

**Otsego High School Graduation Requirements  
(Michigan Merit Curriculum)  
31.5 Credits to Graduate**

**MATHEMATICS - 4 Credits**

- 1 credit Algebra I
- 1 credit Geometry
- 1 credit Algebra II
- 1 credit additional Math (12<sup>th</sup> grade)

**ENGLISH LANGUAGE ARTS - 4 Credits**

- 1 credit English I
- 1 credit English 2
- 1 credit American Literature
- 1 credit additional English

**SCIENCE – 4 Credits**

- 1 credit Biology
- 1 credit Chemistry
- 1 credit Physics
- 1 credit Earth Science

**SOCIAL STUDIES - 3 Credits**

- 1 credit World History / Geography
- 1 credit US History
- 1 credit Government / Economics

**PHYSICAL EDUCATION & HEALTH – 1 Credit**

**WORLD LANGUAGE – 2 Credits**

**FRESHMAN FOCUS – 0.5 Credits**

**VISUAL, PERFORMING AND APPLIED ARTS - 1 Credit**

**COMMUNITY SERVICE – 10 Hours (5 each during Junior and Senior years)**

All students shall be enrolled full-time for four years (12 trimesters). The normal class load for each trimester is six classes. Transfer students will audit in at a rate not to exceed the Otsego normal rate of credit accrual of 9.0 credits per year.

## ART DEPARTMENT

### **Intro to 2-D Art-One Trimester (9-12) (No Prerequisite)**

In this introductory level class, students will learn basic drawing, painting, and printmaking techniques that incorporate the elements and principles of 2-Dimensional design.

### **Intro to 3-D Art-One Trimester (9-12) (No Prerequisite)**

In this introductory level class students will learn basic sculpture and ceramic techniques that incorporate the element and principles of 3-Dimensional Design.

### **Advanced 2-D Art-One Trimester (9-12) (Prerequisite: Intro to 2-D Art or Intro to 3-D Art)**

Students in this course will build upon the knowledge and skills learned in the intro classes. Students will work in a variety of mediums with an emphasis in advanced drawing, painting, and printmaking techniques.

### **Advanced 3-D Art-One Trimester (9-12) (Prerequisite: Intro to 2-D Art or Intro to 3-D Art)**

Students in this course will build upon the knowledge and skills learned in the intro classes. Students will work in a variety of mediums with an emphasis in advanced ceramics, sculpture and fiber design techniques.

### **Art 3- Painting One Trimester (10-12) (Prerequisite: Advanced 2-D or Advanced 3-D Art)**

Students will learn a variety of painting styles and techniques while working with watercolor, acrylics, inks, tempera and oils.

### **Art 3 - Drawing-One Trimester (10-12) (Prerequisite: Advanced 2-D or Advanced 3-D Art)**

Students will learn a variety of drawing styles and techniques while using colored pencils, oil pastels, chalk pastels, charcoals, and pen and ink.

### **Art 3 - Printmaking- One Trimester (10-12) (Prerequisite: Advanced 2-D or Advanced 3-D Art)**

Students will learn a variety of printmaking styles and techniques, including linoleum cut, silk screen, batik, monoprints and etching.

### **Art 3 - Ceramics- One Trimester (10-12) (Prerequisite: Advanced 2-D or Advanced 3-D Art)**

Students will explore advanced hand building techniques, using a variety of glazes and will have an opportunity to work on the potter's wheel.

### **Art 3 - Sculpture- One Trimester (10-12) (Prerequisite: Advanced 2-D or Advanced 3-D Art)**

Students will learn advanced three-dimensional design techniques in a variety of media. These can include clay, wire, wood, cardboard, paper mache', fiber design, and found objects.

### **Independent Studio- One Trimester (10-12) (At least two sections of the Painting, Drawing, Printmaking, Ceramics, and Sculpture Sequence, B average in Art Classes, teacher Permission)**

This studio experience can be an in-depth study of a particular field or media, or an exploratory course of various media. The primary focus should be building an appropriate body of work for inclusion in a portfolio for college admission. This class may be selected multiple times.

### **Interior Design – One Trimester (10-12) (No prerequisite)**

This course involves the use of resources, as well as values and goals, in planning an apartment or home. Emphasis will be given to elements and principles of design, use of color, furnishings and decorating a home. This course also includes kitchen planning, room arrangement, laundry, costs and convenience. Projects may include home buying, designing or planning a home and its furnishings, and the use of design principles.

## **BUSINESS & TECHNOLOGY DEPARTMENT**

### **Computer Applications – One trimester (9-12) (No Prerequisite)**

This course is designed to reinforce keyboarding skills, teach word processing, and database management using Microsoft Office 08 (Word, Access, Power Point and Excel).

### **Desktop Publishing – One trimester (9-12) (No Prerequisite)**

This class is designed to develop desktop publishing concepts. Desktop publishing is an extremely marketable skill in today's technical workplace. This course is designed to teach students to create a variety of high-impact, professional looking publications for home and school. Students will utilize the following software: Microsoft Publisher, Microsoft Power Point, and Movie Maker.

### **Advanced Computer Applications - One trimester (9-12) No (Prerequisite)**

This class is designed to extend the student's knowledge of Microsoft Word, Excel, Access, and PowerPoint. Students will develop proper procedures to create more advanced documents, workbooks, databases, and presentations suitable for course work, professional purposes, and personal use.

### **Web Design 1 - One trimester (9-12) (No Prerequisite)**

This course is designed to teach introductory web design concepts. Students will learn to create web pages using different techniques. Students will learn to create a basic page by writing raw HTML code and how to create a more advanced web page through the use of Adobe Dreamweaver CS3.

### **Web Design 2- One trimester (9-12) (Prerequisite: Web Design 1)**

This course is designed to teach intermediate web design concepts. Students will learn how to create dynamic web page content through the use of Adobe Flash CS3 and how to create and edit images for web pages through the use of Adobe Fireworks CS3. Select students within this class will have the opportunity to design and maintain teacher websites.

### **Internet – One trimester (9-12) (No prerequisite)**

This course is designed to acquaint students with the basic tools and skills necessary for working with the Internet. Students will learn about Acceptable Use, Netiquette, Website Evaluation, Software Piracy, Plagiarism, and Internet ethics. Students will engage in a variety of activities utilizing problem solving and critical thinking and will learn a variety of skills that will aid in their future success in high school, college, and work.

### **Introduction to Computer Science – One Trimester (9-12) (No Prerequisite)**

Introduction to Computer Science (ICS) is a course designed for students who are new to computer programming and coding. ICS students will learn how to design, program, and test Apps for Android devices using MIT App Inventor. While Android App development is the main focus of the course, students will also have opportunities to experiment with 3D modeling and printing, and to try their hands at building and programming circuit boards utilizing Arduino hardware and software. Finally, students will be given time in class to explore their personal interests. With guidance and support from their teacher, students will select a topic to study, research and document their learning, and present their final product. Past projects have included 3D printed items, electronics, artwork, videos, and apps.

### **Advanced Computer Science – Two Trimesters (10-12) (Prerequisite: Introduction to Computer Science)**

This is a course designed for students who have prior programming experience and completed Introduction to Computer Science. In Computer Science II students will deepen the skills learned in Computer Science I with App Inventor, making more detailed and sophisticated applications for Android Devices. In addition, students may choose to focus on computer Hardware/Software, where they will get a hands-on look into how hardware and software work together (through programming) and will have the opportunity to complete several hands-on projects. Students not interested in the Hardware/Software track may elect to pursue AP Computer Science Principles credit by studying the Python and Java programming languages. Students in either track will, with support from the teacher, be given time to work on a Capstone Project of their choosing.

### **Advanced Computer Science – One Trimester (9-12) (Prerequisite: No Prerequisite)**

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

### **Business Communications - Writing – One trimester (10-12) (Prerequisite: English I)**

This course is designed to teach the communication tools necessary for the world of work. It covers a broad range of topics & skills to help students develop competence in each of the communication skills; reading, writing (including electronic communication), speaking, and listening. *Given the emphasis on communication skills, this course can also count as an English elective.*

**Introduction to Business Administration – One trimester (9-12) (No prerequisite)**

Foundation course intended to equip the learner with general base of business knowledge with a focus on the foundation skills and workplace competencies identified by the U.S Secretary’s Commission on Achieving Necessary Skills. Curriculum will also be driven by local and state standards as targeted by the Michigan curriculum framework and Otsego Technology Plan.

**Applied Business Administration – One trimester (11-12) (No prerequisite)**

Application course focused on entrepreneurial and management skills. The learner will manage and operate a business in a model simulation designed with the foundation skills and workplace competencies identified by the U.S Secretary’s Commission on Achieving Necessary Skills. Students will complete a business plan project.

**American Legal History – One trimester (11-12) (No prerequisite)**

A law course offering a broad range of competency building activities designed to provide students with the ability to analyze, evaluate, and critique through investigation the resolutions of various legal disputes and the historical landmark decisions that have shaped the American legal system. The class can be counted as elective credit in social studies.

**Advanced American Legal History – One trimester (11-12) (Prerequisite: American Legal History)**

An applied study of the changes in interpretation of the constitution and the implication of contemporary legislative and judicial tendencies on the everyday lives of American citizens. Available as an independent study through the approval of the instructor, guidance staff, and administration. The class can be counted as elective credit in social studies.

**Financial Business Administration – One trimester (10-12) (No prerequisite)**

An accounting course intended to equip students with the application skills necessary to analyze and classify business transactions according to generally accepted accounting practices. Students will learn to create and use financial documents and records and learn how to use them in making administrative decisions for service and manufacturing companies set up as sole proprietorships, partnerships, or corporations. This class can count as .5 math credit, as defined by the Michigan Merit Curriculum.

**Advanced Financial Business Administration – One trimester (10-12) (Prerequisite: Financial Business Administration)**

An advanced continuation of theory and application designed to build upon accounting and finance practicum as developed in Financial Business Administration. This class can count as .5 math credit, as defined by the Michigan Merit Curriculum.

**Business Administration Practicum – One trimester (11-12) (Prerequisite: Previous Business Administration credit or instructor approval.)**

Practicum course which requires students to develop, implement, and monitor the progress of managing the school store. Curriculum will include the study of marketing as consistent with the administration functions of business management and the completion of a 40 hour program of study entitled *School Store Operations*.

**Personal Finance – One trimester (12) (No prerequisite)**

This course is designed to teach personal money management as well as reinforce basic math skills. Students will discuss fundamentals of finance, solve business math problems, and deal with “real-life” financial situations. Concepts are covered through Financial Peace School Curriculum by Dave Ramsey. Concepts include saving, investing, credit, debt, financial responsibility, money management, insurance/risk management and income/careers. This class can count as .5 math credit, as defined by the Michigan Merit Curriculum.

## ENGLISH DEPARTMENT

**English 1 -Three trimesters (9) (No prerequisite)**

**This course covers a diverse selection of literature and provides students an opportunity to develop academic skills for their high school careers and future success. Students will continue to improve their reading comprehension and writing skills. Students will learn to recognize and analyze literary concepts and author’s techniques. Materials used will include short stories, novels, drama, poetry, and essays. Vocabulary, spelling, and grammar are also integrated into the coursework.**

**English 2 - Three trimesters (10) (Prerequisite: English 1)**

This course covers a wide variety of international literature and is designed to develop student skills for academic success in high school and beyond. Over the course of the semester, emphasis will be on improving reading, writing, and research skills. Students will continue to learn to recognize and analyze structure and author's techniques. Materials covered will include novels, short stories, drama, and poetry. Vocabulary, spelling, and grammar will be included throughout the semester.

### **American Literature - Three trimesters (11) (Prerequisite: English 2)**

This course will expose students to a variety of writings, including papers, projects, and presentations. The American movement in literature will be studied from the colonial period all the way through modern literature. The course also reviews grammar and English skills for the ACT test.

### **AP English Literature and Composition – Three trimesters (11-12) (Prerequisites: American Literature A and B)**

This course is designed to prepare students for the demands of college reading and writing while also preparing students to take the Advanced Placement Literature and Composition test for possible college credit offered each May. This course incorporates all of the requirements of British Literature/College Writing while placing emphasis on the skills needed for the college level study of fiction, drama, and poetry. Students are required to purchase their own copies of novels, offered at discount prices through the instructor. Financial assistance will be provided for students displaying need.

### **Humanities – One Trimester (10-12) (No Prerequisite)**

This class explores the connections between writing and Art. The curriculum will be focused on using the Visual Arts as a jumping off point for creative writing; criticizing works of art; exploring the world of Art History; and researching controversies created by art displays. The focus of this course is the creation of writing.

### **Creative Writing/Short Story – One trimester (10-12) (No prerequisite)**

This course will explore poetry, plays, song lyrics, and children's literature. Students in this class will be able to experience the world of creativity through their own writings, as well as those of their peers and published writers. Writing techniques and styles will be explored.

### **Literature Appreciation – One trimester (9-12) (No prerequisite)**

This one trimester course is intended for the student who enjoys reading. Students work within their individual learning levels to read novels, short stories, poetry, newspapers, and magazine articles. Each nine weeks the students complete two novel projects, one short story project, and one poetry project. The students evaluate literary elements, poetry elements, and author's style.

### **Mystery – One trimester (9-12) (No prerequisite)**

This one trimester course traces the development of the detective and mystery story, beginning with Poe and continuing through modern times. Students will complete individual and group projects and presentations related to these areas. Material will include novels, plays, and short stories.

### **Heroes, Magic & Legends – One trimester (9-12) (No prerequisite)**

This course will study fiction created in the Fantasy literature category. There will be an emphasis on heroic archetypes and heroic journey as demonstrated in fairy tale, legend and fantasy literature. Students will look at how these stories teach cultural and societal expectations and moral dilemmas, with an emphasis on the battle between good and evil and the power of the individual to persevere against overwhelming odds. *This course is offered alternate years, in school years ending in even numbers (2010, 2012, etc.)*

### **Science Fiction– One trimester (9-12) (No prerequisite)**

This course will study fiction created in the Science Fiction literature category. The course will trace the development in science fiction through time, and in a variety of forms (short story, novel, radio & film.) Also addressed are the societal implications of advances in technology and how those themes are addressed in science fiction. *This course is offered alternate years, in school years ending in odd numbers (2011, 2013, etc.)*

### **Mythology – One trimester (10-12) (English 1)**

This course concerns the study of myths from around the world, with a concentration on the European mythic tradition. This knowledge is then applied to thoughts, ideals and practices of the modern world, thus in the large sense, becoming a comparative philosophy class.

### **Business Communications / Presentations– One trimester (10-12) (No prerequisite)**

This course is designed to allow students the opportunity to research, present, and discuss a variety of topics in front of a large group of their peers. The speeches will be independent, but all speeches will have definite requirements and will be timed. *This course is offered alternate years, in school years ending in odd numbers (2011, 2013, etc.)*

**Business Communications / Argumentation– One trimester (10-12) (Prerequisite: English II)**

This one trimester course is designed to allow students the opportunity to research, present, and discuss a variety of topics in front of a large group of their peers. Students will be expected to work with at least one partner each debate. *This course is offered alternate years, in school years ending in even numbers (2010, 2012, etc.)*

**Focused English Composition – One Trimester (11) (Prerequisite: Teacher recommendation)**

This course is designed to support students in going to the next level with your writing, on a more individualized basis. With the help of some new technology, students work with different genres of writing to support students in making writing more focused, interesting, and polished. Feedback is provided more immediately on student writing, so that improvements can be made more rapidly. In addition, there are readings from authentic, real world writers to improve understanding of the writing techniques available to student writers. Throughout the course, students are challenged to evaluate their own growth as a writer, as well as participate in collaborative writing environment.

**Holocaust – One trimester (10-12) (No prerequisite)**

This course examines those relationships and organizations that led to prejudice, ethnic cleansing and mass murder using the Holocaust as the most unique example of prejudice in human history.

**ELA Intervention (Read 180) – Unlimited Trimesters (9-11) (No prerequisite)**

This course is designed to help improve reading comprehension using a novel/text-based approach. Students are identified for this class through testing in their grade level English coursework.

**Yearbook - One trimester (10-12) (No prerequisite)**

This course is designed to develop students' skills in yearbook production. Students learn basic principles of yearbook production and develop skills that include writing copy, captions and headlines; digital photography; desktop publishing and using appropriate technology tools for media production.

## **FOREIGN / WORLD LANGUAGE DEPARTMENT**

**Spanish 1 – Two trimesters (9-12) (No prerequisite)**

Students will study basic skills with an emphasis in speaking and communication, comprehension, reading and writing in Spanish. Students will be able to use a variety of vocabulary words, operate in the present tense, comprehend at-level spoken Spanish and read and write with a high degree of accuracy. In addition, students will be introduced to Hispanic culture.

**Spanish 2 - Two trimesters (9-12) (Prerequisite: Spanish 1)**

There is continued practice of the skills. The student's previous knowledge is used to continue the process of gaining Spanish proficiency in the four areas of speaking, reading, writing, and listening. Students are required to speak Spanish during class.

**Spanish 3 – Two trimesters (10-12) (Prerequisite: Spanish 2)**

This course further expands students' abilities in the four basic skills of speaking, reading, writing and listening within thematic areas. Students will expand their command of the Spanish language by being exposed to new vocabulary items, essential grammatical structures, and extensive readings. Students completing this level are able to engage in conversation, comprehend another person without much repetition, read newspaper and magazine articles, and write with a high level of accuracy. Students are required to speak in Spanish during class.

**Spanish 4 - One trimester (10-12) (Prerequisite: Spanish 3)**

This course further develops a student's skills in vocabulary, composition and fluency. Previously learned grammatical forms are expanded upon, and more advanced grammatical concepts are learned. Students will comprehend talk about special fields of interest and narratives of a non-technical or specialized nature. Spanish 4 students will continue to develop an appreciation for literature and film in the target language. Students are required to speak in Spanish during class.

**Spanish 5 – One trimester (11-12) (Prerequisite: Spanish 4)**

This course covers the equivalent of a third-year college course in Spanish conversation and composition. The course is reading and writing intense. It encompasses aural/oral skills, reading comprehension, grammar and composition and an emphasis on Hispanic literature.

### **Advanced Placement Spanish – Three trimesters (Prerequisite: Spanish 3B)**

Advanced Placement Spanish will build on prior skills with a focus on the written and spoken language. Students will improve their Spanish proficiency through an advanced study of the literature and culture of the Spanish speaking world. The course will prepare students to take the Advanced Placement Spanish test for college credit.

### **French 1 - Two trimesters (9-12) (No prerequisite)**

French 1 helps students develop progressively in listening, speaking, reading and writing the French language. Students will be able to use a variety of vocabulary words, operate in the present tense, comprehend at-level spoken French and read and write with a high degree of accuracy. Students will also learn about the various cultures of francophone societies.

### **French 2 - Two trimesters (9-12) (Prerequisite: French 1)**

French 2 is a continuation and reinforcement of French 1 with focus on additional grammar topics. Students will be introduced to high level vocabulary, learn to communicate in the past tense and practice the skills learned in French 1. There is also an emphasis on francophone cultures.

### **French 3 - Two trimesters (10-12) (Prerequisite: French 2)**

French 3 continues to build upon the knowledge base formed in French 1 & 2. Students completing this level are able to engage in conversation, comprehend another person without much repetition, read newspaper and magazine articles, and write with a high level of accuracy. Students are required to speak in French during class. Students will continue the study of francophone cultures.

## **GRAPHIC ARTS DEPARTMENT**

### **Computer Graphic Design I – One trimester (9-12) (No prerequisite)**

This course is intended to introduce students to concepts of Graphic Design through the use of Adobe Illustrator. Students coming into this class would be expected to use this software in order to create design projects ranging from, Typography, Digital Illustration, Digital Collaging to Logo Design. All finished designs will be presented and handed in a professional manner.

### **Graphic Design II – One trimester (9-12) (Prerequisite: Computer Graphic Design)**

This course is a continuation of Computer Graphic Design I. Students enrolled in this class would work almost exclusively with computers to create graphics used in web design, publication layouts, illustration and vector output. Students would be expected to achieve a high level of knowledge in operating Adobe Illustrator in regards to layout, design, composition and computer generated graphics. Finished products will result in a comprehensive portfolio. This course can be repeated for credit.

### **Interactive Animation I – One trimester (9-12) (Prerequisite: None)**

This course is for anyone who is interested in animation or gaming. Participants will learn how to use popular animation/game development software to create engaging, interactive designs in a variety of styles. Students will be expected to create realistic environments as well as create simple video games. Students will learn how video games and animation have influenced the culture of today and how to use that knowledge to create new and innovative ideas in a virtual world. This course can be repeated for credit.

### **Interactive Animation II – One trimester (9-12) (Prerequisite: Interactive Animation I)**

This course is a continuation of IA I. Students should expect to create realistic animations as well as in depth video games that incorporate knowledge gained from IA I and Computer Graphic Design. Students entering this course should have an interest in the graphic arts and wish to gain a better understanding of the animation and gaming field. As well as continue to learn how animation and video games have influenced the culture of today and how to use that knowledge to create new and innovative ideas in a virtual world. This course can be repeated for credit.

### **Visual Arts – One trimester (9-12) (Prerequisite: None)**

This course will concentrate on camera basics, editing, video story creation, broadcast writing techniques and completion of news and feature segments. Through a hands-on approach, students will learn how to tell a compelling story using video and sound. Work will be done in class as well as in the field; time after school and outside of school may be necessary. Students will eventually produce, write, edit and anchor a daily broadcast of the school announcements (O'Town News), at times incorporating their news stories. Students will complete individual and group projects and all projects will follow journalistic standards and ethics as well as OPS rules and policies. This course can be repeated for credit.

## **LIFE MANAGEMENT DEPARTMENT**

### **Healthy Living 1 – One Trimester (9-12) (No prerequisite)**

This class will cover the 7 health skills that are vital to living an optimal life: Assessing Information, Analyzing Influences, Goal Setting, Decision Making, Interpersonal Communication, Self-Management and Advocacy. These skills will be applied to the topics of Social and Emotional Health, Nutrition & Physical Activity, Safety, and Alcohol, Tobacco and Other Drugs.

### **Healthy Living 2 – One Trimester (10-12) (No prerequisite)**

This class assists students in considering the complexity of their environment in making choices about diet and behavior. Topics include the food pyramid, vitamins, minerals, exercise, weight management, fad and balanced diets, nutrition careers, foreign food, food selection, and basic food prep.

### **Freshman Focus – One trimester (9) (No prerequisite)**

The purpose of this course is to help freshmen make a smooth transition into high school. The course will include an in-depth orientation to OHS, as well as units on the study skills necessary for success at the high school. Additional topics will include career exploration/career pathways, personal/social skills and health/wellness.

## **MATH DEPARTMENT**

### **Algebra 1A/B/C – Three trimesters (9)**

This is the first section of a series of three trimester requirements to fulfill the content contained within Algebra 1. Part A will cover the language and tools of Algebra, solving linear equations, analyze the patterns of functions, and deal with the graphs of linear functions. Part B will cover concepts in systems of equations, linear inequalities, polynomials. Part C will cover concepts in factoring, quadratic and exponential functions, radical expressions and equations, rational expression and equations, and some statistics and probability.

### **Algebra 1A(PLUS) – (9) One trimester (Prerequisite: teacher recommendation)**

This is a support class to reinforce the concepts taught in Algebra 1A. This course will run concurrently with Algebra 1A.

### **Algebra Essentials A/B/C – Three trimesters (9)**

This is a series of three trimester requirements to fulfill the content contained within Algebra 1. Part A will cover foundational concepts that were taught over in the middle school (order of operation, distributive property and solving multi-step equations. Part B will cover concepts involving the coordinate plane, graphing linear equations and solving systems of equations. Part C will cover concepts in quadratic and exponential functions, polynomials and some graphs associated with statistics.

### **Geometry A/B/C – Three trimesters (10) (Prerequisite: Algebra 1 grade of “C-“ or higher)**

This is a two trimester course designed to cover topics in Geometry. These include logic and proof, parallel lines, polygons and circles, perimeter and area, volume and surface area, similarity and congruence, simple trigonometry, and analytic geometry. Emphasis will be placed on developing critical thinking skills as they relate to logical reasoning and multi-step problem solving. Students are expected to have strong algebra skills.

### **Basic Geometry A/B/C – Three trimesters (10) (Prerequisite: Algebra 1 grade below 73%)**

Topics covered in this course will be comparable to that of Geometry A/B but variety of types of problems and pacing are both reduced. Also formal proofs are not included.

### **Algebra 2A/B/C – Three trimesters (11) (Prerequisites: Algebra 1 grade of “C” or higher)**

Topics covered in this course will be an extension of those covered in the Algebra I sequence. Those topics include linear, quadratic and polynomial functions. Other topics that will be discussed will include imaginary and complex numbers, systems and matrices, radical, rational and exponential functions. Discussions with logarithms, conic sections, sequences and series, as well as probability and statistics will also be included.

### **Basic Algebra 2 A/B- Two trimesters (11) (Prerequisite: Algebra 1C grade below 73%)**

Topics covered in this course will be comparable to that of Algebra 2A spread over two trimesters.

### **Trigonometry A/B– Two trimesters (11-12) (Prerequisite: Algebra 2 grade of “B” or better)**

This is a one trimester course intended for the college-bound student. Topics in this class will include linear relations and functions, systems of linear equations and inequalities, polynomial and rational functions, and of course, trigonometry.



**Pre-Calculus – One trimester (11-12) (Prerequisite: Trigonometry grade of “B” or better)**

This is a one trimester course designed to prepare students for the study of calculus. Topics covered include: graphical analysis of function families; vectors and parametric equations; polar coordinates and complex numbers; data analysis; analysis of sequences and series; limits; and an introduction to calculus. Extensive use of graphing calculators is incorporated throughout the course.

**A.P. Calculus – Three trimesters (11-12) (Prerequisites: Pre-Calculus grade of “B” or better)**

An advanced placement course in mathematics, consisting of calculus and related topics, that is comparable to courses in college and universities. Topics to be covered include differentiation and its applications along with a brief review of trigonometry, integration and its application along with differential equations L Hospital’s Rule, power series and an extensive review for the AP Calculus exam.

**Statistics – One trimester (11-12) (Prerequisite: Algebra I)**

This is an introductory course, focusing on data collection (surveys and sampling), data display (graphs and tables) and basic data analysis (measures of center, basic variability), and correlation of bivariate data.

**Consumer’s Math – One trimester (11-12) (No prerequisite)**

This course is designed for all math students and will be one trimester in length. This class consists of a review of arithmetic operations and incorporates these into everyday situations. Topics covered include the expenses of operating a car, commercial transportation, purchasing consumer goods, income, income tax, banking services, investments, insurance, etc.

## MUSIC DEPARTMENT

**Marching Band – One trimester (9-12) (Prerequisite: Necessary technical ability and background in basic musicianship to perform instrumental band music at the high school level.) (Intermediate to Advanced level of difficulty)**

Marching Band is comprised of all members of the high school band. Members must attend Marching Band Camp the first two weeks of August. During these weeks of camp, students will work on basic marching fundamentals, and skills necessary for the entire fall marching season. During this week, the music and drill will be taught. This show will be performed for the District Marching Band Festival, home football games, and additional competitions during the fall.

**Concert Band – Two trimesters (9-12) (Prerequisite: Must also be enrolled in the fall season Marching Band.) (Intermediate to Medium Advanced level difficulty)**

Open, by audition to those students with a reasonable to intermediate proficiency on a band instrument. Concert Band members are expected to participate in marching band including: summer band camp, parades, show performances, as well as all sectionals. After marching band season, the marching band will divide and meet in a concert setting for the remainder of the year. Objectives include the continuation of the development of correct playing habits, sight reading, performance standards, intonation and phrasing. The concert band will perform in MSBOA District and State Band Festivals, as well as other band activities. In addition to the regular scheduled concerts, concert band members are encouraged to participate with the pep band for the boys basketball season. Private lessons are highly recommended.

**Symphonic Band – Two trimesters (9-12) (Prerequisite: Membership by audition. Must also be enrolled in the fall season Marching Band.) (Medium Advanced to Advanced level of difficulty)**

Open, by audition to those students with an advanced proficiency on a band instrument. Symphonic Band members are expected to participate in marching band including: summer band camp, parades, show performances, as well as all sectionals. After marching band season, the marching band will divide and meet in a concert setting for the remainder of the year. Objectives include the continuation of the development of correct playing habits, sight reading, performance standards, intonation and phrasing. This course will expect students to perform very challenging wind band literature to the highest standards. The symphonic band will perform in MSBOA District and State Band Festivals, as well as other band activities. In addition to the regular scheduled concerts, symphonic band members are encouraged to participate with the pep band for the regular boy’s basketball season. Private lessons are strongly recommended.

**Jazz Band – One trimester (9-12)**

Jazz Band is a class open to current band students (and or music students who play a non-traditional instrument such as guitar) by audition to study, perform, and analyze this American music genre. Emphasis will be placed on the performance of jazz styles such as swing, funk, and big band. Improvisation will also be explored. There will be 2-3 performances.

### **Concert Choir - Three trimesters (9-12)**

This is a mixed ensemble consisting of freshmen through senior men and women. We will be singing SAB (Soprano, Alto, Baritone) or SATB (Soprano, Alto, Tenor, Bass) repertoire depending on makeup of the class. This group will work on primary to intermediate sight reading levels and sing a vast array of music from medieval to contemporary music. Though this is a performance based class, we will have opportunities to take a look at music history and basic/intermediate music theory.

### **Bella Voce - Three trimesters (9-12)**

This all female ensemble will consist of Freshmen and Upperclassmen ladies who will focus on music for the treble voice. We will be singing 2 Part (SA) to 4 Part (SSAA) music, depending on the makeup of the class. This class will allow a more in-depth look at the workings of the female voice, blend and sight reading in 2-3 part primary to intermediate music. Bella Voce will sing a vast array of music from medieval to contemporary music. Though this is a performance based class, we will have opportunities to take a look at music history and basic/intermediate music theory.

### **Chamber Singers – Three trimesters (9-12)**

This is an auditioned, smaller chamber ensemble for our advanced singers in Otsego. Singers in this class will focus on advanced literature in a faster paced atmosphere. ie: a cappella music, madrigals, contemporary works, etc. As an advanced class, it will be a prerequisite to spend at least one trimester in either Bella Voce or Concert Choir. Members of this class have the option of also taking either of the other two classes at the same time (if their schedule should allow). This group will be working on intermediate to advanced sight reading goals.

## **PHYSICAL EDUCATION CLASSES**

### **General Physical Education – Two trimesters (9-12) (No prerequisite)**

This course is designed to develop physical fitness, knowledge of physical activities, sportsmanship, leadership, safety, teamwork, and individual expression through body movement. Emphasis is placed on leisure time activities, cleanliness and good health habits are stressed.

### **Strength/Conditioning – One trimester (9-12) (Prerequisite: General Physical Education)**

This is an entry level course for the beginning weight lifter. The emphasis of this class will be on lifetime fitness. In this class, students will be exposed to muscular strength and cardiovascular activities that will improve and promote everyday living. Students will have an understanding of the major muscle groups and how the activities performed in class affect them. This class can be repeated for credit, but may only be taken one time per year.

### **Life Long Fitness – One trimester (9-12) (Prerequisite: General Physical Education)**

Life Long Fitness is designed for the non athlete who wants to develop a program of fitness activities that can be used throughout his/her life. The areas of concentration will be flexibility, cardiovascular fitness, muscle strength, and nutrition.

### **Advanced Physical Education – One trimester (9-12) (Prerequisite: General Physical Education)**

Advanced Physical Education is designed to develop advanced skills and knowledge in team and individual sports, physical fitness, recreational activities, and health. Only those truly interested in physical activity should elect this class. An important goal of this class is to develop desirable safety habits, leadership qualities, and provide leisure time activities.

## **SCIENCE DEPARTMENT**

### **Biology 1 - One trimester (9) (No prerequisite)**

This course explores the microscopic aspects of life science. Topics include the chemistry of life, cells (structure, function, energy and reproduction), and protein synthesis.

### **Biology 2 – One trimester (9) (Prerequisite: Biology 1)**

This course explores the macroscopic aspects of life science. Topics include genetics, evolution and classification, viruses and bacteria, plants, body systems and ecology.

### **Chemistry 1 – One trimester (10) (Prerequisites: Biology 1 & 2)**

This course will cover topics including molecular entropy, exothermic and endothermic reactions, naming and writing formulas for binary compounds, atoms and the periodic table, chemical and physical changes, acids, bases and solutions.

**Chemistry 2 – One trimester (10-11) (Prerequisites: Chemistry 1 & Physics)**

This course will cover topics that include chemical potential energy, breaking chemical bonds, electron movement, nuclear stability, Hess's Law, enthalpy and entropy, molecular and empirical formulas, molecular polarity, ideal gas laws, electron configurations and redox reactions.

**Physics 1– One trimester (10) (Prerequisites: Biology 1 & 2)**

This course will cover topics in force, motion, waves, energy, nuclear energy, and electricity.

**Physics 2 – One trimester (10) (Prerequisites: Biology 1 & 2)**

This course will cover topics in force, motion, waves, energy, nuclear energy, and electricity.

**Earth Science 1 - One trimester (10-12)**

This course will include the topics of the Earth's interior, advanced rock cycle, Earth systems, plate tectonics, climate, space science, geologic time and dating.

**Earth Science 2– One trimester (10-12)**

This course will allow students to take a close look at their environment and environmental issues that are relevant to today's society.

**Anatomy and Physiology – One trimester (10-12) (Prerequisites: Biology 1 & 2 with a “C” average or better.)**

This course will be an in-depth exploration of the human body. Dissection and laboratory activities will be an integral component of this course.

**Introduction to Astronomy – One trimester (11-12) (Prerequisites: Algebra 1C and Earth Science. The student must have achieved a “C” or better in Earth Science and Algebra 1C.)**

Astronomy is an upper level science course. Topics covered will include gravity and motion, light and atoms, distance, velocity, time, backyard astronomy, telescopes, the moon, the solar system, meteors, asteroids, comets, the sun, stellar evolution, measuring the properties of stars, galaxies and cosmology.

**Introduction to Zoology – One trimester (10-12) (Prerequisites: Biology 1 & 2)**

The Zoology course will involve the study of the structure and bodily functions of animals, their habits, where and how they live, their relationship with another and with their environment, their classification, and many other features. This course will focus, for the most part, on vertebrates. This is a computer intensive course, no textbook is used and all assignments are submitted online. Students will also be required to deliver multimedia presentations to the class.

**Advanced Placement Biology – Three trimesters (11-12) (Prerequisites: Biology 1 & 2, Chemistry 1 and Physics. Must have earned a “B” or better in Chemistry and Physics)**

A.P. Biology is a rigorous, college-level course designed to cover the same topics that would be taught during a first year college Biology course. Throughout the year, students will prepare to take the A.P. Chemistry Exam in May. Topics covered will include molecules, cells, heredity, genetics, evolution, biodiversity, structure and function of organisms, and ecology. Laboratory exercises and writing skills will be emphasized.

**Advanced Placement Chemistry – Three trimesters (11-12) (Prerequisites: Biology 1 & 2, Chemistry 1 & 2, and Physics. Must have earned a “B” or better in Chemistry and Physics.)**

A.P. Chemistry is a rigorous, college-level course designed to cover the same topics that would be taught during a first year college Chemistry course. Throughout the year, students will prepare to take the A.P. Chemistry Exam in May. Topics covered will include atoms, chemical bonding, nuclear chemistry, gases/liquids/solids, solutions, reactions, stoichiometry, equilibrium, kinetics, thermodynamics, and descriptive chemistry. Laboratory exercises and writing skills will be emphasized.

**SOCIAL STUDIES DEPARTMENT**

**World History/Geography – Three trimesters (9) (No prerequisite)**

This course is designed to give students a geographical, historical, economic and governmental perspective on world cultures. Taken during the freshmen year of high school, this course will prepare students for the state assessment in Social Studies.

### **U.S. History – Two trimesters (10-12) (World History/Geography)**

This course will trace American History from the post Reconstruction Era through the 1960s. The class will focus on the American West, big business, urban America, World War I, the 1920s, 1930s, World War II, the 1950s with an emphasis on the Cold War and the 1960s.

### **American Government & Economics A/B/C– Three trimesters (11-12) (No prerequisite)**

Studies include foundations of American Government, the three branches of the U.S. Government, rights and responsibilities of the free people, political parties, elections, personalities of the government, and how current events are related to each of these topics. Economics topics covered include: market structure and free markets, supply and demand, financial markets, income distribution, poverty, taxation, GDP, the government's role in the economy, monetary and fiscal policy and globalization. These concepts will be used to develop an understanding of modern day economic problems.

### **Teen Leadership - One trimester (10-12) (No prerequisite)**

Teen leadership is a class available to high school students who wish to develop leadership, professional, and business skills. Students will learn to develop a healthy self-concept, healthy relationships, and learn to understand the concept of personal responsibility. They will develop an understanding of emotional intelligence and the skills it measures, which include self-awareness, self control, self-motivation, and social skills. Students will develop an understanding of the concept of principle-based decision-making and learn to make responsible financial decisions. They will develop an understanding of the effects of peer pressure, will develop skills to counteract those effects, and will develop problem-solving skills. They will develop and understanding of the principle of becoming a good citizen. They will also develop an understanding of the need for vision in goal-setting, personally and professionally.

### **Global Issues – One trimester (10-12) (No prerequisite)**

This is a survey course that focuses on contemporary global concerns. The course puts emphasis on social, geographic, cultural and scientific changes that affect the world. Some of the topics to be covered are controversial. This course is bound to be exciting and thought provoking.

### **Psychology - One trimester (11-12) (No prerequisite)**

This college preparatory course focuses on the study of individual behavior. Special attention is given to explaining what psychology is and how it is used in our complex modern world. Students will study psychology as a science and explore various theories in the areas of physiology, sensation, perception, consciousness, learning, memory, cognition and intelligence. Students will also explore the following topics: infancy, childhood, adolescence, adulthood, motivation, emotion, personality, stress, abnormal behavior, therapies, and social psychology.

### **Advanced Placement Psychology - Three trimesters (11-12)**

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. Also, students will learn about the ethics and methods psychologists use in their science and practice.

### **Sociology/Contemporary American History - One trimester (11-12) (No prerequisite)**

This course is based on the study of the structures and forces that shape society. Social life, social causes and consequences will be defined and analyzed. Sociological perspective will be encouraged such that a college bound student attains a survey-based knowledge of their social science upon completion of the course.

### **History Through Multi-Media (Film and Music) – One trimester (10-12) (No prerequisite)**

A comparative study of key events throughout history, and how the motion pictures and music depicted them. This course will be a contemporary study of history by reflecting on music and film's influence on sociological, cultural, and historical perspectives. This course will examine recent history while reflecting on different musical genres that have influenced history. This course will study events from different decades and look at how mass media has been an integral part of shaping those events.

### **Modern Conflict – One Trimester (10-12) (No Prerequisite)**

This class will study current social, economic, military and religious conflicts from a historical perspective to learn what the roots of this conflict are in hopes of understanding the complexities of the current situation. There will be 5 two week units and the class will choose two current conflicts that they wish to study with the classroom teacher choosing the other three units. Examples of topics may include, but are not limited to: Terrorism; Same-Sex Marriage; Gun Control; The Middle East; Russia; Obamacare; The Green Movement; Minority Civil Rights; Your right to privacy vs. the government's right to know; etc.

### **Advanced Placement U.S. History – Three trimesters (10-12)**

The AP program offers courses of an accelerated nature, and is designed to prepare students for the AP test in May. Students who receive successful scores on this test may earn college credits for their achievement. Non-traditional activities abound, but discussion and participation are a must. These activities include mock trials, debates, simulations, analyses of film, art, architecture and a vast array of exercises aimed at the stimulation of critical thinking skills. There is a determined focus on the analysis of primary source documents and essay writing.

### **Advanced Placement United States Government & Politics – Three trimesters (11-12)**

The AP program offers courses of an accelerated nature, and is designed to prepare students for the AP test in May. Students who receive successful scores on this test may earn college credits for their achievement. This course will provide students a chance to research, discuss, theorize and debate current issues related to US government. Students will have the opportunity to further their education in the area of government and politics and also prepare themselves for the type of rigorous courses taken in college.

## **MISCELLANEOUS**

### **Dual Enrollment (11-12) (Prerequisite: See description below)**

A student may enroll in a college or university prior to graduating from high school under the State of Michigan's dual enrollment legislation. *In order to take courses as part of dual enrollment, a student must have taken the Michigan Merit Exam and/or the PSAT (and scored at the appropriate level), and met all other qualifications set forth by the Michigan Department of Education.* The student may take academically rigorous courses not offered by the home school or cannot be taken due to a scheduling conflict beyond the student's control. Any student who takes college courses in a dual enrollment program may do so as part of their Otsego High School schedule. Otsego Public Schools in compliance with current legislation pays tuition (to be capped at approximately 7% of the per-pupil student aide) or fees associated with these courses. In general, a course taken at the community college level would be paid for by the school district, while a more expensive course at a four-year university will require costs to be supplemented by the student/family. Materials, such as textbooks, are the responsibility of the student and his or her family. Any student who wishes to dual enroll must complete an Otsego High School Dual Enrollment form by May 1, prior to the school year in which the student wishes to take college coursework. It is understood that any course taken as part of dual enrollment and its accompanying grade will appear on the student's transcript and the grade will count toward the student's grade point average.

### **Career Exploration - One trimester (12) (2.5 GPA minimum – no major disciplinary referrals)**

This course is designed to allow students an opportunity to spend one trimester in an unpaid job related to their career pathway. Any student wishing to participate in career exploration must complete an application (available in the Guidance Office) prior to the school year in which they wish to have the experience. Students must provide their own transportation to any off-site placement.

### **Junior Seminar – One trimester (11) (No prerequisite)**

This second trimester course will help junior students focus on test preparation skills to help them prepare for the Michigan Merit Exam and will allow students opportunities to explore options for post-high school plans. The class will offer instruction on how to improve ACT and MME scores, and will help students plan for college or for employment after graduation from high school. Students will also develop interview skills and learn how to best represent themselves on college and employment applications. Career and college search will be an integral part of the course. This is a one-trimester elective and is strongly encouraged for any juniors who are considering any post-secondary training.

### **Senior Seminar – One trimester (12) (No prerequisite)**

Senior Seminar is designed to help students make a smooth transition from high school to college or trade school. Topics covered include: applying to college, resume building, scholarship applications, job interviewing skills and FAFSA completion.

### **Michigan Virtual High School (11-12) (Prerequisite: See description below)**

A student may enroll in an online course through the Michigan Virtual High School (MVHS) with approval of the guidance office and administration. Consideration for approval is based on a student's academic, disciplinary, attendance, and citizenship history. The MVHS course catalogue is available at [www.mivhs.org](http://www.mivhs.org). The student may take courses that are consistent with their career pathway yet are not offered at Otsego High School or cannot be taken due to a scheduling conflict beyond the student's control. Any student who takes MVHS courses may do so as part of their Otsego High School schedule. Materials, such as textbooks, are the responsibility of the student and his or her family. Any student who wishes to enroll must complete an Otsego High School online course enrollment form by May 1, prior to the school year in which the student wishes to take MVHS coursework. It is understood that any online course taken will appear on the student's transcript and the grade will count toward the student's grade point average. Semester-paced courses will count for one-credit. Trimester-paced courses will count for one-half credit. Any deviations from this policy must be approved by the guidance staff and administration.

### **Allegan Advantage (12) (Prerequisite: 3.0 GPA or higher – qualifying SAT test scores)**

The Allegan Advantage is a joint-effort between Lake Michigan College and the public schools in Allegan County. Students enrolling in this program will take classes, taught by LMC faculty, in the areas of English, math, social sciences and career planning. Students enrolled in Early College Academy will be able to earn 15-16 college credits during their senior year. Dual enrollment rules are in effect for this class. OPS will cover the cost of tuition for the courses, while the student will be responsible for the cost of books and materials.

### **Early College Allegan County (11-13, yes 13)**

Early College Allegan County is a three year program that allows students to complete high school requirements and an Associate's Degree from Lake Michigan College concurrently. Students spend their junior and senior years ½ time at high school and ½ time at LMC's satellite campus in Allegan. During the 13<sup>th</sup> year, students will be enrolled fulltime at LMC.

## **Allegan Area Technical & Education Center Course Descriptions 2020-2021**

**ACCOUNTING** – Accounting is the language spoken in every aspect of business. 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. Must be self-motivated, detail-oriented and organized.

**AUTO TECHNOLOGY (Gasoline Engines)** – Troubleshoot, disassemble and repair electrical, fuel, brakes, suspension and steering systems, including use of computerized equipment. Should have mechanical ability and willingness to learn many new hands-on skills.

**BUILDING TRADES I & II** – Learn basic skills involved in the construction industry; masonry, electric wiring, plumbing, heating and air-conditioning; work from blue prints. Math measuring skills are essential; as well as a mature, responsible attitude. Good work ethic and willingness to work in all-weather are needed.

**COMPUTER INFORMATION SYSTEMS** – Students will troubleshoot computer problems while gaining hands-on experience with computer hardware, software, operating systems, and network configuration. Critical thinking and problem solving skills helpful, strong work ethic, and ability to multitask.

**CRIMINAL JUSTICE** – Learn about the wide range of careers available in law enforcement, courts, corrections and private security. Learn problem solving skills, crime scene processing, evidence collection, criminal law and application. Must be mature, possess personal integrity and high ethical standards.

**CULINARY ARTS** – Learn new cooking methods, ways to serve customers, ways to prepare large quantities of food, baking, cake decorating, and catering services. Must be self-motivated and have a strong work ethic.

**EMERGENCY MEDICAL SERVICES (EMS)** – Learn the knowledge, skills, and judgment to treat patients with complicated medical or traumatic conditions where proper care can literally make the difference between life and death. While EMS is a critical component in healthcare, it's also a great entry into law enforcement, any other medical occupations, military or firefighting. EMS is great for students who love helping others, work well under pressure, and are able to think quickly on their feet.

**EMPLOYABILITY SKILLS\*** - Learn how to identify career options and explore how to get a job and discover the skills needed to be successful in life. Join us if you are interested in developing a plan for your future after high school. \*This class is specifically for students with an IEP through Specialized Instruction.

**ENGINEERING** – Learn about engineering through designing and building hands-on projects (underwater remote operated vehicle [ROV], pumpkin launcher, robots, electronic devices, etc.) using 2D and 3D software, 3D printers, hand tools, and power tools. 17 Direct College Credits (Level one certification) available through Lake Michigan College. Should be able to work both individually and in a team. Good math skills are recommended.

**GRAPHIC ART & DESIGN** – Careers in visual imagery start here, design on paper and computer to produce signs, brochures, books, logos, packaging and more. Each trimester will specialize in key skills for design careers, such as Digital Photography or Illustration or Web graphics. Fast creative problem solving, original sketching, computer use, along with measuring, public speaking, and enjoy serving clients.

**HEALTH CARE SCIENCE FOUNDATIONS** – Prepares students for entry-level health care employment and provides the foundation for further training in advanced health services occupations. Learn anatomy, physiology, medical terminology, and patient relations. Must be mature, respect confidentiality, willing to take direction, good at multitasking and working with others.

**HEALTH OCCUPATIONS ACADEMY** – In this 2nd year health care program, students will learn advanced anatomy, physics and medical terminology. They will also have the opportunity to job shadow in several health care fields. Successful completion of Health Care Science Foundations required for enrollment.

**MACHINING & CNC TECHNOLOGY** – Students will cut and shape steel, brass, aluminum and other materials into various sizes and configurations from blueprints using specialized tools and equipment. Learn manual machine techniques as well as computerized machinery (CNC) and Computer-aided Machining (CAM). Take this class if you enjoy working with your hands, are mechanically inclined, and have good math skills.

**HEAVY EQUIPMENT TECHNOLOGY** – Students will learn operation, maintenance, and repair of common construction equipment. Basic electrical and shop principles, welding, diesel engines, skid-steer operation, backhoe, wheel loader, power trains, hydraulics, excavator, bulldozer, and forklift operation/maintenance are all covered. Should be a detail oriented, analytical thinker, and a complex problem solver who is not afraid to get dirty.

**MARKETING & MANAGEMENT** – Jump into real business situations by running the school store. Challenge yourself to improve customer service and profit margins while cutting costs. Basic computer applications assist students to control business functions and strategize opportunities. Critical thinking and problem solving skills helpful; maturity to work independently necessary.

**SMALL BUSINESS OPERATIONS\*** – Small Business Operations is a one-year course that is designed to introduce students to a wide array of hands-on skills with an emphasis on refining all of the soft-skills necessary to gain and keep employment in today's work world. \*This class is specifically for students with an IEP through Specialized Instruction.

**TEACHER EDUCATION** – Work with Head Start preschool students, plus elementary/middle school students to learn what is involved in a career as a teacher. Study teaching principles and classroom management for all grade levels while planning, preparing and presenting lesson plans in classrooms. Teaching Assistant Internship option available midyear and can possibly be continued into a second year. Should be mature, self-motivated and organized.

**VETERINARY TECHNICAL SCIENCES** – Explore the knowledge and skills needed to enter the veterinary medicine field. Students will learn the anatomy and physiology of animal systems and how those systems work together to keep animals healthy. Students will learn animal handling, restraint, vaccination, reproduction, nutrition, and systems monitoring. Students will also use the scientific method to conduct a self-determined research project. Be a self-motivated, dependable worker who can handle multiple tasks and duties and able to work in teams.

**WELDING TECHNOLOGY** – Build and repair metal parts; work from blue prints; learn arc, gas, MIG, TIG, oxyacetylene welding; work on layout problems and fabrication projects; work with math and metals. Should have good attendance and an ability to work well with others. Hard workers will be recommended for jobs by the instructor.