

COURSE OFFERINGS L'ANSE AREA HIGH SCHOOL

L'Anse Area Schools

Statement of Assurance of Compliance with Federal Law

The L'Anse Area Schools complies with applicable federal and state laws prohibiting discrimination, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. It is the policy of the L'Anse Area Schools that no person, on the basis of race, sex, color, religion, national origin or ancestry, age, height, weight, marital status or disability, shall be discriminated against in employment, educational programs and activities or admissions.

Questions or concerns regarding Statement of Assurance of Compliance with Federal Law should be directed to: Superintendent, L'Anse Area Schools, 201 N. 4th Street, L'Anse, MI 49946-1499, (906) 524-6121.

ART I

This course introduces students to the Elements Of Art and Principles Of Design through the application of various art materials and methods. Art history will be incorporated into lessons and projects. Care of tools and procedures of operation will continually be taught through exposure and direction. Grading will be based on rubrics. Effort and art room conduct will be heavily weighted.

ART II

This course is an intermediate/advanced course expanding upon the Elements Of Art and Principles Of Design. Students will focus more on their creative process and personal expression. Students will also develop a greater understanding of Art History,

Art Criticism and Advanced Color and Design Theories. Techniques such as drawing, painting, printmaking and ceramics will be explored.

ADVANCED ART/CERAMICS

- Students who have successfully completed Art I and Art II will be ready for the visual problem solving required for this class.

Planning a project and following it through to a natural end, as well as showing growth and understanding of the process and mediums will be emphasized. Many methods and projects will involve clay. Art history will be explored through every project. Grades will reflect both teacher and self evaluation as outlined in a rubric. Students will be supported in the development of a professional art portfolio suitable for college admittance.

YEARBOOK/2D DESIGN

The Jr High/ High School Yearbook will be put together in this class. All aspects of the process will be part of the graded curriculum. Some of these activities include: selling ads, taking photographs at school events, compiling lists, copy editing, computer generated page layout and design, selling items for fundraisers, and the opportunity to work and make decisions as a team with the rest of the class.

When the Yearbook is complete, this class will explore aspects of 2D design in many mediums and materials.

CAREER & TECHNICAL CLASSES (CTE) AVAILABLE AT THE COPPER COUNTY INTERMEDIATE SCHOOL DISTRICT

(Students will be bused up to the CCISD and back for these classes)

AUTOMOTIVE TECHNOLOGY (CTE)

The goal of the Automotive Technology program at the Copper Country Career & Technical Education Center is to introduce and prepare students to explore or enter the automotive field. This program provides a "head to hands-on" approach that will lead to success in post-secondary training and into an expanding automotive-related field. Students involved in this program may range from technicians trainees to pre-engineering students.

Some of the instructional areas to be covered are: braking systems, front-end alignment, suspension, on board computers, sensors, emissions, fuel injection, oscilloscope, engine analysis, and related support systems. The Automotive Technology program is nationally certified by NATEF (National Automotive Technicians Education Foundation) and is taught by an ASE (Automotive Service Excellence) certified instructor. Students will be given the opportunity to take state and national (ASE) certification tests.

- Pre-requisite - Junior or Senior standing

CAREER & TECHNICAL CLASSES (CTE) AVAILABLE AT OUR SCHOOL

Health Occupations -Nursing Assistant

Students in grade 11 & 12 are eligible to take this career and technical education course. The curriculum covers 340 instructional hours divided between classroom lecture, laboratory practice and clinical experience. Students will acquire basic

knowledge and functional skill levels in areas of communication, documentation, ethical and legal responsibilities, safety practices, teamwork, client interaction, implementation of the client care plan, personal care tasks, and assisting in attaining and maintaining client functional independence. The skills and knowledge attained in this course are transferable to entry-level skills for nursing, physical therapy, medical assisting, radiology, and other health occupations.

Upon successful course completion, students will be eligible to take the State of Michigan clinical skills and written exams for nursing assistants within the next year. Students who pass both sections of this examination become registered Competency Evaluated Nurse Assistant and can be employed in a variety of medical facilities such as long-term care or home health. Please be advised that there are costs associated with this course.

- 1 - Uniform-pants-top & white leather shoes-approximately \$50.00.
- 2 - Testing fees at the end of the year (2011 fees - \$176.50).

Students also join HOSA, the Health Occupation Students of America as part of the course curriculum and participate in regional, state and national leadership conferences.

BUSINESS CLASSES

COMPUTER APPLICATIONS

This is a one-semester *required* course for all ninth grade students, which provides an opportunity for students to broaden usable and practical skills at the computer as well as expand many auxiliary skills (abilities), which will contribute to the development of a well-rounded education. Students progress into intermediate and advanced skills in word processing, database, spreadsheet, desktop publishing, and time management applications. We utilize the Microsoft programs (Word, Excel, Access, Publisher, and PowerPoint). Students will also be exposed to technological and internet-related topics that impact them as users of the cyber world.

BUSINESS APPLICATIONS

This is a one-semester graduation requirement course for all 9th grade students. It provides an opportunity for students to develop usable and practical job search skills. Students will research and explore career opportunities in the Business Computer Lab using the "**CAREERCRUISING.COM**" website. Job search activities will include the creation of a RESUME and Letter of Application. Interviewing techniques will also be presented. Students will complete the job search by researching on-line job search websites. In addition, students will develop

strategies for: decision making, communicating effectively, adjusting to the world of work, advancing their career, balancing career and personal life.

PERSONAL FINANCE:

"Secure Your Financial Future"

(Highly recommended for all students)

- Prerequisites: Keyboarding, Business Applications, Computer Applications

Offered to students in grades 10-12. **Personal Finance** is a one-class period, hands-on computer oriented class. Students will learn how to plan and manage their personal finances and achieve a financially successful life. The class will focus on the student's role as a citizen, student, family member, consumer, and active participant in the business world. The class provides opportunities for self-awareness, expression, and satisfaction in a highly technical and competitive society. Students will discover new ways to maximize earning potential, develop strategies for managing resources, explore skills for the wise use of credit, and gain insight into the different ways of investing money. Students will learn about the consequences of mismanaged finances such as bankruptcy.

TimeMAPS (Interactive software) is used to teach money management and life skills.

Topics covered: Basic life planning, money basics, career paths, taxes and payroll deductions, banking, budgets, spending decisions, investing in the future, insurance, retirement planning, automobile and home purchases.

ACCOUNTING

Offered to students in grades 10-12. This course provides an exposure to an accounting CAREER, the terminology of bookkeeping and accounting, how to start an accounting system, transaction analysis, describes the accounting cycle, common accounting practices, provides for microcomputer applications, applies to service, merchandising, partnership, and corporate functions and involves the complete accounting cycle.

- Prerequisites: Keyboarding, mathematic background recommended

NETWORKING

Offered to Students in Grades 9-12. This one/two-period class will provide students an opportunity to work independently under the supervision of the Business Teacher and network administrator on tasks vital to the operation of the L'Anse Area Schools Network. Students will be required to work on various technology projects for the L'Anse Area Schools. Students will work with the Windows 2000 or Windows XP platforms using various computer applications. Projects include troubleshooting hardware and software, equipment and license

inventory, staff and student technology training. Students will assist in PowerPoint projector and distant learning equipment setup. Students must be willing to take charge or follow the direction of others in a variety of circumstances. In addition to the network responsibilities, students will work collaboratively with administration, teachers, and staff.

- Prerequisites: Keyboarding, instructor approval, administrator approval, network administrator approval

GENERAL EDUCATION CLASSES

ENGLISH

ENGLISH I

Students will continue to develop vocabulary, grammar, writing, and reading comprehension skills to provide a strong foundation for study at the high school level.

Students will build vocabulary knowledge/word recognition through the use of the *Building Vocabulary Skills* workbook from Townsend Press.

Grammar instruction will focus on sentence construction, punctuation, easily confused words, and editing/proofreading skills to enable students to write well-constructed and grammatically acceptable compositions in a variety of formats.

Writing instruction will focus on the six essential traits of powerful writing: 1) development and elaboration, 2) organization, 3) sentence structure and variety, 4) conventions of written English (punctuation, capitalization, etc.), 5) word choice, and 6) voice.

The objective of writing assignments will be to increase writing fluency/clarity and provide practice in a range of formats such as essay tests, personal narratives, research papers, journals, short stories, and poetry.

Reading comprehension will be based on fiction and non-fiction selections that will be arranged by genre. Curriculum will include a short story unit with various short stories, a modern young-adult novel (*Speak* or *The Hunger Games*), a non-fiction memoir (*Tuesdays with Morrie* or *Night*), and a Shakespearean drama (*Romeo & Juliet*).

Honors English I

- Prerequisites: In order to successfully complete a highly rigorous level of study, students must maintain a "B" average or above in Honors English 8, have an excellent attendance/behavior record, and be highly motivated, focused, and willing to work.

This course is designed for students interested in upper-level Honors English courses and AP English. As such, it has a rigorous and accelerated curriculum meant to challenge highly motivated students.

In addition to the curriculum for English I, Honors English will require

- 3-4 additional novels
- a longer research paper
- additional writing assignments.

GENERAL AMERICAN LITERATURE (ENGLISH II)

American Literature is taught at the tenth grade level. It is taught with extensive focus on American Literature from the time prior to European settlement until present day. Students are expected to read and reflect on literature from their text book, along with additional reading in and out of class. Students will also be given the opportunity to create meaningful projects and gain experience with technology. Students will learn to properly write literary responses, reflections, compare and contrast essays, creative stories and research papers. Writing will be taught with a strong focus on the **6 Essential Traits** series which emphasizes ideas, organization, convention, word choice, sentence fluency and voice. Students will also gain extensive vocabulary knowledge through the vocabulary workbook. This course is required for graduation of L'Anse High School. Admittance into the Honors section requires a B+ average, along with proficient standardized test scores and teacher approval.

Independent Novels Project- This project is modeled after college-level standards. Students will be expected to obtain a book from the novels list to read and complete a project on every eight weeks. This is a fast paced project that requires an ability to work independently and manage time appropriately.

Other Readings-

- Fever 1793 (Historical Fiction)
- The Adventures of Tom Sawyer (Regionalism)
- Of Mice and Men (Fiction)

HONORS AMERICAN LITERATURE (ENGLISH II)

This course, designed to follow the Michigan Grade Level Content Expectations, is a comprehensive study of American Literature from the time prior to European settlement until present day. The American Literature text book along with independent novels will be read and reflected on regularly. Students will learn to write literary responses, reflections, persuasive essays, compare and contrast essays and research papers with MLA citations. Writing will be taught with a strong focus on the **6 Essential Traits** series which emphasizes ideas, organization, convention, word choice, sentence fluency and voice. Technology will be used extensively to assist students in creating meaningful responses to literature. Students will also gain extensive vocabulary knowledge through the vocabulary

workbook. This course differs from the *General American Literature* course in that the number, length and depth of projects, papers and readings are increased. Students are also expected to complete some reading over the summer to introduce them to authors and styles of particular importance. Students should be aware that a B average, proficiency in standardized tests and teacher approval is necessary to continue with the honors courses.

Independent Novels Project- This project is modeled after college-level procedures and assignments. Students will be expected to obtain a book from the novels list, read it and complete a reflective assignment every four weeks. This is a fast-paced project that requires an ability to work independently and manage time appropriately.

Other Readings-

- Narrative of the Life of Frederick Douglass (Autobiography)
- White Fang (Naturalism)
- Of Mice and Men (Fiction)
- Famous American Speeches

ENGLISH III:

Students will focus extensively on **Writing, Grammar** and **Reading for Information**, which are the three main components of the English section of the MME/ACT test.

The New York Times Upfront magazine (a bi-weekly publication highlighting current events) will be purchased to use in the classroom. This magazine features articles, discussion prompts, writing prompts and standardized testing questions. Using this magazine will develop reading comprehension of non-fiction selections, encourage critical thinking and analysis, and improve logical responses (both oral and written). ***Upfront's*** articles, combined with quizzes, provide essential test-taking practice to prepare students for the ACT. Additional Reading for Information resources will also be incorporated into the curriculum.

Persuasive Research Paper: Students will prepare a research paper on a contemporary social issue. MLA style/format will be used. Skills learned in the 9th and 10th grades will be reviewed and incorporated into a significant research project. A power-point presentation on the research topic will be required.

Grammar: Students will use the **English Essentials** grammar workbook which will review, reinforce and build upon the grammar being taught in 9th and 10th grades.

Novels: These novels will continue the American literary tradition started in the 10th grade. The authors of these novels are prominent American authors with whom the students should be familiar, and these selections provide a multi-cultural look at America.

General English III

The Pearl
Old Man and the Sea-novella
The Crucible-play
Malcolm X

Vocabulary- Students will use the 3rd workbook in the Townsend Press series of vocabulary development- *Advancing Vocabulary Skills*.

Honors English III: Students enrolling in Honors English III must maintain a "B" average in English I and II. These students must exhibit a diligent work ethic that enables them to successfully complete a highly rigorous level of study. In addition to the curriculum for English III, Honors English III will require 6 additional novels, a longer (more comprehensive) research project, and additional writing assignments.

Honors English III additional books

The Scarlet Letter
The Great Gatsby
I Know Why the Caged Bird Sings
Ethan Frome
Black Boy-autobiography

ENGLISH IV:

Students will become familiar with prominent British/European authors to provide a good base of cultural literacy. The classic literature that they will study will explore the connection between literature and history. The selections will begin with the Anglo-Saxon Period and continue through to contemporary selections. Students will also write a variety of essays and a research paper/power point presentation to prepare them for college writing.

British/World Literature

Beowulf
King Arthur Legends
I Am Mordred
The Canterbury Tales
Hamlet
Brave New World
Animal Farm
Go Ask Alice
Les Miserables
The Count of Monte Cristo

Their Eyes Were Watching God

Essay Writing- Students will write several different types of essays to prepare for college: Descriptive, Expository, Compare/Contrast, Persuasive, Creative, Responding to Literature, and others.

Research Paper with citations- Honors Eng. IV will be required to do a more extensive research project/power point presentation

Vocabulary- Students will continue their vocabulary development by using *Advanced Word Power* workbooks

Grammar- Students will continue to work in the English Essentials workbook that they received in English III, completing Part 2.

ENGLISH IV HONORS:

- Prerequisites: students must maintain a "B" or better average in English III, have an excellent attendance and behavior record, and be a conscientious self-starter.

This class has a more rigorous & challenging curriculum, designed to better prepare students for college English courses. The Honors class will do additional reading to broaden the students' literary backgrounds and the writing assignments will be more rigorous, challenging and lengthy.

Additional Novels for Honors

Grendel
Silas Marner
Wuthering Heights
Frankenstein

GOOD BOOKS

The Good Books course explores the genres and themes of modern literature and nonfiction. The course is designed for students who enjoy reading and discussing books. Students should be able to read independently and daily. Students will be given time to read in class, but will be expected to do daily reading at home.

The goal of the course is to develop the student's appreciation of reading and to clarify the value of comprehending the written word / literary techniques. The books in this course offer profound insights into the human condition and many of them are written specifically for the teenage audience. Through wide and deep reading of literature and literary nonfiction, students gain a reservoir of literary and cultural knowledge; the ability to evaluate intricate arguments, and the capacity to face challenges posed by complex texts.

FILM/DRAMA:

The Film/Drama elective explores the mediums of film and the stage. The course is designed around project-based, hands-on learning. Students will get the chance to not only watch and analyze various films/ plays, but to also design and write their own short film. Some projects that have been done in the past include: movie spoof trailers, humorous infomercials, monologues, and musical videos. Acting ability or experience is not necessary for this course; however, students should have a positive attitude and be willing to participate. Reading, writing, and discussion will be necessary tools to complete this course. Students should also be able to work independently and in groups and be able to meet deadlines.

POETRY

This course is designed to introduce students to reading and writing poetry for meaning, to learn and incorporate poetic techniques and devices, and for enjoyment. Throughout the semester students will study classical and contemporary poets and their works. Students taking this course should have an appreciation for poetry.

Materials: Text: *Poetry: Close Readings for Cooperative Learning Units*

Supplemental Handouts will also be provided.

Each student will keep a folder for handouts and personal writing.

Evaluation: Student grades will be determined by:

- Cooperation/participation in poetry group
- Occasional tests on poetic terms, devices, types, etc.'
- Writing assignments
- Poetry folders

MYTHOLOGY:

This course is designed to introduce students to world mythology.

Units covered will include: Sumerian, Egyptian, Chinese, Japanese, Greek/Roman, Norse, Native American, and African. Students will read background information and stories to learn the about different cultures. Students taking this class should be efficient readers and self-starters.

Materials: Numerous paperback collections and handouts.

Evaluation: Student grades will be determined by:

- Participation
- Occasional reading quizzes
- Unit tests
- Writing assignments

PUBLICATIONS/CREATIVE WRITING:

This class is designed to introduce students to the process of publishing written materials, including, but not limited to, newsletters, literary magazines, and personal writing. The writing process (drafting, proofreading, editing, revising, and rewriting) will be emphasized to produce a final product worthy of publication.

Students must be self-starters, able to work on their own when necessary, but also cooperate with others on the final product, and accept responsibility for meeting deadlines.

LA Chronicle-Every other week student groups will work cooperatively to gather information about our school in order to write, organize and publish a newspaper. Students will gain interviewing skills, knowledge of the 5 W's of journalism, the inverted pyramid style of news writing, proofreading and editing skills, and effective layout schemes.

Creative Writing- When students are not working on the newspaper, creative writing assignments will be assigned. These assignments will include journals, essays, poetry, and short stories.

Evaluation: Due to the nature of this class, most of the student's grade will depend on participation. Each student is required to be involved in every step of the publishing process....**EACH STUDENT WILL:**

**GATHER INFORMATION/DO REPORTING
WRITE
PROOFREAD
EDIT
REVISE
DO LAYOUT
PUBLISH**

If you **DO NOT MEET DEADLINES**, you will receive a "0" on that assignment. Any student not willing to complete all stages of publication in a timely manner should find an alternative class to take!!

FOREIGN LANGUAGE/ WORLD LANGUAGES

SPANISH I

This course consists of an introduction to Spanish conversation, vocabulary and grammar. Students will be expected to be able to speak, write and translate basic Spanish by the end of the year.

SPANISH II

This course is a continuation of Spanish I, and emphasizes more complex grammar structures in Spanish. Students will continue to read, write, and speak Spanish on a more advanced level. Culture will also be emphasized through video and discussion.

- Prerequisite - A grade of "C" or better in Spanish I, or written approval of the instructor.

FRENCH I

This course consists of an introduction to French conversation, vocabulary, grammar and culture. Students will be expected to be able to speak, write and translate basic French by the end of the year.

French II

This course is a continuation of French II and emphasizes more complex grammar structures in French. Students will continue to read, write, and speak French on a more advanced level. Culture will also be emphasized.

- Prerequisite - A grade of "C" or better in French I, or written approval of the instructor.

MATHEMATICS

ALGEBRA I

- Prerequisites: Successful completion of 8th grade math.

This course will provide a study of real number systems using a function based approach. Students will study problem solving techniques, work with variables, function patterns and graphs, solve equations and inequalities, solve systems of equations and inequalities, perform operations with and factor polynomials, solve and graph quadratic equations, perform operations with and graph both radical and rational functions.

GEOMETRY

- Prerequisites: Algebra I

This course will provide a study of: inductive and deductive reasoning, formal proofs, properties of parallel and perpendicular lines, triangle congruence, proving relationships within triangles, quadrilaterals, similarity, right triangles and trigonometry, transformations, area, surface area, volume, and circles.

ALGEBRA II

- Prerequisites: Algebra I and Geometry

Algebra II is a full-year course that will expand on the concepts learned in Algebra I and will include the following topics: linear systems, matrices, quadratic functions, polynomial functions, radical functions, exponential and logarithmic functions, rational functions, conic sections, probability, and sequences and series. Graphing calculators such as the TI-84 are extensively used.

ALGEBRA IIA

- Prerequisites: Algebra I and Geometry

Algebra IIA is the first course of Algebra II covered over two years. It covers the first half of the Algebra II book, chapters 1 through 7. Topics include properties of real numbers, linear systems, matrices, and the following functions: quadratic, polynomial, and radical. A scientific calculator is required; a graphing calculator is recommended.

ALGEBRA IIB

- Prerequisites: Algebra I, Geometry, and Algebra IIA

Algebra IIB is the second course of Algebra II covered over two years. It covers the second half of Algebra II, chapters 8 through 14. Topics include exponential, logarithmic, and rational functions; conic sections; sequences and series; probability and statistics; trigonometric functions, identities, and equations. A scientific calculator is required; a graphing calculator is recommended.

PRECALCULUS

- Prerequisites: Algebra 1, Geometry, and Algebra 2

Precalculus is a full-year course designed to strengthen previously learned algebraic and geometric concepts while expanding into the Precalculus concepts of functions and trigonometry. The study of functions is emphasized, including the identity, squaring, cubing, absolute value, reciprocal, square root, exponential, logistic, natural logarithmic, greatest integer, sine and cosine functions. Probability and statistics are also covered. A graphing calculator such as the TI-84 is required.

CALCULUS

- Prerequisites: Algebra I, Geometry, Algebra II, and Precalculus

Calculus is a full-year course that studies the mathematics of motion and change that is widely used in science and engineering. Topics covered include the rate of change of a function, derivatives and their applications, integration and its applications, transcendental functions, and methods of integration. A graphing calculator like the TI-84 will be used extensively throughout the course and is strongly recommended. Students may have the opportunity to take the AP Calculus exam in May.

PRACTICAL MATHEMATICS

Practical math is a 12th grade math class designed to teach students math skills that they will use in everyday living &/or various areas of employment. Topics to be covered include: basic non-calculator & calculator computations, estimation, percents, statistics, health and life insurance, salary, overtime pay, recreation and

sports, basic purchases, income taxes, sales tax, checking and savings accounts, credit cards, loans, automobile expenses, transportation expenses, housing expenses, budgeting, investment options, trade industries and professions (carpentry, plumbing, electrical contracting, painting, masonry, advertising, health care, communications, manufacturing).

MATH LAB:

This course is designed to assist students with the concepts/skills necessary to succeed in Algebra I/Geometry. Students will work through problems assigned by both their Algebra I/Geometry teacher and those assigned by their math lab instructor.

MUSIC

SYMPHONY BAND

- Prerequisites - Two years of Junior Band, or permission of the instructor

Symphony Band, a continuation of the Junior Band program, provides and opportunity for advanced group instruction on all major wind and percussion instruments. The emphasis of instruction focuses on individual and group performance. The Senior Band functions as a marching band for selected parades and athletic contests, a concert band for performance of music of a more serious nature, and a pep band to provide entertainment and promote school spirit at various athletic events.

The many rehearsal and performance opportunities presented throughout the year are very valuable and important educational experiences; not an end in themselves or an added "frill", but a means toward meaningful and desirable qualities of character and life skills. Some of these qualities and skills are: skill to use and evaluate knowledge; desire for knowledge and continuing education; proper development of peer relationships; democratic principles and loyalty; development of moral and ethical responsibility; development of pride in achievements, of self-understanding, and positive self-worth; development of creative self-expression; and the ability to use leisure time productively and wisely.

PHYSICAL EDUCATION

GYM I

This Physical education class will emphasize both team and individual (life) sports. Students will learn historical information about and the rules and fundamentals that will help them appreciate participating in each sport. Students will also learn

about fitness and different techniques to help achieve a healthy lifestyle after graduation.

HEALTH 9

High school health is a one semester state required course. Course curriculum is aligned with national and state standards. Students will acquire knowledge and skills that can be transferred to developing health literacy and positive personal health behaviors. The course of study will have students develop ways to improve in all areas of their health while examining the subjects of alcohol, tobacco, and other drugs use, violence prevention, suicide & depression, nutrition, disease prevention and screening including HIV/AIDS/STIs. Students will also develop their community advocacy by completing the American Heart Association Adult/Child CPR and First Aid course.

GYM II/WEIGHTLIFTING

The main goal for our physical education courses is to cover motor skills, physical fitness, cognitive concepts, and personal and social character traits. Our weight lifting class will deal with maintaining cardio respiratory endurance by assessing personal status of endurance. We will also try to make one of our goals to develop and maintain healthy levels of muscular strength and endurance. In order to achieve this goal we will assess personal status of muscular strength and endurance of the arms, shoulders, abdomen, back, and legs monthly. Our class will also develop and maintain healthy levels of flexibility of selected joints of the body and also try to maintain healthy levels of body composition by assessing monthly. Lastly, all students will value physical activity and its contribution to lifelong health and well-being.

This Physical education class is a continuation of gym 1. Students will receive a more in-depth version of both team and lifetime sports with an emphasis on techniques that will allow them to participate at a higher level of performance and understanding.

SCIENCE

ENVIRONMENTAL EARTH SCIENCE

- Prerequisite - completion of 8th grade science

Environmental Earth Science is the study of the Earth and its relationship to the universe. The students will study Earth's processes, changes of the interior and surface, and the forces that cause these changes with an emphasis on how they

relate to and impact humans and how humans influence the Earth systems. Environmental Earth Science also examines the interaction between Earth's weather and climate, and the changes of organisms through time (paleontology). Finally, students will study astronomy, the study of our solar system, galaxies and universe. Earth Science is required for all ninth grade students and fulfills State of Michigan high school course requirements.

CONSERVATION

- Prerequisite - completion of Biology with a C or higher

Conservation is the study of the wise use of our natural resources. The principle areas of study include: freshwater ecology, terrestrial ecology, environmental pollution, fisheries management, soils, forestry, land use, solid waste and recycling, energy conservation and orienteering

BIOLOGY I

- Prerequisite - completion of 9th grade science

General Biology is an introductory biology course. It is intended to prepare students for advanced high school biology or for college biological science courses. Course content consists of cell biology, genetics, evolution, and an intro to human systems. Emphasis is placed on synthesis of information and graphical interpretation of data.

CONCEPTUAL PHYSICS

This is a typically junior level science class that will build a strong conceptual understanding of physics. The course will incorporate hands on lab activities, critical thinking and problem solving. Topics to be covered include mechanics, gravitation, Newton's laws, properties of matter, heat transfer, sound, light, electricity and magnetism. This class will satisfy one of the Michigan Merit Curriculum science credit requirements for the class of 2011 and beyond.

HONORS PHYSICS

- Prerequisite - Algebra II. It is recommended that students should have taken **Precalculus** or be currently enrolled in **precalculus** when taking physics.

This course provides a mathematical, problem solving approach to the study of matter and energy. Topics include mechanics, thermodynamics, wave theory, sound, optics, and electricity. Occasional demonstrations and lab work supplement the topics.

CHEMISTRY I

- Prerequisite Algebra 1

Chemistry I is a general chemistry course that includes the classification and study of the composition of matter. Topics covered include the principles of chemical reactions, energy, periodic table trends, kinetic molecular theory, types of bonding, nomenclature, and stoichiometry. Laboratory work will accompany each chapter.

CHEMISTRY II

- Prerequisite - Satisfactory completion of Chemistry I

Chemistry II is an advanced chemistry course in which the major areas of study include: the scientific method, energy transfer, properties and changes of matter, understanding trends in the periodic table, classification of matter, heat and temperature, significant figures, stoichiometry, atomic theory, quantum numbers and atomic orbitals, electron configurations, chemical bonding, nomenclature, writing chemical equations for reactions, properties of common gasses, kinetic theory of matter, gas laws, phase diagrams, solutions, colligative properties, ions in aqueous solutions, acids and bases. There are extensive laboratory experiments in this class and students will learn to write lab reports in a manner similar to what is expected in a college chemistry class.

ANATOMY AND PHYSIOLOGY (Offered in alternating years with Advanced Biology)

- Prerequisite: A grade of "B" or better in General Biology or the recommendation of the General Biology instructor.

Anatomy and Physiology is designed as an introductory course in anatomy and physiology and assumes no prior knowledge of the human body by the student. It is geared to students preparing for careers in health related professions, such as nursing and occupational therapy, physical therapy, medical technology, medicine, and dentistry. Because of its' scope, the course is also useful for students in the biological sciences, science technology, science education, and physical education programs.

ADVANCED BIOLOGY (Offered in alternating years with Anatomy)

- Prerequisite- Minimum cumulative GPA of a 3.5

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Some AP students, as college freshmen, are permitted to undertake upper-level courses in biology or to register for courses for which biology is a prerequisite.

The AP Biology course is designed to be taken by students after successful completion of a first course in high school biology and one in high school chemistry. The AP Biology Development Committee conducts college curriculum surveys of introductory biology courses for biology majors and develops the AP Biology

Examination so that it is representative of the topics covered by the survey group. Accordingly, goals have been set for percentage coverage of three general areas: I. Molecules and Cells, 25%, II. Heredity and Evolution, 25% III. Organisms and Populations, 50%.

AP ENVIRONMENTAL SCIENCE

- Prerequisites: Biology grade of B or better, Chemistry, Algebra

The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study.

The AP Environmental Science course is an excellent option for any interested student who has completed 2 years of a high school laboratory science. This course is usually taken in the junior or senior year.

SOCIAL STUDIES

UNITED STATES HISTORY/GEOGRAPHY 1890 - PRESENT

This course will cover major events which shaped our nation from the period of the Civil War to the present. It will concentrate on how those major events affected our political and economic systems and, how geography still plays a major role in decisions made. It will also detail how divergent cultures came together to become what America is today.

CIVICS/ECONOMICS

Civics is designed to provide students with a complete understanding of the American political system. Students will learn the functions and organization of our government and the individual's role in this democratic system. Students will become familiar with the core democratic values, checks and balances, freedoms guaranteed by the Bill of Rights and other Amendments to our Constitution, and the process of how men and women are chosen to represent people in the government.

Economics allows students to gain an understanding of the forces that shape America's economic system and the other economic systems around the world. Students will gain knowledge about the functions of the market economy and the role of the individual in it. They will also focus on economic concepts such as supply

and demand, opportunity cost, scarcity and personal finance management.

WORLD HISTORY/GEOGRAPHY

World History is a required course for all juniors. The course is designed to investigate the development of the world's civilizations by studying their political and economical systems as well as their social, cultural, and religious contributions to history. Through this course the students will gain insight into past events and see how those events have led to current world situations. Units of study will include:

- "Five themes of Geography" which help to illustrate the link between history and geography: Location, Place, Human/Environment Interaction, Movement, and Region are covered.
- "Rise of Civilizations" will explore the "appearance" of early humans.
- "Flower of Civilizations" will focus on Ancient Greece and Ancient Rome.
- "Regional Civilizations" will take the students from the Byzantine Empire up to the Americas.
- "Emergence of the Modern World" will include the Renaissance and Reformation and their impact on civilizations.
- "Revolution" will look at how new technology led to the scientific revolution.
- "Rise of Industry and Nationalism" will begin with the Industrial Revolution, how political and social reform led to the rise of Nationalism and the development of great empires in Europe.
- "World in Conflict" will start with World War One and how the Treaty of Versailles ended the war and in effect caused World War Two.

CURRENT EVENTS

This course covers the major events going on in the United States and the world. It will concentrate on why events take place and their possible results. The course will tie in these events and use history, government, and economics to explain the reasons for these events.

NATIVE AMERICAN HISTORY AND GOVERNMENT

This class covers an overview of Native American History, in North America, from the beginning to present. It will concentrate on how various tribes had the type of culture they had and how they interacted with each other. It will examine the major civilizations which began and how they were changed because of European

interaction. The second half of the course will examine the history of the Ojibwe people, the history of the K.B.I.C., and the type of government Native American tribes have. It will concentrate on the concept of sovereignty and how that presents a unique status of the individual Native American and the tribe. Students will gain an understanding of various segments of tribal government, how it operates, and areas it covers on this reservation.

SOCIAL PSYCHOLOGY

This Psychology course will serve as an introduction into the field of psychology. It will provide basic knowledge on the various fields of psychology, methods of research, the anatomy of the brain and the functions of each region of it. This psychology course will encompass the how and why of learning and how it changes with each stage of human development. Students will also be exposed to various mental illnesses and how they are treated. In addition to individual behaviors, students will also study how people interact in their everyday lives and under specific circumstances. Topics will range from the differences in cultures to predicting human behavior in certain social situations.

INDUSTRIAL EDUCATION

MECHANICAL DRAWING/CAD

This course is in basic drafting techniques with problems designed to give the students an exploratory experience in this area of Industrial Arts. Students will be exposed to Computer Aided Design after learning the basics. This course is a necessary pre-requisite for all other drafting courses.

MACHINE WOODS

The most important aspect of our woodshop class is to have the students achieve comfort with all the tools available to them in the building. In order to achieve this goal we will go through parts of our "Wood: Technology and Processes" book starting with general shop safety, then machine safety, and lastly, we will get hands on experience. Next, the students will either design their own project or work on a project assigned to them. Making the students comfortable in the shop should lead to them enjoying and wanting to come to class daily.

ADVANCED WOODS

- Prerequisite - Successful completion of Machine Woods.

This course is designed to give students who performed well in machine woods and want to develop their skills to a higher level an opportunity to do so. The projects that are made by the students are expected to be more difficult and the finished

product should show the advanced level of skill of the student. The class is primarily a lab situation and minimal classroom instruction is necessary.

METAL FABRICATION

This course is an introductory course in the welding, machining, and metal fabrication area. We also review most of the manufacturing processes in the metal industry. The course includes hands-on operation in the welding area as well as in the bench metal area.

Required projects include:

Welding:

- Buildup pad in flat position
- Welding joints in the flat position

Machining

- Meat tenderizer

Fabrication

- Ice skimmer

POWER MECHANICS

Prerequisites - None - designed for students in grades nine and ten.

This class is a basic course in power and transportation. Automotive repair will be studied, basic electricity, the theory of combustion, two and four stroke cycle engine theory, ignition systems, carboration, cooling systems, clutches and transmissions as well as CO2 dragster design and racing.

Advanced Metals

Prerequisites- Metal Fabrication

This class is split between the two different semesters. The first semester is primarily welding. Time is spent studying the welding process and performing welds in all positions. Second semester is a project based class. Second semester includes project design and processes.

CAD I

- Prerequisites - Mechanical Drawing

This course is designed to provide the student with an understanding of the features, limitations, and considerations associated with the operation of a Microcomputer-based CAD system. Students will gain valuable hands-on experience using AutoCAD micro based software, microcomputers, input devices such as digitizers and output devices such as pen plotters and printers. The proper use of

each hardware component is covered near the beginning of the course as well as the use of the necessary MS DOS commands to insure effective and efficient management of files. Proper use and management of both hard and floppy disk systems is also covered. The course presents logical step-by-step instruction about the AutoCAD commands, mode settings, drawing aids, shortcuts, and other valuable characteristics of AutoCAD.

Exercises in multi-view drawings, sectioning, dimensioning, isometric projection, fasteners, parallel line development and working drawings are incorporated into the course so as to enable the student to gain additional knowledge of proper drafting standards and techniques.

CAD II

This course is designed to provide an opportunity for the student to enhance his or her skills in the use of AutoCAD. More extensive use of ANSI dimensioning practices, fits, tolerancing and fasteners, as well as basic principles of descriptive geometry will be incorporated.

The student will also have the opportunity to explore and learn AutoCAD's 3D modeling capability, architectural house design and construction methods.

Flexibility rather than a rigid format will be the rule for this course. The student will be restricted only by his or her own limitations. Students will be encouraged to be creative in their search for more productivity.

Prerequisites - Enrollment in the course will require successful completion of CAD I with a grade of "C" or better.