collaborate with fellow student leaders in a group setting. Students will learn how to be an effective member of a team and accomplish collective goals together through respect and compromise. Students will be given the opportunity to assess the needs of the school community and then plan and implement group objectives. Possible events are organizing intramurals, initiating school-wide activities, promoting fund raising opportunities, connecting with schools throughout the District, and creating awareness around local/global initiatives. Students will be given the opportunity to work with other student leaders within the District as they set agendas for District initiatives and actively participate in decision-making opportunities.

PEER MENTORING 11/12

Do you enjoy helping others? Are you looking for a way to do meaningful work in your school community? As a peer mentor, you will work with students in need of extra help and guidance in a classroom setting. In addition to help with course content, you will also assist students in developing effective study habits. As an older student in the classroom, you will make a valuable contribution as a mentor and role model. Initially, and at regular times throughout the course, peer mentors will meet as a group to learn about effective methods, reflect on progress, and explore relevant topics **(while most of your work will take place during the school day, PM 11/12 meetings may take place after school, and attendance is required)**. Prospective mentors are strong students who are responsible, self-starting, and outgoing, and can be a positive example to other students. Peer mentoring provides valuable experience towards post-secondary studies, and the collaborative and leadership skills you develop will be assets in any job field. If you're considering a career in education, this is your first step. An added benefit: teaching others makes you a better student. The benefits of mentoring by fellow students are unique; you will play an important role for the students you help. If you are hoping to do fun and rewarding work that makes a difference, become a peer mentor!



*"If your actions inspire others
to dream more, learn more, do more
and become more, you are a leader."
-John Quincy Adams*

PSYCHOLOGY 12 (Note: this course does not count as a Social Studies 11 credit for graduation)

This is an introductory course into the scientific study of behavior and mental processes. The big ideas covered look at the biological, psychological, and social-emotional components of psychology. The course is designed to provide students with a basic level of understanding of psychological principles in addition to an examination of individuals mindful practice, classical experiments, and key researchers within the field of Psychology. This course requires a substantial amount of reading, writing and oral activities during class time. Attendance and active classroom participation will ensure success in this course. *A major research project is mandatory.* Strong reading and writing skills is recommended. This course does count for credit but is NOT considered as a Social Studies 11 credit for graduation.

GR. 9-12 COURSE DESCRIPTIONS – Physical Health Education



GENERAL INFORMATION

- Gym strip and equipment requirements:
 - T-shirt (has sleeves, is long enough, no scoop or low necklines, no tank tops)
 - Shorts (no denim, no belt loops) or sweatpants
 - Running shoes (that provide support) and are tied up – no skate shoes
 - NO HATS!!
 - Duo-tang suitable for inserts
- Clothing used in PHE classes should not be worn to other classes.
- A medical note from a physician must be obtained for any medical absences from PHE over 3 periods. A note from home is required for medical reasons less than 3 periods.
- Marks are based on the demonstration and application of the Curricular Competencies (CC) for the course. Meeting the CC's will depend upon levels of participation, attitude, effort and upon tests, fitness, and skill improvement.

PHYSICAL HEALTH EDUCATION 9 - Co-ed

Prerequisite: PHE 8

Grade 9 PHE is an extension of PHE 8. Every student has opportunity to develop skills and knowledge in the following areas:

- Develop anaerobic and aerobic fitness, skills and knowledge in the activities taught.
- Develop an interest in and appreciation for physical fitness.
- Develop leadership skills.

The course offers team games such as volleyball, football, basketball, lacrosse, soccer and individual “non-team” sports such as dance, badminton, and track and field. Theory and classroom work will be implemented to support the curricular component of Healthy Living. Topics such as nutrition, goal setting, mental health, physical health, and sexual health will be explored and evaluated. This assessment will be incorporated into the students’ PHE mark.

PHYSICAL HEALTH EDUCATION 10 – Co-ed

Prerequisite: PHE 9

As PHE 10 is the last year of compulsory Physical Health Education, the PHE Staff expects the students to:

- Develop anaerobic and aerobic fitness, skills and knowledge in the activities taught.
- Develop an interest in and appreciation for physical fitness to increase student’s chances of being active throughout their lives.
- Develop leadership skills.

The course offers team games such as volleyball, football, basketball, lacrosse, soccer and individual “non-team” sports such as dance, badminton, and track and field. Theory and classroom work will be implemented to support the curricular component of Healthy Living. Topics such as nutrition, goal setting, mental health, physical health, and sexual health will be explored and evaluated. This assessment will be incorporated into the students’ PHE mark.

STRENGTH AND CONDITIONING 10 – Co-ed

Prerequisite: PHE 9

Course Description: In this course, students will learn the fundamentals of weightlifting, cardiovascular exercise, and some gymnastics. Students will be introduced to numerous components of fitness, program design, as well as safety in weightlifting. This course will also satisfy all health requirements and will give credit as PHE 10. No prior knowledge of weightlifting is required. It is open to everyone.

In this course students should expect to:

- Be engaging in exercise and fitness on a daily basis
- Design exercise programs to achieve personal fitness goals
- Engage in learning the 10 components of fitness
- Learn the basics of Olympic weightlifting
- Explore different types of fitness including but not limited to calisthenics, functional fitness, bodybuilding, long and short distance running, power lifting, gymnastics, sport specific training, as well as flexibility training.
- Engage in sports and other activities that would be a part of a regular PHE class (including the Health component).

STRENGTH AND CONDITIONING 11/12– Co-ed Prerequisite: (recommended but not required) Strength and Conditioning 10

Course Description: In this course, students will continue to build on the fundamentals of weightlifting, cardiovascular exercise, and gymnastics. Students will continue to improve components of fitness, program design, as well as safety in weightlifting. This course will also satisfy all health requirements for PHE 11/12. No prior knowledge of weightlifting is required. It is open to everyone however Strength and Conditioning 10 is recommended.

In this course students should expect to:

- Be engaging in exercise and fitness on a daily basis
- Design exercise programs to achieve personal fitness goals
- Engage in learning the 10 components of fitness
- Learn and perform the basics of Olympic weightlifting
- Explore different types of fitness including but not limited to calisthenics, functional fitness, bodybuilding, long and short distance running, power lifting, gymnastics, sport specific training, as well as flexibility training.
- Engage in sports and other activities that would be a part of a regular PHE class
- Attend field trips relating to strength and conditioning pursuits

**There may be a cost attached to this course.

ACTIVE LIVING 11/12 – Healthy Living for Women

Prerequisite: PHE 10 for PE 11; PE 11 for PE 12 and teacher recommendation

This elective course, meeting all learning outcomes for PE 11/12, is designed for girls. The emphasis is on lifetime attitudes towards fitness and healthy living with participatory skills stressed. Part of the course will involve trips to various community resource facilities. There is a cost to participate in this class.

Course content of PE11/12 (Healthy Living for Women) consists of the following:

- Individual Fitness (i.e., Zumba, Dance, etc.)
- Dual Sports (Minor Games, Badminton, Tennis, etc.)
- Team Games (Basketball, Volleyball, Flag Football, Minor Games, etc.)
- Racquet Sports (Badminton, Pickle Ball, Table Tennis, etc.)
- Health Topics
- Weekly Field Trips (Cross-fit, Spin, Biking, Curling, Skating, etc.)
- Possible Athletic Department Service Hours



ACTIVE LIVING 11/12 – Healthy Living for Males

Prerequisite: PHE 10 for PE 11; PE 11 for PE 12 or permission from teacher

This elective course, meeting all learning outcomes for PE 11/12, is designed for boys.

The emphasis is on lifetime attitudes towards fitness and healthy living with participatory skills stressed. Students must complete 15 hours of athletic department service hours for full credit in this course. Part of the course will involve trips to various community resource facilities. There is a cost to participate in this class.

Course content of PE 11 and PE 12 consists of the following:

- Individual and dual activities (Archery, Badminton, Track & Field, etc.)
- Team games (Basketball, Volleyball, Soccer, Rugby)
- Weekly Field Trips (Intro to Weight Training, Curling, Ice hockey, Golf, etc.)
- Fitness
- Possible Athletic Department Service Hours

Athletic Leadership 11/12

Prerequisite: None

This elective course will be credited as a leadership course and designed for all students.

This course takes place outside the timetable.

In this course students will:

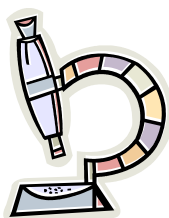
- Learn and apply leadership theory and practical application
- Be given several leadership duties based around the athletics in the school. Opportunities include but are not limited to:
 - Coaching middle school (Gr. 6/7) athletics teams
 - Officiating athletics games at the school
 - Planning and Officiating Intramurals during lunch hour
 - Leadership of potential house teams competition

GR. 9-12 COURSE DESCRIPTIONS - Science

The Science Program at LFMSS is designed to provide all students with basic scientific literacy and a positive attitude towards science as it relates to technology and society.

Equipment:

A scientific calculator is essential for Senior Physics and Chemistry courses. It should be capable of handling exponential numbers, trigonometric functions, and logarithms.



SCIENCE 9

Prerequisite: Science 8

The Science 9 curriculum provides students the opportunity to develop scientific knowledge, skills, and attitudes that will be relevant in their everyday lives and their future careers. The course addresses a variety of curricular competencies and content areas. The big ideas covered include the following:

- Science Processes – skills related to scientific communication, scientific literacy and understanding, using scientific technology
- Biology – cellular reproduction, asexual and sexual reproduction
- Physics – circuits, current, voltage, resistance
- Chemistry – the periodic table, formation of compounds
- Earth Science – matter cycles, sustainability of systems

SCIENCE 10

Prerequisite: Science 9

The Science 10 curriculum continues to provide students the opportunity to develop scientific knowledge, skills, and attitudes that will be relevant in their everyday lives and their future careers. The course addresses a variety of curricular competencies and content areas. The big ideas covered in Science 10 are:

- How are genes formed from DNA?
- What affects genetic diversity?
- How do chemical reactions proceed?
- What role does energy play in the process?
- How do energy transformations affect living things and the environment?
- How does the big bang theory explain the formation of the universe?

GR. 9-12 COURSE DESCRIPTIONS - Science

LIFE SCIENCE 11

Prerequisite: Science 10

Life Sciences 11 consists of four units that incorporate the Big Ideas of biological interactions, evolution at population level, and grouping of organisms based on common characteristics. This is an introductory course intended to present basic biological principles and help students to develop necessary laboratory skills. By examining concepts and gaining knowledge through labs, inquiry projects, and collaborate in classroom experiences it is hoped that students will develop an appreciation for the integrated nature of biology and through this develop a feeling of responsibility to sustain and protect biodiversity. Also, this course provides opportunity for students to build their scientific literacy skills, analyze and evaluate data and claims, and develop communication and collaborative skills.

The big ideas covered in the course includes:

- Methods and principles of biology - classification and taxonomy, adaptation, and evolution
- Microbiology – viruses, bacteria, protists
- The fungus kingdom
- The plant kingdom – algae, moss, ferns, [gymnosperms, angiosperms]
- The animal kingdom – invertebrate and vertebrate
- Selected optional topics: parasitology, aquatic biology, bioethics, biological careers, wildlife biology, population ecology

ANATOMY AND PHYSIOLOGY 12

Prerequisite: Life Sciences 11

Recommended: if achievement was C+ or higher in Life Sciences 11

It is not recommended that students take this course before Grade 12.

Anatomy & Physiology 12 is designed for those students with a keen interest in the life sciences and/or those students wishing to pursue biological studies at the post-secondary level. This course presents an intensive survey of human systems at the organ system, tissue, cellular, and molecular levels. This course consists of four units that incorporate the Big Ideas of Homeostasis, Gene Expression and Organ Systems. The first three units focus on cellular biology and the last unit covers the major systems of the body, focusing on anatomy and physiology. Anatomy and physiology 12 involve analytical problem solving, developing questions and making predictions, technical writing, data analysis and laboratory work. Participation in the classroom experiences and in labs will help students develop scientific literacy critical thinking, and how to apply new understandings to personal and societal issues.

Course content includes:

- Methods and principles – experimental design, homeostasis
- Biochemistry (includes DNA)
- Cell biology
- Human biology – form, function, and physiology of human systems (e.g., Digestive System, Circulatory System, Respiratory System, Excretory System, Reproductive System, Nervous System, Muscular/Skeletal System)



GR. 9-12 COURSE DESCRIPTIONS - Science

CHEMISTRY 11

Prerequisites: Science 10 and Precalculus Math 10

Recommended: if achievement was C+ or higher in both Science 10 and Precalculus Math 10

Chemistry is the science that deals with the properties and reactions of materials. It is concerned with the identification, characterization, and transformations of matter, and with the energy changes accompanying these transformations. As such, it makes an important contribution to our ability to comprehend the natural environment and understand various other pure and applied sciences, as well as the nature of scientific inquiry.

Through participation in co-operative labs, independent research, and other classroom experiences, students acquire knowledge, skills, and attitudes that enable them to pursue further study and experience success in the workplace as informed decision makers and full participants.

The big ideas covered in Chemistry 11:

- Atoms and molecules as building blocks of matter
- Organic chemistry and implications for human health, society, and the Environment
- How the mole is a quantity used to make atoms and molecules measurable
- Conservation of matter and energy in chemical reactions



CHEMISTRY 12

Prerequisite: Chemistry 11 (with a minimum C+ standing and Math 11 with minimum C+ standing)

Recommended: Not recommended for students who have not fulfilled the above prerequisites

Chemistry 12 is a continuation of Chemistry 11 and many of the skills and concepts covered in Chemistry 11 will be built upon in Chemistry 12. Unlike Chemistry 11, which is a survey course in which many different topics are covered, Chemistry 12 concentrates on five big ideas which are covered in greater depth. Higher level math is not a requirement of this course, but a strong math background will benefit students taking this class. Chemistry 12 is a problem-solving course in which mathematical principles and critical thinking are applied to conceptual problems. Students taking Chemistry 12 should be comfortable working in the lab, following written procedure and make connections between data, observations, and scientific concepts. It is recommended that students planning to take Chemistry at a post-secondary institution, take Chemistry 12.

The big ideas for Chemistry 12:

- Reactants must collide to react, and reaction rate is dependent on the surrounding conditions
- Dynamic equilibrium can be shifted
- Saturated solutions are systems in equilibrium
- Acid/base strength depends on the degree of ion dissociation
- Oxidation & reduction are complementary processes that involve the gain or loss of electrons.

GR. 9-12 COURSE DESCRIPTIONS – Science

PHYSICS 11

Prerequisites: Science 10 and Pre-Calculus Math 10

Recommended: if achievement was C+ or higher in both Science 10 and Pre-Calculus Math 10

Students will be studying a variety of topics in Physics with the understanding of their applications to the real world. The central goal of this course is for students to learn to "figure out how things work". This goal ties into the critical thinking competency that permeates throughout the course. Students will learn approaches to problem solve hypothetical situations and skills to methodically work out solutions.

The big ideas covered in Physics 11:

- An object's motion can be predicted, analyzed, and described
- Forces influence the motion of an object
- Energy is found in different forms, is conserved, and has the ability to do work
- Mechanical waves transfer energy but not matter

PHYSICS 12

Prerequisites: Physics 11 (with a minimum C+ standing and Pre-Calculus Math 11 with minimum C+ standing)

Recommended: Not recommended for students who have not fulfilled the above prerequisites

This course gives students an introduction to higher level Physics. It is a pre-requisite for post-secondary fields such as science, engineering, and kinesiology. It is also a highly recommended University corequisite for other sciences such as Chemistry, Biology, and Kinesiology. As a result, the content covers a range of strands with the ability to model physical phenomena being the ultimate goal. Problem solving continues to be the major competency in the course curriculum. Therefore, students will continue to work on this skill.

The big ideas covered in Physics 12:

- Forces can cause linear and circular motion
- Forces and energy interactions occur within fields
- Momentum is conserved within a closed and isolated system
- Measurement of motion depends on our frame of reference

EARTH SCIENCE 11

Prerequisite: Science 10

Earth Sciences 11 is a survey course designed to introduce students to the diverse aspects of earth and space science and offers applications to the real world. Through the investigation of geologic processes, students will become aware of their role as custodians of our planet and develop an appreciation of the impact of human activities on both local and global environments.

Course content includes:

- Earth and Its Environment: Introduction
- Geological Science: Earth materials; weathering and erosion; Tectonics and Volcanism; Tectonics and Earthquakes; Resources and Environment
- Oceanographic Science: Oceans
- Astronomical Science: Observing the Universe; Stars and Galaxies; the Sun and the Solar System; the Earth and Moon; Space Technologies
- Atmospheric Science: The Atmosphere; Pressure and Winds; Evaporation; Precipitation and Weather
- Earth's History: Geologic Time

GR. 9-10 COURSE DESCRIPTIONS – Social Studies

SOCIAL STUDIES 9

Prerequisite: Social Studies 8

Why do people revolt?

This course looks at the continuing effects of colonialism and imperialism, significant revolutions and conflicts and major social, political, and technological changes between 1750-1919. Students will explore changing attitudes, differing worldviews, and the rise of new leaders and nation-states in this revolutionary time period. Students will explore local, national, and global conflicts, analyze causes of change, and develop research skills and insights that will help them navigate an increasing complex and closely connected world.

SOCIAL STUDIES 10

Prerequisite: Social Studies 9

What does it mean to be Canadian?

This course explores how 20th Century global and regional conflicts have been a powerful force in shaping the development as a country through changes in population, economy, and technology. Students will analyze the elements that constitute Canadian identity, including historical injustices that challenge the narrative and identity of Canada as an inclusive, multicultural society. Students will develop their ability to apply the concepts of historical thinking and the historical inquiry process when investigating key issues and events in Canadian history since 1919.

GR. 12 COURSE DESCRIPTIONS – Social Studies

HUMAN GEOGRAPHY 12

Prerequisite: Social Studies 10

How have demographic patterns and population distribution been influenced by physical features and natural resources? Human Geography is an in-depth study of the complex and ever-changing relationship between humans and their environment. This course will examine a wide range of topics such as demographic patterns, population distribution, the spread of disease, international conflicts, industrialization, urbanization, and globalization, economic development, and human interaction with the environment. Students enrolled in Human Geography 12 will use geographic inquiry processes and critical thinking skills to communicate their findings and draw meaningful insights into some of our world's most pressing issues and phenomena.

20th CENTURY WORLD HISTORY 12

Prerequisite: Social Studies 10

How has the breakdown of long-standing empires created new economic and political systems?

This course is an in-depth study of the major events of the twentieth century, covering World War One, the rise of dictators, World War Two, the Cold War and the present day world. Emphasis is placed on why the events took place, and how they have affected the world today. 20th Century World History will continue to help students develop important research and critical thinking skills and will offer students an opportunity to debate a variety of historical issues.

LAW STUDIES 12**Prerequisite: Social Studies 10**

How do society's laws and legal framework affect people's daily lives?

Law 12 is a survey course that introduces students to the concept of law and the role that it plays in society; by watching and reading current and past cases, we dive into trials, criminal minds, lawsuits, and ground-breaking verdicts. We create mock trials and take on roles of being lawyers, investigators, witnesses, judges, jurors, etc. During the course, we visit the Supreme Court of British Columbia in Vancouver to make a connection to learning. Students get opportunities to see real life trials and talk to a judge. This course is valuable for students not only interested in the legal and law enforcement industry, but also in many other areas such as social work, psychology, counselling, criminology, contracting, human resources, business, and many other careers.

PHYSICAL GEOGRAPHY 12**Prerequisite: Social Studies 10**

How have the natural processes of the earth impacted the landscape and human settlement?

Geography is the study of the relationship between the physical and biological components of earth. Students learn about the ways in which the earth's surface is formed and how the planet is in a constant state of transformation. Students are introduced to the rest of a delicately balanced web of processes within the realms of atmosphere and biosphere and finally, the place of humanity in this web is considered in terms of our utilization of resources and impact on the planet. The main goal of this course is to equip students with the knowledge to see our world as a product of many integrated and dynamic processes in which our activities are both influenced and influential.

**There is the potential for an optional field trip in this course.*

SOCIAL JUSTICE 12**Prerequisite: Social Studies 10**

So, life isn't fair...what can you do about it?

Explore the darker side of humanity and find ways to recover from the worst of our own atrocities. This course builds on students' innate sense of justice, motivating them to think and act ethically and empowering them to positively impact the world. Learning from historical and current events such as slavery, genocide, and civil rights movements, students will explore topics such as privilege, power, equity, ethics, and social and moral responsibility. Social Justice 12 is a participatory course that requires self and social analysis, respect for diversity, and a willingness to take action, work collaboratively and respectfully discuss controversial issues.



REFERENCE GUIDE - Graduation Checklist

Student Name _____

Grade: _____

Grade 10 Required Courses

Credits

- English Language Arts 10 4
- Social Studies 10 4
- Science 10 4
- a Math 10 Workplace/Foundations 4
- Physical Health Education 10 4
- Career Life Education 4

Total Credits:

Grade 11 Required Courses

Credits

- English Language Arts 11 4
- a Social Studies 12: _____ 4
- a Science 11: _____ 4
- a Math 11: Workplace/Foundations/Pre-Calculus 4

Total Credits:

Grade 12 Required Courses

Credits

- English Studies 12 *or* English First Peoples 12 4
- _____ 12 4
- _____ 12 4
- _____ 12 4
- Career Life Connections/Capstone 4

Total Credits:

Fine Arts &/or ADST Required Course

Credits

- Fine Arts: _____ 10 / 11 / 12 4
- Or**
- ADST: _____ 10 / 11 / 12 4

Total Credits:

Additional Courses – Electives

Credits

- _____ 12 4
- (Recommended)**
- _____ 10 / 11 / 12 4
- _____ 10 / 11 / 12 4
- _____ 10 / 11 / 12 4
- _____ 10 / 11 / 12 4
- _____ 10 / 11 / 12 4
- _____ 10 / 11 / 12 4
- _____ 10 / 11 / 12 4

Total Credits:

OVERALL TOTAL CREDITS MUST = MINIMUM 80 CREDITS

