

ADDISON HIGH SCHOOL COURSE DESCRIPTION GUIDE 2025-2026

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Vision Statement

The vision of Addison Community Schools is to prepare confident students in making positive contributions to the global society and the community in which they live.

Mission Statement

The mission of Addison Community Schools is to provide a well- balanced curriculum and learning environment, supplemented by enriching experiences in order for all learners to be successful.

Beliefs

A strong, well-rounded academic and extracurricular program is imperative for high student achievement

A safe, orderly, and predictable environment that is also enjoyable promotes learning

Having a balance between maintaining a solid foundation of technology with being on the cutting edge promotes high student engagement in learning

Building a culture of collaboration and providing frequent and timely communication among all stakeholders, will create meaningful partnerships between the school and community

All children and families have the right to effective instruction, and the responsibility to learn, progress, and experience success

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Graduation Requirements

Students must fulfill all credit and course requirements for the year in which they graduate. The requirements for receiving a diploma and participating in commencement from Addison High School are as follows:

In addition to the minimum total of earned credits, the following department requirements must be met:

2026

Total earned credits needed for graduation: 24 credits

English: 4 units of credit

- English 9 1 credit
- English 10 1 credit
- English 11 or College English 1 credit
- English 12 or College English 1 credit

Mathematics: 4 units of credit

- Algebra 1 1 credit
- Geometry 1 credit
- Algebra 2 1 credit
- Once credit in math in the final year of school

Science: 3 units of credit

- Biology 1 credit
- Physics or Chemistry 1 credit
- Science elective 1 credit

Social Studies: 3 units of credit

- US History 1 credit
- World History 1 credit
- Civics 0.5 credit
- Economics 0.5 credit

Personal Finance 0.5 credit

(Embedded into Economics)

Health 0.5 credit

Physical Education 0.5 credit

Visual Performing, Applied Arts: 1 unit of credit

(Any visual art course), band, choir, music appreciation, vocational education or practical arts, or any combination thereof.

World Languages: 2 units of credit

Two years of classroom instruction at the high school level.

Online Learning Experience

Course, learning, or integrated learning experience

2026 - 2029

Total earned credits needed for graduation: 23 credits

English: 4 units of credit

- English 9 1 credit
- English 10 1 credit
- English 11 or College English 1 credit
- English 12 or College English 1 credit

Mathematics: 4 units of credit

- Algebra 1 1 credit
- Geometry 1 credit
- Algebra 2 1 credit
- Once credit in math in the final year of school

Science: 3 units of credit

- Biology 1 credit
- Physics or Chemistry 1 credit
- Science elective 1 credit

Social Studies: 3 units of credit

- US History 1 credit
- World History 1 credit
- Civics 0.5 credit
- Economics 0.5 credit

Personal Finance 0.5 credit

(Embedded into Economics)

Health 0.5 credit

Physical Education 0.5 credit

Visual Performing, Applied Arts: 1 unit of credit

(Any visual art course), band, choir, music appreciation, vocational education or practical arts, or any combination thereof.

World Languages: 2 units of credit

Two years of classroom instruction at the high school level.

Online Learning Experience

Course, learning, or integrated learning experience

2024-2025 Programs of Study Student Worksheet

GRADE 9	GRADE 9
1 Credit	English 9
1 Credit	Algebra 1, or Geometry
1 Credit	Biology or Chemistry
1 Credit	US History
.5 Credit	Health
.5 Credit	Physical Education
1 Credit	Spanish or Band
1 Credit	Seminar
GRADE 10	GRADE 10
1 Credit	English 10
1 Credit	Algebra 1, Geometry, Algebra 2
1 Credit	Biology, Chemistry, or Physics
1 Credit	World History
2 Credit	Spanish 1, Spanish 2, Visual, Performing, or Applied Arts, or other elective
1 Credit	Seminar
GRADE 11	GRADE 11
1 Credit	English 11 or College English
1 Credit	Geometry, Algebra 2, Pre-Calc, or Statistics
1 Credit	Chemistry, Physics, or Science elective
.5 Credit	Civics (Government)
.5 Credit	Economics
3 Credits	Career & Technical, Dual Enrollment, Work Experience, or other electives Science elective, Spanish 2, Visual, Performing, or Applied Arts, or other elective
GRADE 12	GRADE 12
1 Credit	English 12 or College English
1 Credit	Algebra 2, Pre-Calc, Statistics, Senior Finance, or math related elective
5 Credits	Career & Technical, Dual Enrollment, Work Experience, Co-Op, Spanish 2, Visual, Performing or Applied Arts, or other electives

Sample Student Schedule for 2024-2025

Freshman		Sophomore		
Period	Semester 1	Semester 2	Semester 1	Semester 2
1	PE/Health	PE/Health	Spanish 1 or 2	Spanish 1 or 2
2	English 9A	English 9B	English 10A	English 10B
3	Algebra 1A	Algebra 1B	Geometry A	Geometry B
4	Seminar	Seminar	Seminar	Seminar
5	Biology A	Biology B	Chemistry A	Chemistry B
6	Band/Spanish 1	Band/Spanish 1	Band/Elective	Band/Elective
7	US History A	US History B	World History A	World History B

Junior		Senior		
Period	Semester 1	Semester 2	Semester 1	Semester 2
1	Algebra 2 or Pre-Calculus	Algebra 2 or Pre-Calculus	Senior Finance A	Senior Finance B
2	Vocational Tech, Dual Enrollment or Work Experience			
3	Vocational Tech, Dual Enrollment or Work Experience			
4	Vocational Tech, Dual Enrollment or Work Experience			
5	English 11A	English 11 B	English 12A	English 12B
6	Civics	Economics	Elective	Elective
7	Science Elective	Science Elective	Elective	Elective

Plan Ahead

Plan well the first two years of high school so that Lenawee Technical programs, Co-Op, Work Experience, and Dual Enrollment* are available to you.

*You may not dual enroll in a class if it is offered at Addison High School and you have not finished all the related classes here. Addison High School does not pay enrollment tuition for a class already taken at the high school.

Michigan Merit Curriculum Modification

Personal Curriculum

The parent or legal guardian of a student may request a personal curriculum that modifies certain requirements of the Michigan Merit Standard requirements. The personal curriculum must be developed by the student, at least one of his or her parents or his or her guardian, and his or her high school counselor or other designee selected by the high school principal. Revisions to a personal curriculum may be made if developed and agreed to in the same manner as the original personal curriculum.

The personal curriculum must incorporate as much of the subject area content expectations of the Michigan Merit Standard as is practicable; establish measurable goals that the pupil must achieve while enrolled in high school; provide a method to evaluate whether he or she met those goals; and be aligned with the pupil's educational development plan.

The pupil's parent or legal guardian and the principal must agree to the personal curriculum before it takes effect. If a student is at least 18 or is an emancipated minor, he or she may act on his or her own behalf under these provisions. The parent or guardian must be in communication with each of the student's teachers at least once each calendar quarter to monitor the student's progress toward the goals in his or her personal curriculum.

Special Education Accommodations

If a student receives special education services, his or her individualized education program (IEP) will identify the supports, accommodations, and modifications necessary to allow him or her to progress in the curricular requirements, or in a personal curriculum and meet the requirements for a high school diploma.

Michigan Merit Curriculum Personal Curriculum Modifications Options

Graduation Requirement	Personal Curriculum (Modification)	
<u>English</u> English 9 English 10 English 11 or College English 11 English 12 or College English 12	4 Credits	No modifications
<u>Mathematics</u> Algebra 1 or Algebra A/B (2 credits) Geometry Algebra 2 or Algebra 2 A/B (2 credits) One math course in the final year of school	4 Credits	All students: Complete at least 3.5 math or math-related credits Complete a math or math-related credit in the final year Algebra 2 modification options: Complete 2.5 credits including .5 credit of Algebra 2 OR Complete a two year Career and Technical education curriculum which includes .5 credit of Algebra 2 content OR Complete Algebra 2 over 2 years with credit given each year
<u>Science</u> Biology Physics or Chemistry Science elective	3 Credits	No modification
<u>Social Studies</u> US History & Geography World History & Geography Civics (Government) (.5 credits) Economics (.5 credits)	3 Credits	No modification for Civics 2 credits must be earned Modified only if student takes additional credit(s) beyond the required credit in English Language Arts, Math, Science, or Languages other than English
Physical Education and Health	1 Credit	Modification only if student takes additional credit(s) beyond the required credits in English Language Arts, Math, Science or Languages other than English
Visual, Performing, Applied Arts	1 Credit	Modification only if student takes additional credit(s) beyond the required credits in English Language Arts, Math, Science or Languages other than English
<u>Languages other than English</u> Begins with students entering 3rd grade in 2006- Credits earned in grades 9-12 OR an equivalent learning experience in grades K-12 Second year of foreign language can be substituted by CTE/LISD Tech center classes.	2 Credits	No modification
Online learning experience —Online course or learning experience or online experience is incorporated into each of the required credits		No modification

Timelines

Students should work closely with their parents, teachers, and counselor to follow the suggestions outlined below. For additional help, students and parents are encouraged to contact the counselor.

Grade 9

Select classes that match your career interest. Learn about the extra-curricular activities you can become involved in. Work to your academic potential. Remember your semester grades and attendance become part of your permanent record. Make daily attendance a priority! Discuss your future goals with your counselor. Update your Educational Development Plan (EDP) in Xello. Investigate summer enrichment programs. All students will take the PSAT in the spring.

Grade 11

Attend the Financial Aid for College and Trade School & Tech Center Night in the fall. Speak with representatives from postsecondary schools that visit AHS. Find out the entry requirements for colleges and trade schools and select your classes to meet those requirements. Update your EDP. Find extra-curricular activities to become involved in. Find a volunteer opportunity in a career field that interests you. If you plan to continue your education after graduation, visit the campuses of your top five postsecondary schools. Students not planning to attend a post-secondary school should investigate the job market, military options, or apprenticeship programs. All students are required to take the SAT.

Grade 10

Keep your grades up so you can have the highest GPA and class rank possible. Look at challenging course options for your junior year including higher levels of math, science, social studies and English. Attend the Sophomore Visitation at the Tech Center and consider a program for next year. Update your Educational Development Plan (EDP). Investigate summer enrichment/employment opportunities. Athletes should learn the NCAA academic eligibility requirements and take classes to meet them.

Grade 12

Continue to work on your grades and extracurricular activities. Make sure you have the courses required for graduation. Meet with your counselor to review requirements and post-secondary plans. Re-take the SAT off campus, if necessary. Athletes planning to compete at a Division I or II college should file a NCAA Clearinghouse form at the beginning of their senior year. Check email and senior Google classroom regularly for updates and new scholarship information. In October, complete post-secondary school application via commonapp.org or on websites from schools that interest you. Several colleges offer free applications during the month of October. Attend the Financial Aid Night for information on applying for aid. Complete and send the FAFSA shortly after it is release. Review your EDP to see if there is anything more you can add. Use the information to build your resume. Complete local scholarship applications in January, February, and March. Compare financial aid packages from post- secondary schools to which you have been accepted. Maintain good attendance and grades. Prepare for graduation. This typically happen in May.

ENGLISH

English 9 A-B

Applicable Grades: 9

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

A=Students will be reading, writing and discussing many genres of the language, including grammar, short story, poetry, drama and others. Focus will be on short stories and *To Kill A Mockingbird*.

B=Students will be reading, writing and discussing many genres of the language, including grammar, short story, poetry, drama and others. Focus will be on *The Odyssey* and *Romeo & Juliet*.

English 10 A-B

Applicable Grades: 10

Credits: 1

Prerequisite: English 9

Type of Course: Required

A=Students will be reading, writing and discussing many genres of the language, including grammar, short story, poetry, drama and others. This class is an extension of what the students learn in English 9A&B, with a more in depth look at the terms and ideas using different material. Focus will be on *The Crucible* and *Of Mice and Men*.

B=Students will be reading, writing and discussing many genres of the language, including grammar, short story, poetry, drama and others. This class is an extension of what the students learn in English 10A. Focus will be on *Raisin in the Sun*, *Huckleberry Finn* and *Civil Disobedience*.

English 11 A-B

Applicable Grades: 11

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

Prerequisite: English 10

A=Designed for non-college bound students this course will include short stories selected from American Literature. Essay writing will be taught with students practicing various forms of writing.

Grammar, usage, mechanics and spelling skills will also be emphasized. Other literary works that will be studied in this course are *Hamlet* and *King Arthur and his Knights of the Round Table*.

B=This class is an extension of English 11B, with focus on *Fahrenheit 451* and *Lord of the Flies*.

English 12 A-B

Applicable Grades: 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

A=This course includes units in writing a research paper, public speaking, short story analysis and other reading selections drawn from world literature. Focus will be on *Their Eyes Were Watching God*, *The Great Gatsby* and *1984*.

B=This class is an extension of English 12A, with focus on *Things Fall Apart* and *Animal Farm*.

Mythology

Applicable Grades: 9,10,11,12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Mythology includes learning about Greek, Roman, Egyptian and Norse culture by examining the myths and legends they believed in. This class will include all of the language arts criteria including: reading, writing, projects, speeches, research and discussion.

Creative Writing

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 semesters

Type of Course: Elective

Creative Writing is intended for the student who has a serious interest in writing beyond the academic requirements of the other English courses. The student who selects this course should be prepared to write every day in a teacher-selected genre. Writing will include essays, short stories, poetry, children's literature, and drama. The student will also be reading portions written by famous authors such as Poe and Hemingway and discussing their writing styles. Students using peer editing will find their work much more readable for all. A rubric will be provided for each final assignment.

Literature in Film

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 semesters

Type of Course: Elective

This course is designed to familiarize students with literature and film genres, terminology, and techniques. Socratic Seminars and general class discussions will center around themes and historical events relevant to the cultural and social settings of select works. While much of this course will focus on literature and its film counterparts, other mediums of communication (i.e. one-way audio, public speaking, social media, radio, etc.) may be studied as well.

FOREIGN LANGUAGE

Spanish I A–B

Applicable Grades: 9,10,11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Spanish I is the beginning level Spanish course. Stress is placed on pronunciation, vocabulary, sentence building and verb usage. Verb tenses will include the present tense and familiar commands. Students are expected to be able to respond to familiar situations in Spanish such as telling time, counting, describing people and objects along with other survival topics. Students will learn about the culture of Spanish-speaking countries through videos, special projects, and classroom discussions.

Spanish 2 A-B

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Prerequisite: Spanish I

Spanish II stresses pronunciation, vocabulary building, and sentence/verb usage. The class builds on many of the topics covered in Spanish I. Students will increase their skills with the spoken and written language in the present tense. Vocabulary knowledge will be expanded, and the past tense will be introduced. Special projects and classroom discussion will teach Hispanic culture.

BUSINESS AND COMPUTERS

Emerge with Computers

Applicable Grades: 9, 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course will focus on Computer Concepts, Issues, and Skills meeting the Michigan Educational Technology Standards. Computer Concepts covered would include Digital Technology, Hardware, Software, Internet, Telecommunications, Information Security, Digital Media, Databases, E-commerce, and Business Systems. Issues discussed would include Intellectual Property Rights, Digital Life, Freedom of Speech, Privacy, Ethics, and Globalization. Skills would include Microsoft Office 2007, Google Docs, Professional Skills, Internet Skills, and Information Security Skills. In addition, career exploration and employability skills. Emphasis will be put on developing skills that will benefit students not only in high school, but also later in life, whether it is in college or on the job.

Graphic Design 1

Applicable Grades: 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

These courses will focus on the digital design programs used in the graphics industry today: Adobe® Illustrator® CS4, Adobe® Photoshop® CS4, and Adobe® InDesign® CS4. The course will examine the essential features of each, then show in practical detail the skills and technology necessary for effective design for print and Web Media. Students will be given the opportunity to put what they learn to work by tackling design projects from concept to completion with assignments drawn from the everyday world of professional graphic designers.

Web Design 1

Applicable Grades: 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course will focus on designing web sites using the open-source content management system known as WordPress and using HTML Coding. You will be working with the ins and outs of WordPress and HTML Coding - learning the basics and working toward learning how to make WordPress or HTML coding do what you want it to do. You will be designing small sites as you learn the features of WordPress and HTML Coding, along with designing/re-designing a website for a business and/or organization.

Marketing

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semester

Type of Course: Elective

Marketing addresses all the ways in which marketing satisfies consumer and business needs for products and services. Students develop an understanding of the functions of marketing and how these functional areas affect all businesses. They will learn basic marketing concepts and the role of marketing in our economy. Students also develop skills in applying economic concepts to marketing, distribution and logistics, marketing information management, finance in marketing, product/service planning, pricing mixes, promotional strategies and personal selling. In order to increase the number of application experiences, students could participate in – DECA An Association of Marketing Students.

FINE ARTS

Foundations in Art

Course Length: 2 Semesters

Credits: 1

Applicable Grades: 9, 10, 11, 12

Type of Course: Elective

Students will further investigate the elements of art and principles of design in a foundational skills course that will introduce students to the materials, techniques, concepts, and processes essential to understanding the visual arts and the role of the artist, through a series of readings, research, class critiques, and projects. This course will be structured as two marking periods of 2D design, 1 marking period of 3D design, and 1 marking period of Art History.

Yearbook

Applicable Grades: 11, 12

Credits: .5- 1.0

Course Length: 1-2 Semesters

Type of Course: Elective

Students will learn the basics of writing, interviewing, graphic works, layout, and production. Students will regularly produce the student newspaper in addition to other projects. Meeting deadlines is a requirements. A strong background in writing is recommended. Permission of the instructor or principal is required.

Photography

Course Length: 1 Semester

Credit: .5

The students will learn basic photography techniques through the use of film. They will learn to develop their own film in the darkroom, make prints through the use of an enlarger, and start to develop their own body of black and white photography work.

Ceramics

Course Length: 1 Semester

Credits: 0.5

The students will learn how to hand build both functional and non-functional projects through the use of clay. The student will also be introduced to wheel thrown pottery.

Ceramics 2

Course Length: 1 Semester

Credits:0.5

The students will study how to make wheel thrown pottery. They will begin to develop a body of work to further master in the Independent Art course.

Sculpture

Course Length: 2 Semesters

Credits: 1

This year-long course is designed for students who want to focus on three-dimensional art and explore a variety of materials and techniques. Perfect for students who enjoy working with their hands, this class offers an exciting alternative to traditional drawing and painting by introducing projects in clay, wood, wire, and other media. Students will learn how to safely and effectively use a wide range of tools, including advanced equipment like the Glowforge, while developing skills in design, construction, and creative problem-solving. The course includes opportunities to study historical and contemporary sculptural artists for inspiration and helps students build a digital portfolio to track their growth and showcase their work. Sculpture is open to all students, whether experienced in art or just discovering their creative side. Projects are designed to rotate between materials, keeping the experience fresh while reinforcing skills over time. Students will participate in critiques, curate their own portfolio, and exhibit their work in the annual school art show. This course enriches Addison Community Schools' arts program by offering students hands-on, creative experiences that build artistic confidence, critical thinking, and practical skills valuable in both artistic and everyday careers.

Basic Design

Course Length: 1 Semester

Credits: .5

Basic Design is a foundation level class structured to introduce students to the visual elements and principles of design, art history, and careers in art. Students will be expected to apply the concepts learned from the lectures and demonstrations to create 2-dimensional and 3-dimensional visual compositions.

Painting 1

Course Length: 1 Semester

Credits: .5

Basic Painting is for students that would like to learn intermediate painting skills beyond the Foundations course. Students who take Basic Painting will develop mastery of basic and advanced color theory as well as a variety of media. The course will cover the following: Color Theory, Color Theory Application, Painting, Introduction to Acrylics, Introduction to oils, and an introduction to watercolor. The student will begin to explore photo-realism painting, abstract, and non-representational painting.

Painting 2

Course Length: 1 Semester

Credits: .5

Painting 2 is for students who have a basic understanding in painting, have a great interest in exploring further techniques while focusing on their own individual style and technique. The student will have an opportunity to study their preferred media at a more

Drawing 1

Course Length: 1 Semester

Credits: .5

Basic Drawing will enable the student to improve their drawing and rendering skills with a variety of methods and techniques explored. The Basic Drawing course will explore the following media/subject matter: Perspective Review (one and two-point), Contour Drawing, Shading/Gradation, Compositional Still-life, Gesture Drawing, Portraiture, Pen and Ink.

Drawing 2

Course Length: 1 Semester

Credits: .5

Advanced Drawing students want to be challenged. The course is designed for serious art students desiring post-secondary study in art who would like to explore their creative limits in the rendering method. Students will create portfolio quality work for college admission and/or scholarship consideration. The course will cover the following: Exploratory Gestural Drawing, Large-Scale Drawing, Experimental Drawing, Thematic Drawing (emotion, opinion, etc.) Mixed Media, and Portfolio Development.

Printmaking

Course Length: 1 Semester

Credits .5

Printmaking- This course introduces the concepts of traditional printmaking processes. These processes include mainly relief, screen-printing, calligraphy, and monotype. Students will study and create examples of these processes by carving images, making t-shirts, wood burning, and collage.

Theater

Applicable Grades: 9, 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course is designed to help students learn about theater production. Students are required to participate in a theater production each semester.

Music Appreciation

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This course is designed to give students an understanding of our musical culture. As part of the class, students will learn compositional techniques employed by composers, basic music theory and its application, have the opportunity to improvise and work within genres, learn form and analysis, and explore and identify the influences that have led to the music of today. Many genres of music will be presented including rock, jazz, classical, world, and other music through lecture, multi-media presentations, concert footage, and projects.

Band

Course Length: 1-2 Semesters

Credits: .5-1.0

This course is designed to give each band member a chance to perform publicly in an environment conducive to learning, growing, and music making. Students will play from a varied repertoire for four complete concert cycles--marching band, winter concert, festival, and the spring concert. In addition, students will learn basic music theory, its applications, and develop their musicianship so that they can become an independent musician capable of further study and performance on their instrument and/or other instruments. The first trimester will be primarily marching band with the second and third trimesters being primarily concert band.

Advanced Band

Course Length: 1-2 Semesters

Credits: .5-1.0

This advanced course is designed for current high school band members who wish to challenge themselves musically and academically while earning honors credit. Students enrolled in Advanced Band will participate in all standard band activities while taking on additional requirements to further their musical growth. Course expectations include: Performance of an approved solo in front of an audience, participation in an ensemble outside of the high school band program, maintenance of a personal learning log to document rehearsals, track musical goals, and reflect on progress, completion of a special project tailored to the student's personal musical interests, audition for at least one honor band or attendance at a university-level master class, and engagement in advanced music theory concepts incorporated into daily warm-ups and rehearsals. Please note: This course requires significant commitment of additional time outside the school day for rehearsals, performances, and independent projects.

Chorus/Choir

Course Length: 1-2 Semesters

Credits: .5-1.0

This course is designed to help students learn to sing in group and solo setting. The class will have the following general purposes: To help students learn to sing and perform as a group. To help increase students' knowledge in a variety of choral styles. To increase knowledge of note reading and sight singing. To increase knowledge of music theory and music history. To improve students' performance skills

Radio Broadcasting

Course Length: 1-2 Semesters

Credits: .5-1

Radio broadcast is an elective class that teaches students how to operate and broadcast live on air at Addison's radio station WQAR, 95.7. Students will learn the operations of the mixing board, microphones and playlists of the station. They will also be instructed in disc jockey and live on-air techniques, which they will demonstrate during broadcasts. Students will be expected to go live on-air during class times and will also be required to broadcast a minimum of 4 hours per semester after school hours. Students taking the course more than one semester can learn advanced broadcasting techniques. Radio broadcasting is a unique experience for Addison students as we are currently the only radio station operating in Lenawee County schools.

MATHEMATICS

Algebra 1 A-B

Applicable Grades: 9, 10

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

A=Introduction to expressions, equations and function notation. Discussing a variety of ways to represent functions. Review of operations involving integers and the distributive property. Finding square roots and comparing real numbers. Solving a variety of linear equations. Review of ratios, proportions and percent's. Graphing and writing linear equations using tables, slope-intercept form, point-slope form and intercepts. Interpreting slope and modeling direct variation . Know the attributes of parallel and perpendicular lines. Construct a line of best fit and use that line to predict values. Write, solve and graph linear and absolute value equations and inequalities. Solving linear systems using substitution, elimination and graphing

B=Define and use properties of exponents. Write and graph exponential growth and decay functions. Apply operations to polynomials. Factor polynomials. Graph and solve quadratic functions. Graphing and solving radical equations. Introduction to probability and data analysis

Geometry-A-B

Applicable Grades: 9, 10, 11,

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

A=Revisit basic geometric concepts (ie. Points, lines, rays). Use basic formulas: midpoint, distance, perimeter, area and circumference. Use postulates, theorems and definitions to perform inductive and deductive reasoning and proofs.

Solve multi-step problems and construct proofs involving vertical angles, linear pairs of angles, supplementary, complementary and right angles. Solve multi-step problems and construct proofs involving corresponding angles, alternate interior angles, alternate exterior, and same-side (consecutive) interior angles. Use multiple theorems and postulates to prove triangle congruence. Finding and interpreting centers of triangles. Explore similarity using ratios and proportions and apply to triangles

B=Explore right triangles using Pythagorean Theorem and trigonometric functions. Discuss and investigate various types of quadrilaterals including theorems and corollaries pertaining to properties, similarities and differences. Perform transformations with vectors, algebra and matrices. Perform reflections, rotations and dilations using algebra, drawing tools, technology and matrices. Investigate aspects of circles by drawing tangents to circles. Use arc of circles, lengths of chords, secants and tangents to describe and explore relationships with circle. Use formulas for area of triangles, parallelograms, trapezoids, and other polygons. Use ratios to find similar polygons and missing lengths. Derive a formula for the area of a regular polygon. Use lengths and areas to calculate probability. Identify and name solids. Relate the number of faces, vertices, and edges of solids. Find the surface area and volume of prisms, cylinders, cones, pyramids, spheres and composite solids.

Senior Finance

Applicable Grades: 12

Credits: 1.0

Course Length: 2 Semesters

Type of Course: Elective

This course is designed for students interested in learning how to deal with real life financial situations. Time is spent covering situations that students will encounter as consumers in the near future. With the help of speakers from the community, and textbooks, the course will cover topics on how to find and get a job, the aspects of money and banking management, buying and maintaining a car and a home, figuring taxes, insurance and investments, and budgeting one's money. The class will also cover ratios and proportions, scientific notation, problems with powers, and the use of formulas to solve problems.

Algebra 2

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

Prerequisite: Algebra I and Geometry

A=Review equations and inequalities incorporating problem solving strategies and models. Determine if a relation represents a function and identify the domain and range of the function and represent using symbols, graphs, tables, diagrams and words. Solve a variety of quadratic functions by graphing, factoring, and the Quadratic Formula. Perform operations on complex numbers. Determine even and odd functions and the end behavior of polynomials. Perform operations on polynomials. Introduce and

apply properties to rational exponents. Perform function operations and composition. Understanding the relationship of a function and its inverse.

Graphing and solving radical equations. Expand on exponential growth and decay functions. Graph, solve and apply the properties of logarithms.

B=Model inverse and joint variation. Graph rational function and identify key characteristics such as domain, range and asymptotes. Use right triangle trigonometry to solve right triangles. Convert between degree and radian measure. Understand the relationships of the values associated with the unit circle. Use inverse trigonometric functions to equations. Apply the Law of Sine's and the Law of Cosines. Graph and transform trigonometric functions. Graph and write equations of conic sections including circles, parabolas, ellipses, hyperbolas and apply basic transformations. Find measures of central tendency and analyzing the spread of the data. Introduce the normal and binomial distributions and sampling. Introduction to combinations permutations and probability. Introduction to sequences and series including notation and problem solving

Pre-Calculus

Applicable Grades: 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Prerequisite: Algebra I, Geometry, and Algebra 2

This college prep course will take an in-depth look at functions and their graphs. Functions covered will include polynomial, rational, exponential, logarithmic, and trigonometric functions. It will also include a study of vectors, parametric equations, polar coordinates, and limits.

Statistics A-B

Applicable Grades: 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Prerequisite: Algebra 2

This course covers the nature of statistics and how to collect, analyze, and present data scientifically. It also covers the rules and distributions of probability. Students will then use this knowledge to do hypothesis testing as a final class project.

Accounting: I

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This class is an introduction to basic accounting terminology and practices, including computer accounting techniques. This class has proven to be an excellent stepping-stone to further study and a career in accounting. Upon successful completion of this course each student will have the knowledge to maintain personal financial records or the records of a small business. Each student is provided with practical accounting experience by completing two self-paced computer business simulations.

Sport Analytics and Statistics

Applicable Grades: 10, 11

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Sports analytics refers to the use of data and quantitative methods to measure performance and make decisions to gain advantage in the competitive sports arena. This course is designed to help students to develop and apply analytical skills that are useful in many high paying careers, using sports as the application area. These skills include critical thinking, mathematical modeling, statistical analysis, predictive analytics, game theory, optimization, and simulation.

Basic statistical concepts and methods are presented in a manner that emphasizes understanding the principles of data collection and analysis rather than theory. Much of the course will be devoted to discussions of how statistics is commonly used in the real world. There are two major parts to this course:

Data – which includes graphical and numerical summaries to describe the distribution of a variable, or the relationship between two variables, and data production to learn how to design good surveys and experiments, collect data from samples that are representative of the whole population, and avoid common sources of biases.

Probability and Inference – using the language of probability and the properties of numerical summaries computed from random samples, we learn to draw conclusions about the population of interest, based on our random sample, and attach a measure of reliability to them

Quantitative Reasoning and Statistics

Applicable grades: 10,11,12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Prerequisite: Algebra I, Geometry, 1st Semester Algebra II

This one semester course will help prepare students for the workforce, trade school or pursuing a certificate or degree from a non-four-year institution. Quantitative Reasoning develops student skills in analyzing, synthesizing and communicating quantitative information. Cultivates algebraic reasoning and modeling skills through a quantitative literacy lens. Emphasizes critical thinking and the use of multiple strategies in applied contexts. Topics also include proportional and statistical reasoning, probability, and evaluation of bias and validity.

PHYSICAL EDUCATION AND HEALTH

Freshmen PE/Health

Applicable Grades: 9

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

This is a required class for incoming freshmen. A student must pass Freshman PE before taking any other physical education class. The class addresses skills, rules, and strategies of most team sports. The class also introduces weightlifting principles and fitness activities. Participation is a major portion of the grade. Testing is a smaller portion of the grade and includes skill, strength, endurance, and knowledge testing. The major philosophy is to provide individuals with the skills, knowledge, and opportunity to be successful in some type of activity. This course is based on a philosophy of choosing life-long wellness. Students will develop an appreciation of the impact of their heredity, their environment, and their choices upon their personal wellness. Units covered will be personal hygiene, choosing a nutritious diet, mental health, stress control, preventing drug abuse, and healthy sexuality.

Physical Fitness

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This class is designed to give students the knowledge in weightlifting techniques and principles. Off lifting days will be utilized for periodic fitness testing, endurance activities, and various activities. Emphasis is placed on overall fitness and the importance of leading an active lifestyle.

Fitness and Activities

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Students will be expected to participate in a variety of fitness developmental activities on a daily basis, as well as participate in a variety of games and activities for fitness and fun. Testing will be done in both areas.

Strength and Conditioning

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This class is designed to give students the knowledge in strength training and weight lifting techniques and principles. Various activities will be utilized to improve physical strength and condition throughout the year. Emphasis is placed on overall fitness and the importance of leading an active lifestyle.

Team Sports

Applicable Grades: 9, 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course is designed for students who are interested in developing the physical skills necessary to be competent in many forms of movement as well as knowledge of team sport concepts, such as offensive and defensive strategies, understanding of rules and boundaries, and appropriate social behavior in team settings. Students will be responsible for participating as well as officiating each unit. The expectation is that students participate at a high level of effort and be proficient in skills associated with the unit being taught. Units may include: Football, Soccer, Ultimate Frisbee, Volleyball, Basketball, Team Handball, Badminton, Pickleball, Kickball, Slow Pitch Softball, and Floor Hockey.

Recreation

Applicable Grade: 9,10,11,12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This course would be an addition to our PE program and would primarily focus on outdoor recreation or outdoor activities. These activities would include Map and Compass, Geocaching, Kayaking or lake activities, Gathering, Hiking, etc. Mostly depending on the season in which class is offered.

Enhanced Strength and Conditioning

Applicable Grade: 9,10,11,12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Enhanced strength and conditioning is a class in which students are given the tools and resources to live a healthy and active lifestyle focused on physical strength and endurance. Students will be involved in a rigorous program in which we will be focusing on overall muscular strength and endurance of a person, along with flexibility, cardiovascular endurance, and body composition. This class will help students prepare themselves for sports while in school, but mostly prepare them for the demanding career paths that one might take after or during the completion of high school.

SCIENCE

Biology A-B

**Credits: 1
11**

Applicable Grades: 9,10,

Course Length: 2 Semesters

Type of Course: Required

This course satisfies the biology portion of a three credit science requirement. Biology is divided into two semesters; Biology A and Biology B. The topics covered in Biology A include, introduction to science, ecology and cell biology. The topics covered in Biology B include, photosynthesis, cell respiration, cell division, genetics, and evolution. This is a robust course designed to teach the process of scientific study and give all students a mastery foundation in the biological sciences. The course provides lecture, class discussion and experimentation. Experimentation includes, clover leaf population study, tree density lab, mass of gum before chewing and after chewing, oat seed lab that investigates the growth of oat seed roots, and several opportunities to observe biology through microscopes.

Chemistry A-B

Applicable Grades: 10, 11, 12

Credits: 1

**Course Length: 2 Semesters
Required .**

Type of Course:

Pre- requisite: Biology

This course satisfies the physical science portion of a three credit science requirement. There is a strong mathematical approach and calculators are recommended. Laboratory work is emphasized. Topics covered in Part A include: Matter and Change, Atomic Theory and Structure, Molecular Structure, Stoichiometry. Part B will include: Gases, Solutions, Reaction Rates, Acids and Bases, Electro-Chemistry. Students must take Part A before taking Part B. Course work will include lecture, computer models, laboratory work, and student lead group work.

Physics A-B

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course:

Required unless taking Chemistry . Pre- requisite: Biology I

Physics covers topics in 1D and 2D motion, Newton's Laws, Momentum, Energy, Electricity, and Einstein's Theory of Relativity. It is designed to challenge the intellect and intuition inside out as you learn how things work in the world around you. The focus is on understanding the general principles of physics and using those principles to solve real world problems. There will be a focus on using technology to study and report scientific findings. Performance will be evaluated based on homework, projects and test scores as well as completion of laboratory experiments and tests. The level of mathematics necessary for this class requires a thorough understanding of algebraic principles and knowledge of geometry. Basic right triangle trigonometry will be taught and used during the course of the trimester. Students must take Part A before taking Part B

Horticulture

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non seed plants. The laboratory exercises are coordinated with lecture topics and may include field exercises. Students will be working in the greenhouse.

Geology A-B

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 1-2 Semesters

Type of Course: Elective

Earth and Space Science provides a study of the earth's lithosphere, atmosphere, hydrosphere, and its celestial environment. This course emphasizes the study of energy at work in forming and modifying earth materials, land forms, and continents through geological time. Students have opportunities to gain an understanding of the history of the development of the earth and space sciences, to explore the uses of knowledge of the earth and its environment in various careers, and to cope with problems related to personal needs and social issues. Students will cover topics on Earth materials, weathering and erosion, astronomy with an emphasis on Earth's place in the universe Earth and Space Science provides a study of the earth's lithosphere, atmosphere, hydrosphere, and its celestial environment.

This course emphasizes the study of energy at work in forming and modifying earth materials, land forms, and continents through geological time. Students have opportunities to gain an understanding of the history of the development of the earth and space sciences, to explore the uses of knowledge of the earth and its environment in various careers, and to cope with problems related to personal needs and social issues. Students will cover topics on oceanography, atmosphere, and geologic time and changes throughout Earth's history. Course content will be delivered through lecture, projects, computer models, and class discussions.

Invertebrate/Vertebrate Zoology

Applicable Grades: 10, 11, 12

Credits: .5-1

Course Length: 1-2 Semesters

Type of Course: Elective

This course is recommended for students interested in the health sciences: nursing, medicine, pharmacology, and medical technology, as well as animal science fields such as veterinary medicine, or marine biology. In this one trimester class students will learn classification, anatomy, morphology, and evolutionary adaptations of animals **without** backbones. The course work includes, lecture, mandatory dissections, computer models, and projects. Organisms studied in this class include: sponges, jelly fish, flat worms, round worms, clams, octopus, insects, sea stars, etc.

This is a follow up course to the invertebrate zoology course. Again, this course is recommended for students interested in the health sciences: nursing, medicine, pharmacology, and medical technology, as well as animal science fields such as veterinary medicine, or marine biology. In this one trimester class students will learn classification, anatomy, morphology, and evolutionary adaptations of animals **with** backbones. The course work includes, lecture, mandatory dissections, computer models, and projects. Organisms studied in this class include: frogs, fish, lancelets, hag fish, sharks, rays, skates, birds, reptiles, and mammals

Anatomy and Physiology

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

This is a full-year high school course that provides foundational knowledge and skills in anatomy and physiology, clinical medicine, and laboratory research. The course engages students in how this content can be applied to real-world situations, cases, and problems. Through both individual and collaborative team activities, projects, and problems, students tackle real-world challenges that biomedical professionals face in the field. Students work with the same tools and equipment used in hospitals and labs as they engage in relevant hands-on work. They explore BioDigital™ 3D interactive models, simulations, and assessments to visualize human anatomy and physiology. Students develop skills in technical documentation to represent and communicate experimental findings and solutions to problems, as well as skills in ethical reasoning and clinical empathy.

Anatomy

Applicable Grades: 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course is an Anatomy course covering the Human Skeletal, Muscular, Nervous, Endocrine, Circulatory, and Digestive Systems. The course work emphasizes a hands-on approach to learning about the human body including the study of models, mammalian dissections and interactive computer activities. This course is recommended for students interested in the health sciences: nursing, medicine, pharmacology, and medical technology, as well as any other interested students.

Astronomy

Applicable Grades: 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course will provide the student with an introduction to the concepts of modern astronomy, the origin and history of the Universe and the formation of the Earth and the solar system. Students will compare the Earth's properties with those of the other planets and explore how the heavens have influenced human thought and action. The course gives a description of astronomical phenomena using the laws of physics. The course treats many standard topics including planets, stars, the Milky Way and other galaxies, black holes to more esoteric questions concerning the origin of the universe and its evolution and fate. Although largely descriptive, the course will occasionally require the use of mathematics (Algebra).

Oceanography

Applicable Grades: 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Oceanography combines various aspects of physical, chemical, biological and geological sciences. For example, the ocean and atmosphere are coupled together as a large heat engine which controls global climate. The structure of the sea floor and the physical properties of the overlying water affect the growth and distribution of organisms on the ocean bottom and in the ocean water column. Oceanography emphasizes the nature of ocean processes and focuses on global oceanographic phenomena as well as issues that affect our lives as citizens who live on this water planet. Topics treated include the history and scope of oceanography, global tectonics, tsunami, ocean-atmosphere dynamics, coastal processes, waves, tides, and marine ecosystems, and the significance of the oceans to man.

SOCIAL STUDIES

United States History & Geography

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

This course studies the history of the United States from the 1890's until the present. Beginning with the Spanish- American War and the imperialistic era from which it sprang and continuing through two World Wars, the Great Depression, and the Cold War, our country's famous people, common people, and events will be studied and analyzed. Included in our study will be how geography affected the development of the present day U.S.

World History & Geography

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Required

According to the Michigan social studies framework, Michigan's World History course takes a global and comparative approach to studying the world and its past to develop greater understanding of the development of worldwide events, processes, and interactions among the world's people, cultures, societies, and environment. The course will begin reviewing foundational eras covered in middle school and will work its way through thousands of years of human history to contemporary global issues. Within each historical era, students work at three interconnected spatial scales to study world history through several lenses: global, interregional, and regional. We will be studying the following eras of human history: Eras 1-3 – Beginnings to 300 C.E/A.D – these are expectations to establish necessary background to begin high school study, Era 4 – Expanding and Intensified Hemispheric Interactions, 300 to 1500 C.E/A.D, Era 5 – The Emergence of the First Global Age, 15th to 18th Centuries, Era 6 – An Age of Global Revolutions, 18th Century to 1914, Era 7 – Global Crisis and Achievement, 1900 to 1945, Era 8 – The Cold War and its Aftermath: The 20th Century since 1945 Contemporary Global Issues

Economics

Applicable Grades: 11

Credits: 0.5

Course Length: 1 Semester

Type of Course: Required

This is a class for today. Examples and discussions are based on what is happening around us. The purpose of the class is to help make each student more aware of the significance of economic decision making, both from the individual consumer's point of view as well as the national government's point of view. Increased knowledge in this area should lead to a consumer that is better equipped to understand the options available to successful living.

***Financial Literacy/Personal Finance standards are embedded into this class to meet Michigan graduation requirements.**

Civics/Government

Applicable Grades: 11,12

Credits: 0.5

Course Length: 1 Semester

Type of Course: Required

This course emphasizes the study of the U.S. government in five areas: the U.S. constitution and basic principles, law making and the legislative process, law and the courts, state and local government, and elections and voting. These areas and current government topics form the content of this course.

Leadership 12

Applicable Grades: 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course will include active participation in the development, coordination, and implementation of activities that will positively impact both the school and its surrounding community. Students will work both individually and in groups to assess and plan events for the upcoming school year, giving them leadership roles as they will be required to lead groups, and programs.

SAT Prep

Applicable Grades: 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

This course is an elective and is designed to help students prepare for the SAT and MSTEP tests that they will take during the spring of their junior year. In order to prepare for these tests, students will help students to practice skills that they will need when they join the workforce. During this career preparation period, students will research colleges and universities and careers. Students will also practice important skills necessary to get a job, such as interviewing and creating a resume.

Psychology

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Psychology is a class intended for students who are interested in learning more about that old question: HMMMM.... I wonder what makes people tick? Or thing like "Why am I so different from my sister?", "Why do I procrastinate?", and "What is a psychotic really like?". During the course you will also learn about how we learn and remember, how to raise your children, how to teach your pets and many other useful applications.

History in The Movies

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semester

Type of Course: Elective

A look at how Hollywood has portrayed some of the key events in human history. Students will do research on topics and compare how the historical research compares with what they see in the movies.

Sociology

Applicable Grades: 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Students explore such topics as social control, deviance, prejudice, marriage, family and adolescence. This course will help the student understand how individuals are affected by society.

Modern Social Issues

Applicable Grades: 9, 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

In this course students will look at a few of the many social issues that exist in our society. Students will be encouraged to discuss these issues and look at opposing viewpoints.

RECOVERY, ONLINE, DUAL CREDITS, OTHER

Credit Recovery-Computers

Applicable Grades: 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Requirements: Principal Approval

This course runs simultaneously with Credit Recovery. At-risk students may earn a computer credit in addition to their online credit while taking Credit Recovery. A 1/2 computer credit will be issued for each semester for students in Credit Recovery that complete miscellaneous computer assignments while working on their online class.

Regardless of how many Credit Recovery credits a student earns, a maximum of 1 computer credit will be granted

Online Learning

Applicable Grades: 9, 10, 11, 12

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Requirements: Principal Approval

Students enrolled in this class will enroll in an online core subject area course or elective needed for graduation. An online instructor is assigned to the course who grades and monitors student progress. An Addison teacher facilitates the learning program at the school site. Students must be able to work independently and at a steady pace in order to be successful in an online learning environment. Principal permission is required.

Dual Enrollment

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Requirements: Proficiency met on the PSAT test Principal Approval

Eligible students are in grades 9, 10, 11 or 12, enrolled in at least one high school course, and have qualified proficient in the PLAN test or in the area of interest as an 11th grader. Sophomores wishing to be eligible for the Dual Enrollment option as an 11th grader will need to take the PLAN as a sophomore. Students may not take courses that are hobby, craft or recreational, in the area of physical education, theology, divinity, or religious education (and a course that normally applies toward satisfaction of degree requirements.) There may be some instances where students are out of formula for reimbursements and may pay out of pocket. Students interested in dual enrollment must meet with the principal and counselor prior to signing up for courses.

Seminar

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Provides an individualized opportunity for students to work with a teacher to develop study habits, accountability and organizational skills to properly identify their educational needs. Students will have the opportunity to regularly check their grades, meet with teachers in areas that need additional development and build positive relationships.

Tutorial

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Provides an individualized opportunity for students to work with a teacher to develop study habits, accountability and organizational skills to properly identify their educational needs. Students will work directly with a teacher or paraprofessional to meet their specific educational goals in each class with coursework tailored to their learning style.

Peer to Peer Support

Applicable Grades: 9, 10, 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

Peer to Peer Course Credit Programs represents one model of 21st Century instructional design that incorporates applied (experiential) learning in a non-traditional manner. A peer to peer program is a strategy for providing ongoing support and modeling from one non-disabled pupil to a pupil with an individualized education program (IEP). It encompasses both the academic and social domains. Benefits are derived by both pupils.

INDEPENDENT LEADERSHIP

Independent Leadership

Applicable Grades: 10, 11

Credits: .5

Course Length: 1 Semester

Type of Course: Elective

Requirements: Principal Approval

This course is for students to develop leadership roles within the school. Mentoring, tutoring, daily responsibilities and independent research, are the lessons that the independent leadership student will be exposed to. Each individual teacher will prepare a syllabus for students.

AP COURSES

AP Computer Science Principles

Applicable Grades: 10, 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

Requirements: Principal Approval

Computer Science Principles curriculum is a full-year entry-level course that introduces high school students (10th - 12th grade) to the foundations of modern computing. You do not need any prior knowledge of computing concepts. The course will cover a broad range of foundational topics such as programming/coding, algorithms, the Internet, big data, digital privacy and security, and the societal impact of computing.

AP English Literature and Composition

Applicable Grades: 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

This course the students engage in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style and theme, as well as such smaller scale elements as the use of figurative language, imagery, symbolism and tone.

AP Psychology

Applicable Grades: 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

AP Calculus

Applicable Grades: 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

Calculus deals with calculating and exploring things that change variable rates. The major concepts of calculus include limit, derivative, and integrals. In addition to these major concepts we will successfully highlight numerous subtopics and methods as listed in the course outline. We will explore each concept in four different ways; graphically, numerically, algebraically and verbally emphasizing the connections and applications. This class will prepare students for the AP Calculus exam in which students may earn college math credits.

AP Chemistry

Applicable Grades: 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students should attain a depth of understanding of fundamentals and reasonable competence in dealing with chemical problems. The topics covered are different than basic chemistry, with more emphasis on chemical calculations and mathematical formulations of principles and more laboratory work. Topics covered are: Structure of Matter, States of Matter, Reactions, Descriptive Chemistry and Laboratory

AP English Language and Composition

Applicable Grades: 11, 12

Credit: 1

Course Length: Year

Type of Course: Elective

This course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and resources of language contribute to effectiveness in writing.

AP Biology

Applicable Grades: 11, 12

Credit: 1

Course Length: Year

Type of Course: Elective

AP Biology course is built around eight themes. These themes assist students in organizing concepts and topics into coherent conceptual frameworks. (1) Science as a Process- Science is a way of knowing. It can involve a discovery process using inductive reasoning, or it can be a process of hypothesis testing. Example: The theory of evolution was developed based on observation and experimentation. (2) Evolution-Evolution is the biological change of organisms that occurs over time and is driven by the process of natural selection. Evolution accounts for the diversity of life on Earth. Example: Widespread use of antibiotics has selected for antibiotic resistance in disease-causing bacteria. (3) Energy Transfer- Energy is the capacity to do work. All living organisms are active (living) because of their abilities to link energy reactions to the biochemical reactions that take place within their cells. Example: The energy of sunlight, along with carbon dioxide and water, allows plant cells to make organic materials, synthesize chemical energy molecules, and ultimately release oxygen to the environment. (4) Continuity and CHANGE- All species tend to maintain themselves from generation to generation using the same genetic code. However, there are genetic mechanisms that lead to change over time, or evolution. Example: Mitosis consistently replicates cells in an organism; meiosis (and hence sexual reproduction) results in genetic variability. (5) Relationship of Structure to Function- The structure levels from molecules to organisms ensure successful functioning in all living organisms and living systems. Example: Aerodynamics of a bird's wing permits flight. (6) Regulation- Everything from cells to organisms to ecosystems is in a state of dynamic balance that must be controlled by positive or negative feedback mechanisms. Example: Body temperature is regulated by the brain via feedback mechanisms. (7) Interdependence in

Nature- Living organisms rarely exist alone in nature. Example: Microscopic organisms can live in a symbiotic relationship in the intestinal tract of another organism; the host provides shelter and nutrients, and the microorganisms digest the food. (8) Science, Technology, and Society- Scientific research often leads to technological advances that can have positive and/or negative impacts upon society as a whole/ Example: Biotechnology has allowed the development of genetically modified plants.

AP US History

Applicable Grades: 11, 12

Credits: 1

Course Length: 2 Semesters

Type of Course: Elective

The AP program in United States History is designed to provide students with the analytical skills and enduring understandings necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in an essay format.

HONORS COURSES

Honors US History

Applicable Grades: 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

Honors US History is a college preparatory class. As such, the academic requirements are challenging and the classroom expectations are elevated. The first semester will focus on review from 8th and 9th grade US history classes: Founding the New Nation, Building the New Nation, Testing the New Nation, Forging an Industrial Nation, and Struggling for Justice at Home and Abroad. Second semester will focus on Contemporary US History: The Making of Modern America with a focus on the 50's, 60's, 70's, 80's, 90's to today. Students will critically engage with history through readings, writing, discussions, and projects. The objective of this class is to learn the history of the United States, relate content to current events, and prepare for higher education.

Project Lead the Way

Introduction to Engineering Design

Applicable Grades: 11, 12

Credits: 1

Course Length: Year

Type of Course: Elective

Principles of Engineering (POE) is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering and high tech careers. POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

In PLTW Engineering, students engage in open-ended problem solving, learn and apply the engineering design process, and use the same industry-leading technology and software as are used in the world's top companies. Students are immersed in design as they investigate topics such as sustainability, mechatronics, forces, structures, aerodynamics, digital electronics and circuit design, manufacturing, and the environment, which gives them an opportunity to learn about different engineering disciplines before beginning post-secondary education or careers.

The plan will be to run the program similar to an academy where students are expected to report, in uniform, at the beginning of each class period by standing at attention for roll call, presenting personal gear for inspection, and showing evidence of the completion of all assignments. The course is conducted on a military model where physical fitness, discipline, and decorum are highly valued.

Edmentum Course Offerings

Math

AP® Calculus A/B

AP® Statistics A/B

Accelerate to Algebra 1

Accelerate to Algebra 2 Accelerate to Geometry Accelerate to Michigan Algebra I Accelerate to Michigan Algebra II Accelerate to

Michigan Geometry Algebra 1 A/B

Consumer Mathematics

Financial Mathematics A/B

Geometry A/B

Michigan Algebra II A/B

Michigan Geometry A/B

Michigan Integrated Math I A/B

Michigan Integrated Math II A/B

Michigan Integrated Math III A/B

Precalculus A/B

Probability & Statistics

English Language Arts

AP® English Language and Composition A/B AP® English Literature and Composition A/B

Accelerate to English 09

Accelerate to English 10

Accelerate to English 11

Accelerate to English 12

Accelerate to Michigan English 09

Accelerate to Michigan English 10

Accelerate to Michigan English 11

Accelerate to Michigan English 12

Business English A/B

English 09 A/B

English 10 A/B

English 11 A/B

English 12 A/B

Michigan English 09 A/B

Michigan English 10 A/B

Michigan English 11 A/B

Michigan English 12 A/B

Science

AP® Biology A/B

AP® Chemistry A/B

AP® Environmental Science A/B

Biology with Virtual Labs A/B

Chemistry A/B

High School Earth & Space Science A/B

Integrated Physics & Chemistry A/B

Physics A/B

Social Studies

AP® Macroeconomics

AP® Microeconomics

AP® Psychology

AP® U.S. History A/B

Contemporary World History A/B

Economics

Ethnic Studies

High School Civics

High School World History A/B

Michigan United States History A/B

Michigan World History and Geography A/B

U.S. Government
U.S. History A/B
World Geography A/B
World History Survey A/B

World Languages

French 1 A/B
French 2 A/B
German 1 A/B
German 2 A/B
Spanish 1 A/B
Spanish 2 A/B
Spanish 3 A/B

Electives

Academic Success Art History and Appreciation Artificial Intelligence
Business and Information Technology A/B
College and Career Preparation I
College and Career Preparation II
Communication Applications
Creative Writing
Digital Citizenship A/B
Engineering and Technology A/B
Environmental Science A/B
Exploring Agriculture and Business A/B
Exploring College and Careers A/B
Exploring Health Sciences A/B
Gothic Literature
Holocaust Studies
Introduction to Anthropology
Introduction to Archaeology
Introduction to Philosophy
Introduction to Visual Arts
Introduction to World Religions
Music Appreciation
Mythology and Folklore
Structure of Writing
Women's Studies

Health, Fitness & Physical Education

Adaptive Physical Education
Advanced Physical Education 1
Advanced Physical Education 2
Anatomy
Comprehensive Physical Education
Credit Recovery Health
Credit Recovery Physical Education 1
Credit Recovery Physical Education 2
Drugs & Alcohol Exercise Science
Family & Consumer Science
Family Living & Healthy Relationships
First Aid & Safety
Fitness Basics 1
Fitness Basics 2
Fitness Fundamentals 1
Fitness Fundamentals 2
Flexibility Training
Group Sports
HOPE (Health Opportunities through Physical Education) 1
HOPE (Health Opportunities through Physical Education) 2
Health
Health & Personal Wellness Health 2
Health Careers
Health Extended
Individual Sports
Intro to Coaching
Intro to Group Sports 1
Intro to Group Sports 2
Intro to Individual Sports 1
Intro to Individual Sports 2
Intro to Nursing 1
Intro to Nursing 2

Life Skills
Lifetime & Leisure Sports
Medical Terminology
Nutrition
Outdoor Sports
Personal Health & Fitness
Personal Training Career Prep
Personal Training Concepts
Physical Education
Physiology
Running
Sports Officiating
Strength Training
Walking Fitness

Career & Technical Education

Business Management and Administration

Business Applications
Business Information Management A/B
Computer Applications
Human Resources Principles A/B
Information Technology Applications
International Business
Introduction to Business and Technology A/B
Legal Environment of Business A/B
Management Fundamentals A/B
Principles of Business Management A/B
Principles of Business, Marketing, and Finance A/B Principles of Business, Marketing, and Finance A/B
Professional Communications

Information Technology

CompTIA A+ 220-1001
CompTIA A+ 220-1002
CompTIA Cloud Essentials+ Certification (CLO-002) CompTIA Cloud+ Certification A/B (CV0-003) CompTIA Network+ Certification (N10-007) A/B CompTIA Security+ Certification (SY0-601) A/B Computer Programming 1 A/B
Computer Science Essentials
Introduction to Cybersecurity
Networking Fundamentals A/B
Principles of Information Technology A/B
Principles of Information Technology A/B
Security Fundamentals A/B

Finance

Accounting A/B
Accounting I A/B
Accounting II A/B
Introduction to Finance

Human Services

Child Development and Parenting A/B
Introduction to Military Careers
Personal Finance
Personal Financial Literacy
Principles of Human Services A/B
Psychology A/B
Relationships and Emotions A/B
Sociology

Health Science

Allied Health Careers A/B
Anatomy and Physiology A/B
Applied Medical Terminology A/B
Certified Nurse Aide A/B
Exercise Science A/B
Health Information Management A/B
Health Science 1 A/B
Health Science 2 A/B
Medical Coding and Billing A/B
Medical Therapeutics A/B
Principles of Health Science A/B
Principles of Health Science A/B
Rehabilitation Careers A/B

Hospitality and Tourism

Culinary Arts A/B
Food Handler and Food Manager Certifications

Hospitality Management A/B
Nutrition and Wellness
Principles of Hospitality and Tourism A/B
Sports and Entertainment Marketing

General

Career Explorations
Computing for College and Careers A/B
Essential Career Skills

Agriculture, Food, and Natural Resources

Forestry and Wildlife Management A/B
Foundations of Green Energy A/B
Introduction to Marine Biology
Introduction to Veterinary Science Natural Resources A/B
Principles of Agriculture, Food, and Natural Resources A/B

STEM

Biotechnology A/B
Electronic Communication Skills
Game Development
Introduction to Android Mobile App Development
Introduction to Astronomy
Introduction to iOS Mobile App Development
Principles of Engineering and Technology A/B
Revolutionary Ideas in Science
Robotics I A/B
Web Technologies A/B

Transportation, Distribution, and Logistics

Principles of Transportation, Distribution, and Logistics A/B

Government and Public Administration

Principles of Government and Public Administration A/B

Arts, A/V, Technology, and Communications

Audio/Video Production 1 A/B
Audio/Video Production 2 A/B
Audio/Video Production 3 A/B
Digital and Interactive Media A/B
Graphic Design and Illustration A/B
Introduction to Fashion Design
Principles of Arts, Audio/Video Technology, and Communications A/B
Professional Photography A/B
Theater, Cinema, and Film Production

Education and Training

Principles of Education and Training A/B

Architecture and Construction

Drafting and Design A/B
Principles of Architecture and Construction A/B

Marketing

Entrepreneurship A/B
Introduction to Social Media Marketing, Advertising, and Sales

Law, Public Safety, Corrections, and Security

Introduction to Criminology
Introduction to Forensic Science
Principles of Law, Public Safety, Corrections, and Security A/B

Manufacturing

Principles of Manufacturing A/B

College & Career Readiness

ACT® English
ACT® Mathematics
ACT® Reading
ACT® Science Reasoning
ACT® WORKKEYS
AP® Computer Science A
ASVAB Mathematics
ASVAB Technology & General Science, Part 1
ASVAB Technology & General Science, Part 2
ASVAB Word Knowledge & Paragraph Comprehension Accuplacer® Mathematics
Accuplacer® Reading
Accuplacer® Writing
HiSET® Preparation - Language Arts - Reading Part 1
HiSET® Preparation - Language Arts - Reading Part 2
HiSET® Preparation - Language Arts - Writing Part 1

HiSET® Preparation - Language Arts - Writing Part 2
HiSET® Preparation - Mathematics Part 1
HiSET® Preparation - Mathematics Part 2
HiSET® Preparation - Science Part 1
HiSET® Preparation - Science Part 2
HiSET® Preparation - Social Studies Part 1
HiSET® Preparation - Social Studies Part 2 Preparation for the GED® Test - Math
Preparation for the GED® Test - Reading Language Arts (RLA)
Preparation for the GED® Test - Science
Preparation for the GED® Test - Social Studies
SAT® Mathematics
SAT® Reading
SAT® Writing and Language
TABE® Language Level A
TABE® Language Level D
TABE® Language Level E
TABE® Language Level L
TABE® Language Level M
TABE® Mathematics Level A, Part 1
TABE® Mathematics Level A, Part 2
TABE® Mathematics Level D
TABE® Mathematics Level E
TABE® Mathematics Level L
TABE® Mathematics Level M
TABE® Reading Level A
TABE® Reading Level D
TABE® Reading Level E
TABE® Reading Level L
TABE® Reading Level M
TASC Preparation - Language-Arts Reading Part 1
TASC Preparation - Language-Arts Reading Part 2
TASC Preparation - Language-Arts Writing Part 1
TASC Preparation - Language-Arts Writing Part 2
TASC Preparation - Mathematics Part 1
TASC Preparation - Mathematics Part 2
TASC Preparation - Science Part 1
TASC Preparation - Science Part 2
TASC Preparation - Social Studies Part 1
TASC Preparation - Social Studies Part 2
TEAS - Test of Essential Academic Skills: English TEAS - Test of Essential Academic Skills: Math TEAS - Test of Essential Academic Skills: Reading TEAS - Test of Essential Academic Skills: Science

English Language Acquisition
ELL Foundations: Level 1
ELL Foundations: Newcomer

Local District CTE Programs

Southern Michigan Center for Science and Industry (CSI) – Hudson

Southern Michigan Center for Science and Industry’s objective is to provide opportunities for careers in engineering, sales, manufacturing and advance manufacturing, to improve student performance and workplace readiness, by providing 21st century education and training using blended learning with utilization of technology.

Environmental Science – Sand Creek

This course covers environmental issues, geology (minerals, rocks, weathering, soil, and plate tectonics), and hydrology (water cycle, groundwater, watersheds). Students will conduct a botany experiment in the school greenhouse. Students in this class will have the opportunity to learn leadership through the National FFA Organization. Please note this is a required graduation class and is also the first Agriscience class offered at Sand Creek for completion of the Agriscience CTE program.

PLTW Biomedical Science – Madison Schools

The rigorous and relevant four-course PLTW Biomedical Science sequence allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health. Students engage in activities like investigating the death of a fictional person to learn content in the context of real-world cases. They examine the structures and interactions of human body systems and explore the prevention, diagnosis, and treatment of disease, all while working collaboratively to understand and design solutions to the most pressing health challenges of today and the future. Each course in the Biomedical Science sequence builds on the skills and knowledge students gain in the preceding courses. Schools offer the three PLTW Biomedical Science foundation courses within a period of three academic years from the start of implementation and may also offer the capstone course.

Principles of Biomedical Science

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

Human Body Systems

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

Medical Interventions

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Capstone Course

Biomedical Innovation

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.

Lenawee Tech Center Course

Arts & Communications Career Pathway

Graphic Design

Learn digital illustration, photo manipulation, and page layout using Adobe Creative Suite. Students will also learn professional business practices, print and digital production process, and project management skills to better prepare them for a high demand careers in the visual arts field.

Digital Media Production

Students will use professional audio and video editing software to produce video shorts from conception to completion. Students will be able to ditch auto focus and make their first viral video, short film, or podcast. Students will also have the opportunity to work for LISD TV Channel 22 right here in Lenawee County! This program teaches digital video and audio and photography editing techniques including editing, remastering, and retouching. Once students understand the basics they will be ready to hit the ground running as media entrepreneurs!

Business, Management, Marketing & Technology Career Pathway

Accounting

This Accounting program is designed for new business students, small-business owners, and those interested in double-entry accounting systems. Work includes development of basic procedures of acceptable accounting practices. Discussion and demonstration will focus on analyzing, classifying, recording, summarizing, and reporting business transactions. This program blends independent work and classroom demonstrations with online exercises; preparing students for entry-level positions or for college-level financial coursework. While learning double-entry accounting principles, students will realize the important role accounting plays with business decisions. Future career options and opportunities in the field of accounting are abundant.

Culinary Arts

Students in the LISD TECH Center's Culinary Arts program learn to manage real-world kitchen challenges in a classroom that doubles as a commercial kitchen and is fully equipped with institutional cooking equipment. Cooking, baking, management, and safety and sanitation practices are the focus of the program. Students will learn to create recipes, prepare meals from scratch, perform basic daily kitchen operations including cost controls, inventory and ordering. Students are involved in planning and coordinating several events throughout the year and cater meals at the LISD TECH Center. This program helps develop leadership skills through these events as well as participation in several competitions.

Computer Information Services

Students in the CIS program learn in the classroom, virtually (online) and in group settings to diagnose and repair computers, set-up computer networks and prepare for various computer technician certifications. Special emphasis is also put on the latest cyber-security protocols and the prevention of computer hacking. The program participates in several student organization leadership events, including Business Professionals of America (BPA) and SkillsUSA. Students can earn college credits and industry-recognized certifications, including A+, Network+, Security+, and Cybersecurity Analyst (CySA+).

Computer Programming

This one- or two-year program will cover topics relating to software development with a focus on computer programming. The program is designed to accommodate different skill levels from introductory to the college level where students will learn how to plan, write, implement, debug, and maintain computer programs. Students will have the opportunity to learn mobile, game, web, and/or robotics programming in addition to computer application development and will use a blended learning environment that combines online curriculum with hands-on labs and projects.

Marketing & Entrepreneurship

Students in this program will learn to recognize economic and market trends, develop entrepreneurial, management, and leadership skills, utilize various sales promotional techniques, create positive relationships with customers, and develop business plans. The school store, “The spOt”, provides the opportunity to practice marketing strategies and track financial information. Students in this program frequently qualify for state and national DECA leadership events.

Engineering, Manufacturing & Industrial Technology Career Pathways

Automotive Services Technology

Students work in teams in a shop setting to learn to diagnose and repair automotive steering and suspension systems, brake and electrical systems, and engine performance problems. Students take part in SkillsUSA leadership events, and second-year students become team leaders. Students can earn several Automotive Service Excellence (ASE) Certifications as part of the coursework.

Building Trades & Construction Careers

Students start by learning basic safety procedures and earning their 10-hour OSHA certificate. They quickly learn to use hand and power tools safely and learn the basics of building science – foundations, framing, exterior, and interior finishes. Students also learn valuable industry skills such as estimating, design, building permits, and job interviewing skills. Students will explore other construction industry professions such as construction manager, electrician, plumbing, and HVAC tech.

Welding Technology

This program provides students with an opportunity to explore a wide variety of welding processes, as well as the knowledge, skills, safety, and professional behaviors necessary for competent performance as a welder or welding technician. Students in this program will learn the basic science about metal and the many different ways to weld, cut, solder, or braze metals together, including: shielded metal arc, gas metal arc, gas tungsten arc welding, thermal cutting, and weld inspection. Safety and welding code and procedures for a variety of industrial applications will be emphasized. Students are able to earn Jackson College credit as part of this program.

Residential Construction

Students will learn to work in teams to complete all aspects of a construction project including framing, plumbing, roofing, dry walling, and electrical. This class, for second year students, will remodel a Habitat for Humanity house and/or work on a community- based project.

Automotive Collision Repair & Refinish

First-year students in this program will learn the basics of repairing and refinishing collision damaged vehicles. First-year students will learn metal finishing, plastic repair, MIG Welding, filler application, and basic refinishing procedures.

Second-year students will focus on a much more in-depth side of the collision industry. Students will learn structural and frame repair, 3D measuring, waterborne paint technology, estimating, and advanced refinishing techniques.

Students from the LISD TECH Center Automotive Collision Repair and Refinishing program compete in the SkillsUSA competition yearly. Historically, students have done very well in the competition qualifying for state and national leadership events.

Engineering ,Design and CAD

Students will learn to think like an engineer, design creatively and create a blueprint using Computer-Aided Design (CAD). Students also learn to use advanced engineering and architectural software packages including: AutoCAD, Inventor, NX and CATIA.

Engineering, Robotics& Emerging Technologies

The topics of alternative energy and robotics will be investigated to discover Engineering Principles and Methods. Using this information, the students will build simple machines, learn about different robot applications and build a competitive robot. They will also investigate and solve problems with respect to alternative energy.

Machining & Computer Aided Manufacturing(CAM)

Students will learn to work in today's advanced manufacturing facilities, to operate manual machine tools and to program and operate Computer Numerical Control (CNC) machines such as the machining center, turning center, and surface grinder. Learn machine shop safety, blueprint reading, related math, precision measurement, Computer Aided Manufacturing (CAM) and welding/fabrication.

Health Sciences Career Pathways

Dental Aide

Students will learn dental terminology, CPR, First Aid, oral anatomy and physiology, dental radiography, how to assist in dental procedures and how to use and sterilize dental equipment

Emergency Medical Technician (EMT)

Students will learn to work as members of the pre-hospital emergency medical care teams administering emergency care to sick and injured while transporting them to the appropriate facility.

Health Care Careers

Students will learn CPR and First Aid, how to measure blood pressure, take vital signs and medical terminology. Students will participate in clinical experiences at hospitals and health care facilities.

Nursing Preparation

Get a jump start on nursing school prerequisites through concurrent- enrollment in easier Michigan University classes and on-site clinical opportunities at Bixby Medical Center. This class offers expanded clinical and skill building as well as the opportunity to take the state CNA certification exam.

Certified Nurse Aide (CNA)

Students will learn to provide nursing or nursing-related services to residents in a nursing home, adult foster care, assisted living facility or in patient homes. Successful students have the opportunity to take the state CNA certification exam.

Exercise Science & Sports Medicine

Learn basic concepts as they relate to anatomy, medical terminology, kinesiology (movement science), injury evaluation and treatment, and nutrition. Explore the different fields under the exercise science umbrella, such as physical therapy, athletic training, and strength and conditioning.

Human Services Career Pathways

Education Careers

Students will learn about child development and how people learn from birth through adulthood. Students will explore career options within education, such as teacher, teacher assistant, social worker, speech pathologist, occupational therapist, counselor, etc. Students may have the opportunity to experience on-the-job training through Cadet teaching.

Law Enforcement & Corrections

Learn about the field of law enforcement and corrections. Study the public safety branches, law and the legal system, problem solving and investigations, and communications and ethics in law enforcement.

Natural Resources & Agriscience Career Pathways

Agri-Tech

Students will learn to raise livestock, operate farm machinery at the LISD Center for Sustainable Future; Students will study modern soil, crop and plant science, animal science, how to manage and conserve natural resources and use of alternative energy sources. FFA leadership training will be included.

Biochemical Technology

Students will learn skills in standard laboratory operating procedures by working with chemicals and extracting DNA. Students will explore careers in the pharmaceutical, forensics, product manufacturing, research and development fields.

Horticulture

In this plant science course, students will learn landscape, conservation of natural resources and how to use design software programs. Students will learn greenhouse management and nursery operation at the LISD Center for Sustainable Future. FFA leadership training will be included.

Sustainable Agriculture & Environmental Systems

This program is designed for students to develop skills and explore opportunities within the fields of sustainable agriculture and environmental science. Students will raise small animals, plant and maintain gardens, perform environmental surveys and experiment with solutions to agricultural and environmental problems. FFA leadership training will be included.

Natural Resources

Explore careers in environmental science and sustainable agriculture. Learn to identify plants and wildlife, monitor water and soil quality, use mapping tools, perform experiment using the scientific method, and improve habitats to protect our natural resources.

COLLEGE AND CAREER PLANNING (EDP)

An Educational Development Plan, (EDP), helps students identify career goals, lists the interests and skills needed to meet those goals, and documents the experiences, education, and accomplishments needed to successfully attain them.

Local schools in the Hillsdale-Jackson-Lenawee Intermediate School Districts use the web-based EDP to facilitate career planning and course selection. Students are able to complete and update their EDP to facilitate career planning and course selection. Students are able to complete and update their EDP anywhere via the Internet. This on-line tool is confidential and secure because students must enter personal student ID's and passwords to access the system. No personal information is entered. Students may print out a copy of their EDP to review at any time.

Xello.com

Xello is the application we use to help students identify potential careers and education opportunities. All students will update their information on a yearly basis to revise their resume, add additional interests, perform career inventory surveys, and review post-secondary opportunities.

Login information: Students must contact Mrs. Haag or Mr. Nickels for username and password information.