

## Course Catalog 2023-2024

## Art Courses

Required: Two units of Fine Arts and/or Practical Arts and/or Foreign Language

## Mixed Media 1

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 9-10-11-12
Prerequisite: None.
This class is an introduction to the design fundamentals in art. Understanding and manipulation of the elements of art and principles of design and how these are used in art will be explored. This course will explore a variety of 2-dimensional and 3 -dimensional mixed-media art forms and techniques while developing personal style and voice through a variety of visual concepts and materials such as paper collage, recycled materials, altered books, and more. Contemporary and historical artworks will be explored.

## Drawing \& Painting 1

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 10-11-12
Prerequisite: Mixed Media 1
This class is an introduction to the design fundamentals in art. Understanding and manipulation of the elements of art and principles of design and how these are used in art will be explored. A focus on developing skills in drawing and composition using a variety of drawing techniques, as well as observational drawing will be emphasized. Painting techniques and materials such as acrylic and watercolor with a focus on self-expression and creativity will also be covered. For those students considering art school in any discipline, this is a great first step.

## Ceramics 1

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 10-11-12
Prerequisite: Mixed Media 1
This class is an introduction to the design fundamentals in 3D art. Understanding and manipulation of the elements of art and principles of design and how these are used in art will be explored. This course will focus on hand-crafted three-dimensional objects as they relate to form and surface through use of clay and glaze. Basic hand-building methods will be explored, such as pinch pots, relief tiles, coil pots, soft slab, and hard slab construction. The history of ceramics as well as the basic chemistry of clay and glazes will also be studied. Safety in the studio and proper use of materials will be emphasized.

## Elements of Sculpture

Grades: 10,11,12
Duration: Semester
Prerequisite: Mixed Media 1
This course is designed to give the art student an in-depth study in sculpture. The student will have creative experiences working with such mediums as: matchbooks, craft sticks, plaster, clay, wood, wire, paris craft, cardboard, plexiglass, and found objects. The students will develop concern and
understanding in their sculptures for form, construction, and content. They will develop a vocabulary for sculpture. The student will learn about the history of sculpture through studying slides of past cultures and famous sculptures. The intent of this course is to expose the students to a variety of sculptural experiences and refine and hone their sculpting skills.

## Advanced Drawing (Mixed Media/Printmaking)

Grades: 10,11,12
Duration: Semester
Prerequisite Mixed Media 1
This course is designed to give the student opportunities to expand their knowledge and skill in the use of two-dimensional media. Students will be given different creative challenges in areas of drawing while utilizing media such as graphite, printmaking, watercolor pencil, ink, and collage. Special emphasis is placed on intentional design and the communicative aspects of art. This course will broaden students' understanding of Art History, criticism, and aesthetics. Students will emphasize and explore personal meaning and/or intent within their own work.

## Directed Studies Art

Grades: 12
Duration: Full Year or Semester
Prerequisite: Six semesters of Art and instructor's approval
This course is designed to give art students an opportunity to pursue their interests in art during their senior year. The student works closely with the instructor regarding projects they will complete independently. This course is designed for seniors that have an advanced ability in art and possibly plan to prepare a portfolio for art school and college admission. Projects and a plan of work will be established by the student and instructor. Direct guidance by the instructor and peer critiques will be a vital part of the class. The class demands great self-discipline and motivation.

## Business Courses

Required: Two units of Fine and/or Practical Arts and/or Foreign Language

## Financial Literacy: Mind your Business

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 11-12
Prerequisite: None.
This course satisfies the fourth math-related elective graduation requirement if taken in the senior year. How many times have you been told to Mind Your Business? Well, now you can! Step into this course specifically designed to prepare high school students to transition into the workforce and independent living by teaching them how to apply the overlapping principles of business and selfmanagement. Experts at minding their business know how to plan, budget, and manage their time AND money wisely. Areas of study include types of income, business plans and budgeting, banking, commercial and consumer credit, credit laws and rights, business and personal bankruptcy, insurance, spending, taxes, investment strategies, savings accounts, long term financial planning, the ins and outs of credit, mortgages, personal and business loans, taxes, and more! Mind Your Business places great emphasis on problem solving, reasoning, representing, connecting and communicating information in order to make data-driven decisions in both business and personal situations.

## Keyboarding and Beginning Applications I

Grades: 9,10,11,12
Duration: Semester
Prerequisite: None
In this course, students are introduced to the microcomputer through the use of Microsoft Works word processing software and keyboarding software. Students will learn to operate the keyboard by touch and with good technique and develop their speed and accuracy. Students will then format simple documents for use in personal and business communications such as memorandums, business letters, reports and tables.

## Keyboarding Applications II

Grades: 9,10,11,12
Duration: Semester
Prerequisite: Keyboarding and Beginning Applications
Students will produce letters, reports, and tables while continuing to improve their speed and accuracy. The students will also be introduced to spreadsheet and database software. The course is designed so that students work through the textbook independently and develop their problem-solving abilities.

## Marketing

Grades: 11,12
Duration: Semester

Prerequisite: Financial Literacy or instructor's approval
Serves as an introduction to basic business principles as they relate to marketing. Areas of concentration include the consumer, market research, product development, pricing, and distribution channels.

## Retailing

Grades: 11,12
Duration:Semester
Prerequisite: Financial Literacy or instructors approval
Serves as an introduction to basic business principles as they relate to careers in retailing. Areas of concentration include starting a retail business, business organization and polices, planning merchandise, promotion, selling, and store operations.

## Accounting

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 11-12
Prerequisite: None.
This course satisfies 1 credit of the fourth math-related elective graduation requirement if taken in the senior year. Accounting students learn business, entrepreneurial and accounting skills. Emphasis is on recording, analyzing, and problem-solving the financial activities of a business using spreadsheets and automated accounting software. Highly recommended for students who plan to work in business or study business in college and very helpful in everyday life.

## English Courses

Required: Four units

## English Requirements

Freshmen - English 9 (year course)
Sophomores - English 10/ or Honors English 10 (year course)
Juniors - English 11 or AP Language
Seniors - English 12 or AP Literature

## FOUNDATIONS OF ENGLISH

Grade: 9
Duration: Year
Prerequisite: None
Designed for students whose needs may not meet the demands of English 9, this course aims at creating a foundation for academic success. Students encounter a significant emphasis on building vocabulary and prior knowledge through both fiction and non-fiction opportunities. Reading comprehension and reading fluency, along with a detailed guided approach to writing are also components of this class. Although the pace of the course is not as intense as English 9, students are still able to experience rich variety authors, genres, and writing opportunities.

## Course Outline

Short Stories Article of the week (weekly)
Lord of the Flies, Golding
Parts of speech Parts of the sentence
Narrative Essay
Romeo and Juliet, Shakespeare
Research Paper
The Iliad, Homer

## English 9

Grade: 9
Duration: Year
Prerequisite: None
Freshmen English is designed to increase vocabulary knowledge and use, review forms of grammar, introduce the elements and genres of literature, and develop writing and researching skills. New vocabulary is introduced weekly and strengthened through memorization and usage. Areas of grammar study include parts of speech, parts of the sentence, phrases, and clauses. Diagramming is also utilized to help augment visual learning strategies involved in the writing process. Literature is introduced through the study of short stories, mythology, drama, poetry and the novel. Writing skills are honed with an emphasis on several essay strategies and a research paper.

## English 10

Grade: 10
Duration: Year
Prerequisite: English 9
The sophomore year continues the study of grammar, composition and literature. Grammar focuses on reviewing sentence structure, usage and mechanics. Composition is emphasized with a variety of essay types and a research paper. Literature study includes class reading and analysis of a novel, a drama, short stories, non-fiction and poetry. Public speaking is also introduced by covering a variety of speech types and strategies. Vocabulary knowledge and application is studied throughout the year.

## Honors English 10

Grade: 10
Duration: Year
Prerequisite: Earned A in English 9 and Department Approval
Class size is limited to 28.
This course is a two-semester, college-preparatory course for high-achieving sophomores. Main content of the course is American and English literature, essays, drama novels, poetry, short stories, speech and literary research techniques. Students are involved in literary discussion, writing and rewriting as regular activities. Intensive outside reading is required as well as written essays and literary analysis. A novel is assigned during the summer before the class begins and students are required to have it completed before day one of the sophomore year.

## English 11

Grade 11

Duration Year
Prerequisite English 9 \& 10
In English 11 students will cover the major authors and texts that represent and clearly illustrate what is unique and central to the American literary tradition. Students will read, study and discuss American literary movements, the historical reasons they exist, contributing authors and the literature that was produced during these movements. Consideration of the historical and cultural context of the movements, authors and works will be a primary focus. Students will be able to evaluate a text, analyze literature and explore related thematic topics, demonstrate logic and organization in writing and speaking, and write clearly and coherently. Students will learn and demonstrate the elements of revision and how they contribute to a final, cogent draft.

## English 12

Grade 12
Duration Year
Prerequisite English 9, 10, \& 11
English 12 examines the major authors, texts and literary movements of the British literary tradition by focusing on works from the 11th century through contemporary times. Students will analyze literature and identify prominent authors by style, content and historical context. Students will read, study and discuss British literary movements, the historical reasons they exist, contributing authors and the literature that was produced during these movements. Consideration of the historical and cultural context of the movements, authors and works will be a primary focus. Students will be able to evaluate a text, analyze literature and explore related thematic topics, demonstrate logic and organization in writing and speaking, and write clearly and coherently. Students will learn and demonstrate the elements of revision and how they contribute to a final, cogent draft.

## Advanced Placement Language and Composition

Grade: 11
Duration: Year
Prerequisite: 3.5 cumulative grade point average. Class may be limited.
This course satisfies the junior year English requirement.
The $A P ®$ English Language and Composition course blends the study of American literature with the use and impact of rhetorical strategies. While studying various American authors, we will also focus on authors' use of rhetorical strategies. Authors write with purpose and use various language tools to accomplish this purpose. They also write to specific audiences. This course will also examine the tools needed to write for a variety of audiences with a variety of purposes. Students will experience the different types of writing including argumentative, expository and analytical by reading models found in American literature and by using the different strategies in various writing assignments. A novel is assigned during the summer before the class begins and students are required to have it completed before the first day of class.

## AP Literature \& Composition 12 (AP)

Grade: 12
Duration: Semester

Prerequisite: 3.5 cumulative grade point average, faculty recommendation, and English department approval.
(AP Literature \& Composition 12 satisfies the senior year English requirement.) The AP® English Literature and Composition is the exit course of the English department. This course strengthens reading, writing and literary analysis skills. It also augments a student's ability to evaluate, judge, analyze and synthesize literature. This is accomplished by reading a variety of literature from different countries, periods and genres. The course will focus on specific authors, themes, genres and analyses. Every author and literary work studied requires various types of critical thinking. This course aligns itself with the requirements found in the AP®English course description. Strategies towards understanding and taking the Advanced Placement test occur throughout the course. A novel is assigned during the summer before the class begins and students are required to have it completed before the first day of class.

## Equus - Yearbook Production

Duration: Year (Class cannot be dropped after first semester) Grades: 10-11-12
Prerequisite Teacher approval- Does not fulfill English credit.
This yearlong course introduces students to a wide variety of basic journalism practices. Students will develop skills in interviewing, newswriting, feature writing, design, photography, graphics, business management, and marketing, sales, advertising, digital imaging and desktop publishing. Students will fund and produce the yearbook and must be able to finish work before deadlines and spend extracurricular time on the yearbook.

## Family and Consumer Science

Required: Two Units of Fine and/or Practical Arts and/or Foreign Language

## Child Development

Grades 9,10,11,12
Duration: Semester
Prerequisite: None
This class provides students with understanding of children's growth from conception through preschool. Through study and laboratory experiences with children, the student will become more effective in interacting and guiding them according to their developmental level. With education in parenting skills comes better understanding of children and the awesome responsibility each parent has to help the child grow to their full potential.

## Independent Living

Grades: 9,10,11,12
Duration: Semester
Prerequisite: None
Living on your own will be a reality sooner than you think. Prepare for this by studying the principles of management and decision making as it applies to day by day decisions. This class will focus on choosing and preparing for a career and the management of finances, transportation, clothing, and housing choices you will be making as you begin independent living.

## Commercial Foods

Grades: 11,12
Duration: Year/or Semester
Prerequisite: Office Approval
This class provides practical experience in the area of commercial and institutional food handling in the kitchen at LHN during the school hours of 2 nd to 6 th. It is an opportunity for students interested in a career in the commercial food industry to gain insight and have practical experience into mass food production. This is an independent study with a workbook included.

## Foreign Language

Required: Two units of Fine and/or Practical Arts and/or Foreign Language
Recommended: Two - three units for college-bound students

## German I

Grades: 9, 10, 11,12
Length of Course: Year
Prerequisite: None.
This class develops practical language skills - speaking, listening, reading, writing - with activities that will teach students to use the language quickly and imaginatively. Cultural insights and situations are incorporated into each unit with an emphasis on Germany.

## German II

Grades: 10, 11, 12
Length of Course: Year
Prerequisite: D- or better in German I
Students focus on increasing mastery of listening, speaking, reading, and writing skills in this course. The class uses dialog and activities to promote and practice the learning of language. They are designed to develop real-world understanding of language use. The culture of German speaking countries and the geography of Germany and Europe are also explored.

## German III

Grades: 11, 12
Length of Course: Year
Prerequisite: C+ or better in German II.
Students continue to learn language functions and build skills in all four areas. A variety of activities and projects are designed to promote real-world understanding of language use. This course also focuses on an increased understanding of grammatical concepts as students develop a heightened awareness of the everyday culture and language of the German speaking countries. There is a special emphasis on Austria.

## German IV

Grade: 12
Length of Course: Year
Prerequisite: B- or better in German III and teacher permission
A continuation of German III. There is an emphasis on mastering higher levels of writing and speaking, focusing on mastering grammatical concepts and increasing vocabulary. Students will be expected to perform independent study of topics addressed in German III.

## Spanish I

Grades: 9, 10, 11, 12
Length of Course: Year
Prerequisite: None
This course will focus on developing the four language skills of speaking, listening, reading and writing. Students will engage in a variety of activities to practice and promote language learning. This course includes an overview of the geography and other cultural insights of the Spanish speaking world.

## Spanish II

Grades: 10, 11, 12
Length of Course: Year
Prerequisite: D- or better in Spanish I
Students will continue to work toward proficiency in the four language skills: listening, speaking, reading and writing. Students will examine the cultural practices of the Spanish speaking world.

## Spanish III

Grades 10, 11, 12
Length of Course: Year
Prerequisite: C+ or better in Spanish II
Students continue to work toward proficiency in the four language skills of listening, speaking, reading and writing. Students will engage in a variety of activities and projects throughout the course to develop, practice and promote language use and understanding at this level.

## Spanish IV

Grades: 12
Length of Course: Year
Prerequisite: B- or better in Spanish III and teacher permission.
A course designed to strengthen students' skills in combining the grammatical structures they have learned previously for use in real-life situations. Students will have opportunities to improve their skills of listening, speaking, reading, and writing through a variety of activities and projects. Additional advanced grammatical structures and vocabulary will be learned within the context of the history and cultures of various Spanish-speaking countries.

## Math Courses

Required: Three Units
Recommended: Three - Four Units for college prep

## Elementary Algebra I

Grade: 9,10
Duration: Year
Prerequisite: None
An algebra course which will provide the student with a very methodical approach to signed numbers, subtraction, reciprocals, solving linear equations, and polynomials.

## Elementary Algebra II

Grades: 10,11,12
Duration: Year
Prerequisite: Elementary Algebra I
An algebra course designed to reinforce the studies of Elementary Algebra I and extend the concepts of linear equations, polynomials, and radicals. This two year sequence is the equivalent of Algebra I.

## Algebra I

Grades: 9,10,11
Duration: Year
Prerequisite: None
Algebra I will provide strong emphasis on linear solutions, polynomials, radicals, and factoring including an integration of available technology. Interpretation of word problems will be stressed.

## Geometry

Grades: 9,10,11,12
Duration: Year
Prerequisite: Algebra I or equivalent
The course begins with an introduction to the basic concepts of Euclidean Geometry. The course progresses by integrating algebra into the study of different shapes and their relationships through deductive and inductive reasoning.

## Honors Geometry

Grades: 9,10
Duration: Year
Prerequisite: Algebra I and instructor's approval
A power Geometry class which is intended to challenge students by covering the topics of Geometry in an accelerated fashion and with the use of additional supplemental materials.

Grades: 10,11,12
Duration: Year
Prerequisite: Geometry(for students who have successfully completed a year of Algebra and Geometry.)

Emphasis is given to the structure of Algebra and the nature of proofs. Manipulative skills needed to perform algebraic operations with competence are stressed along with developing the student's power to think logically. This course covers quadratic equations, complex numbers, analytic geometry, exponential and logarithmic functions, and trigonometry. Suggested for college prep.

## Honors Advanced Algebra

Grades: 10,11,12
Duration: Year
Prerequisite: Geometry, department approval, and 3.5 GPA in math.
Honors Advanced Algebra is a power course intended to challenge students by the use of an accelerated course.

## Statistics I \& II

Grades 11, 12
Prerequisite: Advanced Algebra
Duration: Year Long
Statistics is a course that covers the topics of producing data, organizing data, chance, and inference. There will be motivational, hands-on activities that allow students to explore statistical concepts and examples from a variety of fields. The graphing calculator will be utilized. Concurrent enrollment in math classes will be allowed, and students must maintain quality efforts and work in both classes.

## Math Analysis

Grades: 11,12
Duration: Semester
Prerequisite: Advanced Algebra and instructor's approval
Math Analysis is a course which covers the topics of symbolic logic, analytical geometry, sequences and series, limits, trigonometry, and polynomial functions (Binomial Theorem). The graphing calculator will be utilized. Suggested for college prep. Concurrent enrollment in math classes will be allowed for special cases only, and students must maintain quality efforts and work in both classes.

## Pre-Calculus

Grade: 11,12
Duration: Semester
Prerequisite: Math Analysis and instructor's approval.
This course is a continuation of Math Analysis beginning with trigonometry and introduces the topics of limits, derivatives, integration, and exponential functions. This course will provide an introduction to college Calculus for math or science majors. The graphing calculator will be utilized. Suggested for college prep. Concurrent enrollment in math classes will be allowed for special cases only, and students must maintain quality efforts and work in both classes.

## AP Calculus

Grades: 11,12
Duration: 2 Semesters
Prerequisite: Math Analysis, Pre-Calculus, and instructor's approval.
AP Calculus will prepare the student to take the AP Calculus exam. Limits, derivatives and its applications, integration and its applications, exponential and logarithmic functions, and inverse functions will be studied. An AP approved graphing calculator is required. This course is divided into semesters with credit given each semester. The second semester must be taken in the same school year. Concurrent enrollment in math classes will be allowed for special cases only, and students must maintain quality efforts and work in both classes.

## Computer Programming I

Grades: 10,11,12
Duration: Semester
Prerequisite: Geometry and keyboarding (or approved standard of competency in touch method.)
This course will develop skills in fundamental programming using the JavaScript language. Modular programming will be emphasized along with organization and problem solving.

## Computer Programming II

Grades: 10,11,12
Duration: Semester
Prerequisite: B or better in Computer Programming I

This course will cover advanced JavaScript skills which will include subroutines and arrays. Video game programming using Scratch will also be introduced.

Required: Two Units of fine and/or practical arts and/or Foreign Language
Recommended: One - Two Units for college prep

## Music Courses

## Concert Choir

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 10-11-12
Prerequisite: Audition.
Concert Choir is a performing chorus, designed for $11^{\text {th }}$ and $12^{\text {th }}$ grade students possessing advanced level music skills. This choir is designed to be the top high school performing organization and will be limited in membership. Advanced musical skills, sight-reading techniques and basic theory will be studied to enhance student proficiency in order to perform the advanced level of music chosen for this choir. Students will perform in a minimum of three concerts each year and may participate in the MSVMA District XVI Choir Festival. Although not required, students are strongly urged to participate in the MSVMA District XVI Solo and Ensemble Festival each year. Concert Choir may travel each year to a festival of music held outside the state of Michigan. Students will be required to participate in all performances.

## Symphonic Band

Length of Course: Year (Class cannot be dropped after first semester)
Grades: 9-10-11-12
Prerequisite: None
Symphonic Band is a performing ensemble designed for grades 9-12 students with intermediate skills on their respective instruments. Membership in this ensemble will be open to all students. Music for this ensemble will be chosen to present a challenge to all members. Instrumental performing techniques are studied along with basic music theory appropriate for this level musician. Students will perform in a minimum of four concerts each year and may participate in the Michigan School Band and Orchestra Association. Although not required, students are encouraged to participate in the MSBOA District XVI Solo and Ensemble Festival each year.

## Physical Education Courses

Required: 1.5 Units plus $1 / 2$ unit of Health to be taken in four years.
These courses are designed to foster creativity and self-direction and to encourage vigorous activity including an emphasis on safety procedures and cardiovascular endurance. The program will present fundamental skills, which can be employed in a comprehensive intramural, interscholastic, and recreational program of team and individual sports, gymnastics, and rhythms.

## Basic Physical Education

Length of Course: Semester
Grades: 9-10
Prerequisite: None.
This course orients students to the importance of a continuing physical education program which affords them the opportunity to maintain a level of activity/fitness conducive to living a longer,
healthier, and more enjoyable life. This course includes units in physical fitness, team sports, individual sports and skills, lifetime sports, and Red Cross.

## Team Sports

Length of Course: Semester
Grades: 9-12
Prerequisite: None.
This class is for students who have an interest in a particular activity. The class focuses on skill development, rules, and individual or team effort. Tournament competition will follow skill development. The program offers basketball, soccer, floor hockey, volleyball, Wiffelball, and ultimate frisbee.

## Health

Grade: 10
Duration: Semester
Prerequisite: Sophomore standing (Required of Sophomores)
This course is designed to introduce students to various functions of the body and its maintenance. Knowledge regarding sound health habits and choices help create a mature attitude for responsible adult living.

## Lifetime Sports

Length of Course: Semester
Grades: 10-11-12
Prerequisite: Basic Physical Education.
This class is for students who have an interest in a particular activity. The class focuses on skill development, rules, and individual or team effort. Students will become more proficient in the units of tennis, pickleball, badminton, bowling, and volleyball. Can be taken more than one time for credit.

## Strength and Conditioning

Length of Course: Semester
Grades: 10-11-12
Prerequisite: Basic Physical Education.
Students will design an individual goal-oriented program with the aid of the instructor. Typical goals are weight loss or gain, improved flexibility, strength or sports specific fitness. These goals will be achieved through a combination of weight training, aerobic activity and skill performance.

## Science Courses

Required: Three Units
Recommended: Three plus Units for College Prep

## Physical Science

Grade: 9
Duration: Year
Prerequisite: None
A first course in science designed to help the student understand the nature of doing science. Topics covered are measurement and the metric system, the scientific method, motion, energy, waves, light, electricity and magnetism, and radioactivity. Everyday applications and doing experiments will be emphasized.

## Biology

Grades: 9, 10
Duration: Year
Prerequisite: None
This course describes the structure of living organisms and the functions of their parts. During the first semester, topics revolve around the building blocks of living material such as the cell, its organelles, and how these organelles work. The second semester covers the anatomy and histology of the whole organism from the simplest single celled organism to humans.

## Chemistry

Grades: 10, 11, 12
Duration: Year
Prerequisite: Biology and Algebra I
This is a course that investigates substances, their properties, and the nature of the processes by which they interact. The emphasis is to show how observations relate to the interpretations and theories of science. Students will learn how chemistry and chemical principles influence their everyday lives and interpret their world from a molecular point of view.

## Honors Chemistry

Grades: 10, 11, 12
Duration: Year
Prerequisite: B or better in biology and Algebra I and instructor's approval.
Honors chemistry is a course intended to challenge those students with a strong math and science interest. It is an accelerated program with a greater emphasis on using mathematics and understanding the theories of chemistry. It is strongly recommended for those students considering a math/science major in college.

## Chemistry Semester 3

Grades: 11, 12
Duration Semester
(Advanced Topics in First Year Chemistry)
Prerequisite: Chemistry or Honors chemistry
This course continues the study of chemistry topics from the first year of chemistry. It will allow students a more in-depth study of chemistry after the first year of chemistry without the rigor of AP Chemistry. Topics covered will include - Organic Chemistry, Review of Stoichiometry, Thermo chemistry, Chemical Kinetics \& Equilibrium, Acids \& Bases, Electrochemistry, and Nuclear Chemistry.

## AP Biology

Length of Course: Year (Class cannot be dropped after first semester) Grades: 11-12 (NCAA approved)
Prerequisite: Biology, Chemistry. Signed AP statement.
AP Biology is the equivalent of two semesters of introductory college biology. It will focus on four big ideas: (1) Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis. (2) Living systems store, retrieve, transmit and respond to information essential to life processes. (3) Biological systems interact, and these systems and their interactions possess complex properties. The strong emphasis on the lab component is necessary to fully understand AP Biology and pass the AP exam. This course may be eligible for college credit. See your counselor for more information.

## Honors Anatomy and Physiology

Grades: 11, 12
Prerequisite: Biology, Chemistry, and Instructor's Approval
A course designed for the upper level student in the study of the human body. Areas of study will be: introduction to medical terminology, extensive study of the systems of the human body, and extensive lab study of a representative mammal. The textbook is used as a first year college anatomy and physiology text. The course is suggested for college prep.

## Physics

Grades: 10, 11, 12
Duration: Year
Prerequisite: Geometry
A course designed to acquaint the student with the laws of nature in areas of motion, forces, energy, waves, electricity and magnetism. An emphasis will be placed on the qualitative approach in the development of these concepts. Suggested for college prep.

## AP Physics

Grades: 11, 12
Duration: Year
Prerequisite: Adv. Algebra and instructor's approval

A course designed to acquaint the student with the practical applications in the areas in the areas of motion, forces, momentum and energy, waves, light and electricity and magnetism. An emphasis is placed on solving problems. Suggested for college prep.

## Earth Science

Grades: 10, 11, 12
Duration: Semester
Prerequisite: Biology
A course designed to acquaint the student with the natural forces that shape planet earth and the solar system, Areas of study include astronomy (Solar System and Earth's motion), meteorology (weather, climate), and geology (land formation and earth structure).

## Environmental Science

Grades: 10, 11, 12
Duration: Semester
Prerequisite: Biology
A course designed for the student interested in the basic ecological concepts and the many impacts upon the environment. Areas of study include: ecological principles, water cycle and groundwater, air and water pollution and population studies.

## Forensic Science

Grades 10,11,12
Duration-Can take Year, Semester 1, or Semester 2
Prerequisite: Biology
Forensic Science is a level-2 science course rich in exploration, lab investigation, and group activities which apply many different disciplines of scientific study, from courses such as biology, anatomy, chemistry, and physics to solve crimes. This class focuses on the collection, identification, and analysis of crime scene evidence and the associated methodology of evidence processing. The emphasis in this class is placed on the methods that allow victim, suspect, and crime scene to be linked together to form a complete picture of a sequence of events.

## AP Chemistry

Grades: 11, 12
Duration: Year
Prerequisite: Honors chemistry or Chemistry with instructor's approval
This is a second year chemistry course that studies stoichiometry, thermochemistry, bonding, chemical kinetics, equilibrium, acids and bases, electrochemistry, and organic chemistry in greater detail. An emphasis is placed on lab procedures and experimentation especially using computers to obtain and analyze data, The Advanced Placement Exam may be taken at the end of the program for possible college credit. This course is intended for those students with a strong science interest.

Required: Three Units including U.S. History, Twentieth Century Global History, and Government Recommended: Three - Four units for college prep

## Social Studies Courses

## World History

Grades: 9,10
Duration: Year
Prerequisite: None
The first semester offers a detailed study of ancient and medieval history. The second semester analyzes modern history from the Renaissance through the end of World War I. Although the emphasis is on Western civilization, Asian, African and American studies are included. Suggested for college prep. This course is a requirement for Honors US History and for Seminar in Current Events.

## United States History

Grade: 11
Duration: Year
Prerequisite: None (Required of Juniors)
This course leads the student into a study of American history through the end of World War I using chronological treatment of the various strands of history as they actually unfolded in the world of people and events. Emphasis is placed on developing a Christian perspective as man relates to past and present.

## AP United States History

Grade: 11
Duration: Year
Prerequisite: 3.25 GPA, World History, and Instructor's Approval
This course leads the student into an in-depth study of American history through the end of World War I. Emphasis is placed on analysis of people and events, including analysis from the Christian perspective. Writing activities will be a significant feature of the course.

## Twentieth Century Global History

Grade: 12 (Required of Seniors)
Duration: Semester
Prerequisite: United States History
This course offers a detailed study of twentieth century events as they relate to our present existence. Major topics include World War II, the Cold War, civil rights in the US, the Vietnam War, Watergate and recent changes in Europe.

## Government

Grade: 12 (Required of Seniors)
Duration: Semester
Prerequisite: None
This course leads the student in the study of the principles and practices of democracy in America. Emphasis is placed on the workings of the three branches of the national government. Other topics include state and local government, campaigns and elections, and the Bill of Rights.

## Economics

Grades: 11,12 Offered every other year Duration: Semester
Prerequisite: None
This course acquaints the student with the functions of the American economy. Market forces, contemporary issues and government economic policy are stressed. Suggested for college prep.

## Introduction to Law

Grades: 10,11,12
Duration: Semester
Prerequisite: None
This course introduces students to the principles and concepts of the American legal system. Major emphasis is placed on criminal law considerations and proceedings. Other topics include torts and consumer law, family law, and individual rights and liberties.

## Psychology

Grades: 11,12
Duration: Semester
Prerequisite: None
This course introduces students to how the mind works and how personality develops. Students study several psychologists and their theories and therapies. The class also offers an overview of abnormal behavior, psychological testing, diagnosis and human relations.

## Current Events

Grades: 10,11,12
Duration: Semester
Offered fall semester of even numbered years
Prerequisite: World History and instructor's approval
This course increases the students awareness of international, national, state and local events to determine how these events both relate to past historical events and especially how they affect an individuals daily life. Events studied include campaigns and elections, news accounts from different sources are used and analyzed.

Required: $\mathrm{A} 1 / 2$ unit of credit for each semester of enrollment.

## Theology Courses

## Old Testament

Grade: 9
Duration: Year
Prerequisite: None
This course covers the history of the Old Testament. Daily devotions also include readings from Psalms, Isaiah, and other books of the Old Testament written for worship. The only textbook is the Bible. However, extensive use is made of biblical films. These films include: Abraham, Jacob, Joseph, Moses, Samson, Ruth, David, Solomon, Jeremiah, and Esther.

## New Testament

Grade: 10
Duration: Year
Prerequisite: None
During the first semester of this class, students will study the intertestamental period, the relationship between the Old and New Covenant, and the fulfillment of Old Testament prophecy in the New Testament. The majority of this semester's study will focus on the study of the four Gospels using the harmony of the Gospels approach. The focus during the second semester will be a study of the book of Acts and the Pauline epistles.

## Comparative Religions

Grade: 11
Duration: Year
Prerequisite: None
Lutheran doctrine will be studied with Comparative religions, world religions, and an examination of the major cults.

## Applied Christianity

Grade: 12
Duration: Year
Prerequisite: None
This course is designed to apply the Christian faith to daily living. The following topics will serve as the basis for this course: Christian ethics, spiritual gifts, Christian family, apologetics, evangelism, and the devotional life of a Christian. Portions of Scripture will be used as the basis for the fundamentals taught in each of the above.

## Academic Center

Grade: 9,10,11,12
Length of Course: Year
Prerequisite: See Below
The Academic Center provides a location and an atmosphere for study and assisted learning. The goal of the Academic Center is to provide the opportunity for students to complete academic work, to access teachers for learning supports, and to gain assistance to improve their understanding of various subject matter and skills. The center is staffed by certified high school level teachers. Students are expected to bring academic materials with them every day to do their work in the Academic Center. Computers, including internet access are also available for students to use in the Academic Center. Students may be enrolled in more than one Academic Center per semester with administrative approval.

## Pankow Learning Center

The Frederick V. Pankow Center provides Career and Technical Education programs that are designed to provide a pathway to their career goal. Pankow Center provides programs that prepare students for jobs that are in demand and that offer long-range career opportunities. L'Anse Creuse students may choose to participate in the more specialized technical preparation curricula at the Pankow Center Many of the programs begin as early as the tenth grade and continue toward a two or four-year degree at a technical, community college or university. Students enrolled in career and technical education will be prepared to enter fields of work, which lead to more economically rewarding positions.

Courses for Pankow include Auto Tech, Auto Collison, Criminal Justice, Culinary Arts, Early Childhood Education, Graphic Arts, Health Occupations, Medical Assisting, Horticulture, Microsoft Network Administration, PC Servicing and Networking, TV and Broadcast Media.

Not all courses are offered each year and additional courses are added some years.

## Dual Credit Courses

Lutheran High School North students can earn college credit while still in high school. The State of Michigan is billed for the authorized amount of tuition and fees. Billing is limited to a maximum dollar amount; students must pay any costs above the limit. Approval of courses and billing authorization is required from the high school principal and/or representative. Please talk to the Guidance office for further information.

## https://www.macomb.edu/future-students/hs-counselors/early-admission.html

https://online.cuw.edu/online-degrees/high-school-dual-credit-courses/

