

Lakehead Adult Education Centre Student Handbook

2019-2020

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MISSION STATEMENT

Our mission is to serve a diverse multicultural and multi-aged community with the highest quality of education.

CODE OF CONDUCT

Lakehead District School Board (LDSB) schools are safe, nurturing, respectful and positive learning environments that enable all students to succeed to their full potential.

They are violence-free environments that promote a sense of responsibility, civility and academic excellence. As part of this, all students and staff are expected to develop and acquire the knowledge and skills that demonstrate respect for human rights and social justice, and promote the values they need to become responsible members of society.

The Code of Conduct is founded on principles of fairness and non-violence and has a focus on assisting students to develop appropriate social/personal skills and non-violent problem-solving techniques that will be used when incidents occur. Students are encouraged to assist each other through programs like peer mediation, problem-solving discussions and dispute resolution.

The LDSB does not tolerate the following activities on its property, on school buses, or at Board-sponsored events:

- Physical aggression of any kind;
- The possession or presence of weapons or replicas;
- Verbal abuse in any form;
- The presence of any intruder or any activity which places the safety of students, staff or visitors at risk;
- The possession, use or trafficking of alcohol, illegal drugs or unauthorized prescription drugs;
- Bullying and cyber-bullying.

FACILITIES

- A phone for student use is located in the main hallway;
- The office is unable to provide change for the pay phone or the vending machines;
- Lunch is provided on Tuesdays and Thursdays at 12:00pm by Roots to Harvest all registered students are welcome;
- Computer lab is available for self-study students during school hours.

HOURS OF OPERATION

Office Hours

Monday to Friday 8:30am to 4:00pm Wednesday evenings 5:00pm to 7:00pm

Guidance Hours

Tuesdays and Thursdays 10:00am to 12:00pm and 1:00pm to 4:00pm Wednesdays 10:00am to 12:00pm, 1:00pm to 4:00pm 5:00pm to 7:00pm

RULES AND REGULATIONS

Smoking or vaping is not permitted anywhere on the school grounds; anyone found smoking or vaping on the school grounds may be fined;

Visitors to the school must check-in and sign-in at the office.

Plagiarism: please refer to Board Policy #4021 for more information.

SCHOOL CLOSURE INFORMATION

For information about school closures due to heavy snowfall or other weather-related issues, please listen to the local radio stations, or check the board website at www.lakeheadschools.ca

THREATS TO SCHOOL SAFETY

The primary responsibility of Lakehead Public Schools is to ensure the safety of students and staff while on Board property;

All central administrative policies and procedures relating to the management of crisis situations were developed collaboratively with the Thunder Bay Police and the Ontario Provincial Police. Detailed response procedures are outlined in the document Police/School Protocol 2009.

TECHNOLOGY USE STANDARDS FOR STUDENTS

Please refer to LDSB policy #3096 Information/Communication Technology Use for more information.

GRADUATION INFORMATION

Please be aware that it may take up to 5 days to process your transcript, and diplomas are processed at specific times throughout the school year. If you have questions, please check in with the Guidance Counsellor.

Convocation takes place in June each school year. Information about the 2019-2020 ceremony will be available from the office in April 2020.

Grad pictures can be booked through the office at no cost to the student. Dates for graduation photo bookings will be available at the office in May 2020.

GUIDANCE SERVICES

The Guidance Services primary focus is to work closely with students in all aspects of development during their time at LAEC. Specific services include: educational counseling, academic counselling, career information.

MATURITY EVAULATIONS

Maturity Credits

Maturity credits can be awarded to students who entered a high school before 1999. Students who entered school after 1999 are not eligible for maturity credits. Students are eligible for 2 credits per year from the day they turn 19 years of age. A maximum of 12 maturity credits can be awarded to a student. A student's total credits (after maturity credits) cannot exceed 23 or 26 credits depending on the diploma they are on. Students who are awarded maturity credits must complete a minimum of 4 credits as a mature

student. For more information about Maturity credits, please see the Guidance Counsellor.

Prior Learning Assessment and Recognition (PLAR)

PLAR is a process for students who have fewer than 16 credits or who started high school after 1999. PLAR allows students to earn credits through subject-specific assessments and through an evaluation of their life experience.

PLAR Requirements:

- Students must be at least 18 years of age or older and out of high school for a year
- Students are required to meet the Ontario Secondary School Diploma requirements which are as follows:
- 30 credits to graduate;
- Earn a minimum of four grade 11 and 12 credits while registered as a mature student by taking the necessary courses;
- Must complete each of the four grade 11 and 12 compulsory credit requirements: Grade 11 and 12 English, Grade 11 or 12 Mathematics (substitutions may be allowed), Grade 11 or 12 Science or Grade 9, 10, 11 or 12 Technological Education (substitutions may be allowed);
- Ontario Secondary School Literacy Test or Literacy Course;
- Community Involvement Activities 40 hours.

Students, who enroll from outside Ontario, must participate through the PLAR process to earn an Ontario Secondary School Diploma. For more information about PLAR, please see the Guidance Counsellor.

POST-SECONDARY INFORMATION

College Applications

Transcript Requests for Current Students

For colleges within Ontario, transcripts and/or letters of registration are sent **electronically** to **OCAS** at **specific times** throughout the school year;

Please be aware that we do not send transcripts and/or letters of registration directly to any Ontario college.

IMPORTANT: when you complete your application through OCAS, you must list LAEC as a school you are currently attending in the Education section of your application. When you have completed an application through OCAS (www.ontariocolleges.ca), you are required to inform the guidance counsellor via email of your application (include your OCAS application #). For transcript requests for colleges outside of Ontario, please contact the guidance counsellor directly after you have completed the application.

Application Deadlines

Different colleges may have different deadlines, please contact the college of your choice for this information;

It is recommended that a student apply as early as possible;

Please be aware that you do not have to have your credits completed to be able to do the application.

Final Mark Deadlines

Different colleges may have different deadlines, please contact the college of your choice for this information; Please be aware that LAEC has deadlines for credit completion which may be different than the college deadlines.

University Applications

Transcript Requests for all University Applications

For universities within Ontario, transcripts and/or letters of registration are sent **electronically** at the student's request;

Please be aware that we do not mail transcripts and/or letters of registration directly to any Ontario university

Application Deadlines

Different universities may have different deadlines, please contact the university of your choice for this information;

It is recommended that a student apply as early as possible;

Please be aware that you do not have to have your credits completed to be able to do an application.

Final Mark Deadlines

Different universities may have different deadlines, please contact the university of your choice for this information. Please be aware that LAEC has deadlines for credit completion which may be different than the university deadlines.

PROGRAMMING

ATTENDANCE

Attendance is the key to your success as a student. Missing a few days means missing a significant portion of the course. Try to minimize time lost due to appointments by scheduling these after your time at LAEC.

Employment Ontario, Ontario Works, and WSIB Clients must follow the requirements set out by those organizations.

CREDIT PROGRAMMING

Semester	Registration Dates	Start	End
Semester 1	August 27 to September 5	September 3, 2019	October 25, 2019
Semester 2	September 17 to October 31	October 28, 2019	December 20, 2019
Semester 3	November 12 to January 9	January 6, 2020	February 28, 2020
Semester 4	January 14 to March 5	March 2, 2020	April 30, 2020
Semester 5	March 10 to May 7	May 4, 2020	June 25, 2020

LAEC offers direct instruction courses, blended learning courses, self-study courses and co-operative education courses for students who are working towards their OSSD, or for those looking to take credits for post-secondary purposes.

Registration Dates for All Credit Programming Co-operative Education

Students have the opportunity to take part in a co-op placement as a way of earning credits toward their OSSD. Placements can be paid (using a student's current job) or un-paid;

Cooperative Education offers real work experience, exploration of a career choice and a chance to further develop skills. See the Guidance Counsellor for a co-op registration form and talk to our co-op teacher for more information.

Blended Learning & Direct Instruction Classes

Blended Learning and Direct Instruction classes are subject to enrollment, and attendance is mandatory.

Schedule for Blended Learning & Direct Instruction Classes

Semester	Start Date	End Date
Semester 1	September 3, 2019	October 25, 2019
Semester 2	October 28, 2019	December 20, 2019
Semester 3	January 6, 2020	February 28, 2020
Semester 4	March 2, 2020	April 30, 2020
Semester 5	May 4, 2020	June 25, 2020

Self-Study E-learning Courses

- Students are given login and password information at the time of registration;
- The teachers for your courses are the best resource for you if you have any questions or are struggling with the material;
- One credit is made up of 20 lessons, and an exam;
- Lessons must be completed to the satisfaction of the subject teacher before grades and/ or credits will be issued. Every lesson must be completed. Every course has an exam. You must achieve an average of 50% or above on your lessons, and 50% or above on the exam in order to earn the credit. Redos of lessons, and exams are at the discretion of teacher. No more than one redo will be allowed for an exam;
- The evaluation policy for all courses is 70% for the course work (lessons and culminating activity) and 30% for the final exam;
- Marked lessons shall be returned within 5-7 working days (Not including weekends, statutory holidays);
- Plagiarism is unacceptable and will result in a mark of 0% for a lesson. Course worked is checked for plagiarism. While students are encouraged to discuss lessons and ideas, the work you hand in must be yours alone;

• If you are struggling with a course or find it is not what you expected, see the Guidance Counsellor -- Courses can be changed, delayed or extra help provided.

Self-Study Booklet Courses

The following courses are available through booklets only: BMX 3E, GPP 3O, HLS 3O, and MCF 3M. A teacher schedule, including times students can access their teacher for support, is available from Guidance, or at the office.

- \$30 refundable book deposit is required for self-study credit courses;
- Self-study credit courses requiring a textbook have an additional \$30 book deposit;
- All books must be returned in good condition for a full refund; lost books will not be refunded;
- All completed lesson work must be accompanied by a cover sheet, which can be found in Room 5 (Computer Lab);
- A copy of the completed comments cover sheet will be returned to the student to keep; completed lessons may be kept by the subject teacher until after the credit is completed.
- Submit lessons to the credit room in the appropriate box for marking from 8:30 a.m. 4:00 p.m. daily, Wednesday evenings from 5:00pm to 7:00pm, or when teachers are scheduled to be in the classroom;
- The teachers for your courses are the best resource for you if you have any questions or are struggling with the material;
- One credit is made up of 20 lessons, and an exam;
- Lessons must be completed to the satisfaction of the subject teacher before grades and/or credits will be issued. Every lesson must be completed. Every course has an exam. You must achieve an average of 50% or above on your lessons, and 50% or above on the exam in order to earn the credit. Redos of lessons, and exams are at the discretion of teacher. No more than one redo will be allowed for an exam;
- The evaluation policy for all courses is 70% for the course work (lessons and culminating activity) and 30% for the final exam;
- It is your responsibility to pick up your marked work;
- Information will not be given out over the phone;
- Marked lessons shall be returned within 5-7 working days (Not including weekends, statutory holidays);
- Plagiarism is unacceptable and will result in a mark of 0% for the lesson.
- Course work is checked for plagiarism. While students are encouraged to discuss lessons and ideas, the work you hand in must be yours alone.
- The teachers for your courses are the best resource for you if you have any questions or are struggling with the material;
- If you are struggling with a course or find it is not what you expected, see the Guidance Counsellor or the Manager. Courses can be changed, delayed or extra help pro-

vided.

Schedule for Self-Study (Booklet & E-learning) Courses and Deadlines

Semester	Start	End	Lessons Due	Exams Due
Semester 1	September 3, 2019	October 25, 2019	October 18, 2019	October 25, 2019
Semester 2	October 28, 2019	December 20, 2019	December 13, 2019	December 20, 2019
Semester 3	January 6, 2020	February 28, 2020	February 21, 2020	February 27, 2020
Semester 4	March 2, 2020	May 2, 2020	April 24, 2020	May 1, 2020
Semester 5	May 4, 2020	June 25, 2020	June 12, 2020	June 19, 2020

Exam Policy for Self-Study (E-learning/Booklet) Credit Courses

- You must achieve an average of 50% or above on your lessons, to be able to write your exam:
- You must pass the exam before the credit will be issued;
- You MUST bring photo ID with you to write an exam.

Exams can be written with your teacher during their scheduled times in the classroom, or on the following evenings:

Wednesday, October 23, 2019

Wednesday, December 18, 2019

Wednesday, February 26, 2020

Wednesday, April 29, 2020

Wednesday, June 17, 2020

Summer Semester

Summer Hours are announced in late spring. Please check with the guidance counsellor or on our website for further information. Students can take 1 credit via self-study (e-learning), or take 1 co-op credit in the summer.

COURSE DESCRIPTIONS AND LEVELS

BUSINESS STUDIES

Retail and Service Marketing, Grade 11, Workplace (BMX 3E)

Prerequisite - None

This course focuses on marketing activities in the retail and service sectors. Students will examine trends and global influences on marketing decisions, and will learn about the importance of customer service in developing a customer base and maintaining customer loyalty. Through hands-on learning, students will develop personal selling and information technology skills that will prepare them for a variety of marketing-related positions in the workplace.

ENGLISH

English, Grade 11, Workplace (ENG 3E)

Prerequisite - English, Grade 10, Applied

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will study the content, form, and style of a variety of contemporary informational, graphic, and literary texts; and create oral, written, and media texts in a variety of forms for practical purposes. An important focus will be on using language clearly and accurately in a variety of formal and informal contexts. The course is intended to prepare students for the compulsory Grade 12 workplace preparation course.

English, Grade 11, College (ENG 3C)

Prerequisite - English, Grade 10, Applied

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will study the content, form, and style of a variety of informational and graphic texts, as well as literary texts from Canada and other countries, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity. The course is intended to prepare students for the compulsory Grade 12 college preparation course.

English, Grade 11, University (ENG 3U)

Prerequisite - English, Grade 10, Academic

This course emphasizes the development of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse challenging literary texts from various periods, countries, and cultures, as well as a range of informational and graphic texts, and create oral, written, and media texts in a variety of forms. An important focus will be on using language with precision and clarity and incorporating stylistic devices appropriately and effectively. The course is intended to prepare students for the compulsory Grade 12 university or college preparation course.

English, Grade 12, Workplace (ENG 4E)

Prerequisite - English, Grade 11, Workplace

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in the workplace and in daily life. Students will analyse informational, graphic, and literary texts and create oral, written, and media texts in a variety of forms for workplace-related and practical purposes. An important focus will be on using language accurately and organizing ideas and information coherently. The course is intended to prepare students for the workplace and active citizenship.

English, Grade 12, College (ENG 4C)

Prerequisite - English, Grade 11, College

This course emphasizes the consolidation of literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms for practical and academic purposes. An important focus will be on using language with precision and clarity and developing greater control in writing. The course is intended to prepare students for college or the workplace.

English, Grade 12, University (ENG 4U)

Prerequisite - English, Grade 11, University

This course emphasizes the consolidation of the literacy, communication, and critical and creative thinking skills necessary for success in academic and daily life. Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. An important focus will be on using academic language coherently and confidently, selecting the reading strategies best suited to particular texts and particular purposes for reading, and developing greater control in writing. The course is intended to prepare students for university, college, or the workplace.

The Ontario Literacy Course, Grade 12, Open (OLC 4O) *Prerequisite - None*

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy Test (OSSLT). Students who complete the course successfully will meet the provincial literacy requirement for graduation. Students will read a variety of informational, narrative, and graphic texts and will produce a variety of forms of writing, including summaries, information paragraphs, opinion pieces, and news reports. Students will also maintain and manage a portfolio containing a record of their reading experiences and samples of their writing.

The Writer's Craft, Grade 12, University (EWC 4U)

Prerequisite - English, Grade 11, University

This course emphasizes knowledge and skills related to the craft of writing. Students will analyse models of effective writing; use a workshop approach to produce a range of works; identify and use techniques required for specialized forms of writing; and identify effective ways to improve the quality of their writing. They will also complete a major paper as part of a creative or analytical independent study project and investigate opportunities for publication and for writing careers.

GUIDANCE AND CAREER EDUCATION

Advanced Learning Strategies, Grade 11, Open (GLS 40)

Prerequisite - None

This course improves students' learning and personal-management skills, preparing them to make successful transitions to work, training, and/or postsecondary education destinations. Students will assess their learning abilities and use literacy, numeracy, and research skills and personal-management techniques to maximize their learning. Students will investigate trends and resources to support their postsecondary employment, training, and/or education choices and develop a plan to help them meet their learning and career goals.

HISTORY

Canada: History, Identity and Culture, Grade 4, University (CHI 4U)

Prerequisite - Any university or university/college course in Canadian and world studies, English, or social sciences and humanities

This course traces the history of Canada, with a focus on the evolution of our national identity and culture as well as the identity and culture of various groups that make up Canada. Students will explore various developments and events, both national and international, from precontact to the present, and will examine various communities in Canada and how they have contributed to identity and heritage in Canada. Students will investigate the de-

velopment of culture and identity, including national identity, in Canada and how and why they have changed throughout the country's history. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate the people, events, and forces that have shaped Canada.

World History Since the 15th Century, Grade 12, University (CHY 4U)

Prerequisite - Any university or university/college course in Canadian and world studies, English, or social sciences and humanities

This course traces major developments and events in world history since approximately 1450. Students will explore social, economic, and political changes, the historical roots of contemporary issues, and the role of conflict and cooperation in global interrelationships. They will extend their ability to apply the concepts of historical thinking and the historical inquiry process, including the interpretation and analysis of evidence, as they investigate key issues and ideas and assess societal progress or decline in world history.

INDIGENOUS STUDIES

Aboriginal Beliefs, Values and Aspirations in Contemporary Society, Grade 11, Workplace (NBV 3E)

Prerequisite - History, Grade 10

This course focuses on the beliefs, values, and aspirations of Aboriginal peoples in Canada. Students will examine issues of identity facing Indian, Métis, and Inuit peoples, and their relationships to land and nature, as well as to one another within their communities and working environments. Students will also learn how traditional and contemporary beliefs and values influence the present-day aspirations and actions of Aboriginal peoples.

MATH

Math for Work and Everyday Life, Grade 11, Workplace (MEL 3E) *Prerequisite - Math, Grade 10, Workplace*

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will solve problems associated with earning money, paying taxes, and making purchases; apply calculations of simple and compound interest in saving, investing, and borrowing; and calculate the costs of transportation and travel in a variety of situations. Students will consolidate their mathematical skills as they solve problems and communicate their thinking

Foundations for College Math, Grade 11, College (MBF 3C) Prerequisite - Math, Grade 10, Applied

This course enables students to broaden their understanding of mathematics as a problem-solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analysing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Functions for College Math, Grade 11, University/College (MCF 3M) Prerequisite - Math, Grade 10, Applied

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Functions, Grade 11, University (MCR 3U)

Prerequisite - Math, Grade 10, Academic

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Math for Work and Everyday Life, Grade 12, Workplace (MEL 4E) *Prerequisite - Math, Grade* 11

This course enables students to broaden their understanding of mathematics as it is applied in the workplace and daily life. Students will investigate questions involving the use of statistics; apply the concept of probability to solve problems involving familiar situations; investigate accommodation costs, create household budgets, and prepare a personal income tax return; use proportional reasoning; estimate and measure; and apply geometric concepts to create designs. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Foundations for College Math, Grade 12, College (MAP 4C) *Prerequisite - Math, Grade* 11, *College*

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

Mathematics for College Technology, Grade 12, College (MCT 4C) Prerequisite - Math, Grade 11, Functions and Applications (MCF 3M)

This course enables students to extend their knowledge of functions. Students will investigate and apply properties of polynomial, exponential, and trigonometric functions; continue to represent functions numerically, graphically, and algebraically; develop facility in simplifying expressions and solving equations; and solve problems that address applications of algebra, trigonometry, vectors, and geometry. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for a variety of college technology programs.

Mathematics of Data Management, Grade 12, University (MDM 4U) Prerequisite - Math, Grade 11, Functions (MCR 3U) or Functions and Applications (MCF 3M)

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analysing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest

Advanced Functions, Grade 12, University (MHF 4U)

Prerequisite - Math, Grade 11, Functions (MCR 3U) or Grade 12, College Technology (MCT 4C)

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

Calculus and Vectors, Grade 12, University (MCV 4U)

Prerequisite – Math, Grade 12, Advanced Functions (MHF 4U) must be taken prior to or concurrently with Calculus and Vectors

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in three dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course.

SCIENCE

Biology, Grade 11, College (SBI 3C)

Prerequisite - Science, Grade 10, Applied

This course focuses on the processes that occur in biological systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life sciences and related fields.

Biology, Grade 11, University (SBI 3U)

Prerequisite - Science, Grade 10, Academic

This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation

Biology, Grade 12, University (SBI4U)

Prerequisite - Biology, Grade 11, University

This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields.

Chemistry, Grade 11, University (SCH 3U)

Prerequisite - Science, Grade 10, Academic

This course enables students to deepen their understanding of chemistry through the study of the properties of chemicals and chemical bonds; chemical reactions and quantitative relationships in those reactions; solutions and solubility; and atmospheric chemistry and the behaviour of gases. Students will further develop their analytical skills and investigate the qualitative and quantitative properties of matter, as well as the impact of some common chemical reactions on society and the environment.

Chemistry, Grade 12, College (SCH4C)

Prerequisite - Science, Grade 10, Applied

This course enables students to develop an understanding of chemistry through the study of matter and qualitative analysis, organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment. Students will use a variety of laboratory techniques, develop skills in data collection and scientific analysis, and communicate scientific information using appropriate terminology. Emphasis will be placed on the role of chemistry in daily life and the effects of technological applications and processes on society and the environment.

Chemistry, Grade 12, University (SCH 4U)

Prerequisite - Chemistry, Grade 11, University

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment.

Physics, Grade 11, University (SPH 3U)

Prerequisite - Science, Grade 10, Academic

This course develops students' understanding of the basic concepts of physics. Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; ener-

gy transformations; the properties of mechanical waves and sound; and electricity and magnetism. They will enhance their scientific investigation skills as they test laws of physics. In addition, they will analyse the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.

Physics, Grade 12, College (SPH 4C)

Prerequisite - Science, Grade 10, Applied

This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment.

Physics, Grade 12, University (SPH 4U)

Prerequisite - Physics, Grade 11, University

This course enables students to deepen their understanding of physics concepts and theories. Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation. Students will also explore the wave nature of light, quantum mechanics, and special relativity. They will further develop their scientific investigation skills, learning, for example, how to analyse, qualitatively and quantitatively, data related to a variety of physics concepts and principles. Students will also consider the impact of technological applications of physics on society and the environment.

GUIDANCE AND CAREER EDUCATION

Leadership and Peer Support, Grade 11, Open (GPP 3O)

Prerequisite - None

This course prepares students to act in leadership and peer support roles. They will design and implement a plan for contributing to their school and/or community; develop skills in communication, interpersonal relations, teamwork, and conflict management; and apply those skills in leadership and/or peer support roles – for example, as a student council member or a peer tutor. Students will examine group dynamics and learn the value of diversity within groups and communities.

SOCIAL SCIENCES AND HUMANITIES

Raising Healthy Children (Parenting), Grade 11, Open (HPC 3O)

Prerequisites - None

This course focuses on the skills and knowledge parents, guardians, and caregivers need, with particular emphasis on maternal health, pregnancy, birth, and the early years of human development (birth to six years old). Through study and practical experience, students will learn how to meet the developmental needs of young children, communicate with them, and effectively guide their early behaviour. Students will develop their research skills through investigations related to caregiving and child rearing.

NON-CREDIT PROGRAMMING

English as a Second Language (ESL) - Blended Learning Classes

Our ESL classes contain students from all over the world. We welcome everyone to our program whose first language is neither English nor French. Classes are geared to the students' levels and help prepare them for living and working in Canada.

Our ESL classes are a combination of virtual direct instruction and elearning. All participants in the ESL program need to be assessed through the CLARS assessment centre before joining class. Potential students can contact Maggie at the Thunder Bay Multicultural Association at: 1-866-831-1144 to book an assessment. Once a student has been assessed, they can come and meet with the Guidance Counsellor, register, and join one of the classes.

To join the ESL class, students need to meet the following requirements:

- First language is not English
- 18 years of age, or older, and one of the following:
 - Canadian citizen (born outside Canada)
 - Permanent resident
 - Convention refugee
 - Refugee claimant
 - Provincial nominee
 - Canadian Experience Class participant or
 - Live-in caregiver program participant

Fee Schedule for ESL Blended Learning Classes

For students who do not meet the requirements above, there is a fee schedule to attend classes. Students are required to pay \$200.00 for the first 4 weeks of classes. The first week begins on the Monday after registration. This payment is non-refundable, and is due at the time of registration. After the first 4 weeks, students are required to pay \$50.00 per week. Payments per week are non-refundable, and are due each Friday. There are no reductions in costs for school holidays that occur during the week. Payment in full is required regardless of a student's attendance record.

International Heritage Language Programs

Classes are for elementary school-aged children ONLY.

Finnish

Mondays 6:00pm to 8:30pm, beginning September 9, 2019 Algonquin Avenue School, 160 Algonquin Avenue

Mandarin Chinese

Sundays 10:00am to 12:30pm, beginning September 14, 2019 Algonuin Avenue School, 160 Algonquin Avenue

Karen

Saturdays 10:00am to 12:30pm, beginning September 15, 2019 Sherbrooke Public School, 10 Sherbrooke Street