

# STANDISH-STERLING CENTRAL HIGH SCHOOL

2401 Grove Road, Standish, MI 48658, 989-846-3660

[www.standish-sterling.org](http://www.standish-sterling.org)

## *COURSE OFFERING GUIDE*

*Graduation requirements and Course Offerings for the 2015-2016 School Year*

## *MISSION STATEMENT*

*“Learning for all”*

### **Program of Studies**

The world of work is rapidly changing as existing careers become more complex and new careers demand increased levels of education. Students need increased academic competencies, advanced technical and communication skills and greater problem solving abilities to become productive citizens in a highly global economy. It is the goal of Standish-Sterling Central High School to create a climate where expectations are high, individual differences are nurtured, global awareness is promoted and lifelong learning is valued.

The Standish-Sterling Central High School’s Career Pathway System represents a commitment to the students in our community. It is critical that the home, school and community establish and maintain effective communications in order to assist students in meeting academic and career goals. By recognizing that students can be influenced and motivated by a variety of learning experiences, both within the school **and** within the community, we elevate those collaborative partnerships that lead to student success.

Students and their parents/guardians are encouraged to review the contents of this guide and school registration very carefully with teachers, counselors and administrators. Through career awareness activities, we can work together to help ensure that students select the most challenging courses to meet their college and career goals. Careful scheduling is especially important as we implement more rigorous graduation requirements. The Standish-Sterling Community Schools is committed to a quality instructional program. We are proud of our schools, our teachers and most of all our students. We wish all students success during their high school careers and beyond.

### **Career Pathways**

All high school students at Standish-Sterling Central High School are part of the Career Pathway Program as they select a Career Pathway and develop an appropriate academic/career plan leading to advanced study at a four-year college or university, community college, technical institution, or direct entry into the world of work. It is the responsibility of the school, home and community to provide experiences to assist students in making informed decisions about education after high school and career opportunities.

Standish-Sterling Community Schools provide a career education program. Career awareness activities are followed by career exploration at the middle school level designed to provide students with a wide range of career-related learning experiences. Assessments of student interest, aptitudes, and abilities, through such measurements as Career Cruising, PSAT, ACT and SAT testing are integrated with a variety of career exploration opportunities. Career speakers, research projects, job shadowing, mentoring and other learning experiences that enrich academic content are combined with effective counseling practice to assist students in making informed decisions and setting goals. Student educational development plans are developed in the middle school to record students' experiences in their career research, Career Pathway and courses needed to follow that Pathway. The Standish-Sterling Central High School counseling program continues to offer career exploration opportunities through a Career Pathway focus. The high school Counseling Department provides the student and family with direct access to career resources. The high school curriculum further expands career-related knowledge and experience through a variety of academic courses in a planned sequence that prepares the student for life after high school in their chosen Pathway.

During each of their high school years, students review their educational development plans, portfolios, and academic experience. Guidance counselors, administrators and teachers are available to assist students as they explore options and make program decisions. The educational development plan serves as a valuable resource for student planning and as documentation for the school and family of the student's Career Pathway experience.

### **What is a Career Pathway?**

A Career Pathway is a system that creates well-marked "paths" of sequenced courses that provide both focus and direction to a student's learning experience. The Pathway prepares the student for a goal-oriented future and puts purpose in learning. It offers a system of choice for each student. Career Pathways include occupations that require varying levels of education and training. Career Pathways are organized into six career clusters that are grouped together because they share similar interests and strengths. The six Michigan Career Pathways are: Arts & Communications, Business, Engineering/Manufacturing & Industrial Technology, Health Sciences, Human Services, and Natural Resources & Agriscience.

### **Why Career Pathways?**

Someday students will need to get jobs. They may go to college first or get advanced education in other ways, but they eventually enter the work force. The bottom line is that the high paying jobs of the future will go to people with skills, so students need to know what it takes to get there...and to succeed. Career Pathways help students learn about new career opportunities, see how school subjects relate to the world of work, make classes more interesting, help students figure out what they're good at doing, show the education and skills needed to get good jobs and make their education fit them.

### **How do students benefit?**

A student's Pathway prepares them so that they know what it takes to get a good job. It . . .

- Helps students learn about hot, new career opportunities
- Helps students see how school subjects relate to the world of work
- Makes students' classes more interesting
- Helps students figure out what they're good at doing
- Opens their minds to all kinds of careers in their chosen career major
- Shows students the education and skills needed to get the high paying jobs
- Makes the student's education fit them

## What is my role as a student?

Do everything you can to focus on your future!

Study hard and do your best in school and extra-curricular activities

Take advantage of every opportunity to learn about the real world through job shadowing, career day, work experiences, field trips, community service and career speakers

Talk to your parents and other adults about their jobs

Go to school every day, on time, and with a good attitude...like a job

Learn, first hand, about as many different jobs, businesses, and professions as possible

Participate in career and college fairs

Talk to your counselors and teachers

What are the Six Career Paths?	Is this Career Path for You?
<p><b>Arts and Communication:</b> Careers in this path are related to humanities and performing, visual, literary and media arts. These include architecture, graphic/ interior/ fashion design, writing; film, fine arts, journalism, languages, media, advertising, and public relations.</p>	<p>Are you a creative thinker? Are you imaginative, innovative and original? Do you like to communicate ideas? Do you like making crafts, drawing, playing a musical instrument, taking photos or writing stories? This may be the career path for you!</p>
<p><b>Business, Management, Marketing and Technology:</b> Careers in this path are related to the business environment. These include entrepreneurship, sales, marketing, computer / information systems, finance, accounting, personnel, economics and management.</p>	<p>Do you enjoy being a leader, organizing people, planning activities and talking? Do you like to work with numbers or ideas? Do you enjoy carrying through with an idea and seeing the end product? Do you like things neat and orderly? Would you enjoy balancing a checkbook, following the stock market, holding an office in a club, surfing the Internet? This may be your career path!</p>
<p><b>Engineering/Manufacturing and Industrial Technology:</b> Careers in this path are related to technologies necessary to design, develop, install, and maintain physical systems. These include engineering, manufacturing, construction, service and related technologies.</p>	<p>Are you mechanically inclined and practical? Do you like reading diagrams and blueprints, and drawing/ building structures? Are you curious about how things work? Would you enjoy painting a house, repairing cars, wiring electrical circuits or woodworking? This may be the career path for you!</p>
<p><b>Health Sciences:</b> Careers in this path are related to the promotion of health and treatment of disease. These include research, prevention, treatment and related health technologies.</p>	<p>Do you like to care for people or animals who are sick or help them stay well? Are you interested in diseases and in how the body works? Do you enjoy reading about science and medicine? Would it be fun to learn first aid, volunteer at a hospital or veterinary clinic? This may be your career path!</p>
<p><b>Human Services:</b> Careers in this path are related to economic, political and social systems. These include education, government, law and law enforcement, leisure and recreation, military, religion, childcare, social services, and personal services.</p>	<p>Are you friendly, open, understanding and cooperative? Do you like to work with people to solve problems? Is it important to you to do something that makes things better for other people? Do you like to help friends with family problems? Do you like reading, storytelling, traveling or tutoring young children? This could be your career path!</p>

**Natural Resources and Agriscience:** Careers in this path are related to agriculture, the environment and natural resources. These include agricultural sciences, earth sciences, environmental sciences, fisheries, forestry, horticulture and wildlife.

Are you a nature lover? Are you practical, curious about the physical world, and interested in plant and animals? Do you enjoy hunting or fishing? Do you like to garden or mow the lawn? Are you interested in protecting the environment? This could be your career path!

Career Pathway	Courses in School	Samples Career & Levels of Education
<b>Arts and Communication:</b> Advertising & Public Relations Creative Writing Film Production Foreign Language Journalism Radio & TV Broadcasting	English, Speech, Art, Painting, Music, Drawing, Career Center Graphics & Design, and Drafting.	Public Relations Executive – UG Dancer – D Film Producer – HS Fashion Designer – UG Journalist – UG Radio & TV Broadcaster - HS
<b>Business, Management, Marketing and Technology:</b> Accounting Office Administration Business Ownership Economics Personnel Hospitality/Tourism Management Computer/Information Systems Marketing Sales Finance	English, Math, Computer Science, Career Center Marketing & Management, Accounting.	Loan Officer – UG Economist Legal Secretary – HS Hotel Manager – HS Office Manager – HS Computer Programmer – HS Salesperson – D Travel Agent - HS
<b>Engineering/Manufacturing and Industrial Technology:</b> Architecture Precision Production Mechanics and Repair Manufacturing Technology Engineering & Related Technologies Drafting Construction	Math, Science, Industrial Arts, Wood Shop, Metal Shop, Drafting, Computer Science, Career Center Electronics/Robotics, Welding, Precision Machining, Auto Mechanics, Small Engine Repair, Auto Body, Building Trades, HVAC.	Architect – G Plumber – HS Electrician – HS Air Traffic Controller – HS Auto Mechanic – HS Chemical Engineer – UG Draftsman – HS
<b>Health Sciences:</b> Dentistry Hygiene Medicine Nursing Nutrition & Fitness Therapy & Rehabilitation	English, Math, Science, Foreign Language, Computer Science, Career Center Health Tech, Nursing, Dentistry, Forensic Science and PT/OT.	Dentist - G Dental Hygienist – HS Doctor – G Veterinary Technician – HS Respiratory Therapist – HS Physical Therapist - UG
<b>Human Services:</b> Human Services Education Child & Family Services Food & Beverage Service Law & Legal Studies Law Enforcement Cosmetologist	English, Math, Science, Social Studies, Foreign Language, Career Center Cosmetology , Culinary Arts, Early Child Care, Law Enforcement.	Chef – HS Teacher – UG Lawyer – G Police Detective – HS Cosmetologist – HS Social Worker – UG Librarian – G Firefighter - HS
<b>Natural Resources and Agriscience:</b> Agriculture Animal Health Care Earth Sciences Environmental Sciences Fisheries Management Wildlife Management Horticulture Forestry	English, Math, Science, Agriculture, Geography , Career Center Agriscience and Vet Science.	Farmer – HS Oceanographer – UG Physicist – G Landscaper – D Marine Biologist – G Conservation Agent – UG Chemist – UG Forester – UG Undergraduate Degree = <b>UG</b> Graduate Degree = <b>G</b>

## **GRADUATION REQUIREMENTS**

To prepare Michigan's students with the knowledge and skills needed for the jobs in the 21st Century, the State of Michigan has enacted a rigorous new set of statewide graduation requirements that are among the best in the nation. With these new graduation requirements, students will be well-prepared for future success in college and the workplace. All Standish-Sterling Central High School students must meet the Michigan Merit Curriculum standards and local graduation requirements to earn a diploma.

A minimum of 26 credits is required for graduating Classes 2016 and beyond. This includes the following:

1. Four (4) credits in English:
  - a. One credit in English 9
  - b. One credit in English 10
  - c. One credit in English 11
  - d. One credit in English 12
2. Four (4) credits in mathematics, including;
  - a. One credit in Algebra I
  - b. One credit in Geometry
  - c. One credit in Algebra II
3. One (1) credit in physical education
  - a. half credit in health education.
  - b. half credit in PE
4. Three (3) credits in social studies, including;
  - a. One credit in U.S. History
  - b. One credit in World History
  - c. Half credit in Government
  - d. Half credit in Consumer Economics
5. Three (3) credits in science, including;
  - a. One credit in Chemistry or Physics or Agriscience
  - b. One credit in Biology
  - c. One credit in science elective (Physical Science)
6. Four (4) credits in foreign language, fine or performing arts. Students must take Four credits in Combination Electives to meet local and state graduation requirements. Combination electives include; Foreign Language Industrial Arts, Fine Arts, Music, Business, Agriscience, CTE and Career Center coursework.
  - a. Students must complete the equivalent of 1 credit of Foreign Language Class of 2016-Class of 2020

### **SENIOR STATUS**

Any student, who has the possibility of meeting graduation requirements at the end of the first semester of his/her senior year, will be considered a member of the graduating class. This means he/she may take part in graduating senior activities, including commencement.

### **Non-Graduating Seniors**

Students who cannot earn enough credits during their Senior year to graduate, will be informed by registered mail at the start of the Senior year. These students will not be considered members of the graduating class and will not take part in graduating Senior activities. At the end of the first semester of the Senior year if a student cannot meet graduation requirements by the end of the school year, he/she will not be considered a member of the graduating Senior class and a letter will be sent by registered mail. This means he/she may not take part in graduating senior activities including commencement. Any student who fits into either of the above situations should check with a high school counselor as soon as possible to discuss meeting the requirements for graduation. No more than one full credit can be taken outside the academic program offered at Standish-Sterling Central to help meet graduation requirements and receive a diploma from Standish-Sterling Central High School. The high school principal must approve of students taking courses for this credit and their completion must be completed no later than September 1<sup>st</sup> of the next school year. This credit would only include courses in the American School and/or Summer School.

## *Designing Your Future*

### PREPARING FOR SUCCESS AT A MICHIGAN PUBLIC UNIVERSITY ADVICE FOR HIGH SCHOOL STUDENTS AND PARENTS AS RECOMMENDED BY THE PRESIDENTS COUNCIL STATE UNIVERSITIES OF MICHIGAN

Central Michigan University \* Northern Michigan University \* Eastern Michigan University \* Oakland University \* Ferris State University \*  
Saginaw Valley State University \* Grand Valley State University \* University of Michigan-Ann Arbor \* Lake Superior State University \*  
University of Michigan-Dearborn \* Michigan State University \* University of Michigan-Flint \* Michigan Technological University \*  
Wayne State University \* Western Michigan University

#### **WHAT DO UNIVERSITIES EXPECT OF THE STUDENT?**

In considering your potential to be a successful student, each university looks at the courses you took and successfully completed. Your overall grade point average, test scores, special abilities, scholastic and volunteer activities and work experience are also important to universities as they evaluate students who have applied for admission. All things considered, however, the best predictor of college success is the quality and rigor of the courses you take each year in high school.

Although each university has final say in admissions decisions, Michigan's public universities strongly encourage you to follow the program of coursework described in this booklet. Standards and expectations for admission are different for each public university and certain programs may also have special requirements for admission. Whatever your area of interest, you should get detailed information about specific admissions requirements from your school counselor or from the appropriate university admissions office. Remember, too, that it is important to do your best throughout high school, and particularly during your senior year.

While these recommendations apply particularly to the universities listed above, if you follow this advice, you'll have a better chance of being admitted to and being successful at the college or university of your choice. Even if you decide not to continue your education immediately after high school, a strong educational background will serve you well in the future. Chances are you will eventually find yourself studying on the job since employers expect their employees to continue to learn while they are working. More and more careers require a degree or additional education and training beyond high school, so think of learning as a life-long commitment.

#### **MAKE GOOD USE OF YOUR TIME IN HIGH SCHOOL**

Even though your high school graduation may seem to be a long time away, the courses that you take as you begin high school determine the courses that you are ready to take in the following years. Your guidance counselor is a great source of information and can be very helpful to you in making course selections, but always discuss your plans with your parents or guardian. As a university student you should also expect a larger quantity of reading assignments and to generally spend more time on homework, so it is very important that you develop good study habits. You are strongly encouraged to take college entrance exams, the ACT Assessment or SAT, by late in your junior year. If available at your school, take PLAN (a pre-ACT test) in your sophomore year. It is also good practice to take the PSAT early in your junior year. Your score on the PSAT may be a factor in consideration for some scholarships. It is also important to take the Michigan Educational Assessment Program (MEAP) when it is offered at your school. In addition to possibly qualifying for a Michigan Merit Award, taking the MEAP also gives you information about areas which may need improvement.

#### **PAYING FOR COLLEGE**

If you believe you can't afford to go to college, think again. Many federal and state programs are available to help students meet the costs of college. Each year Michigan public universities also commit substantial financial assistance to students. A good deal of aid is based on financial need, but scholarship assistance is also available to students based on their academic achievement in high school and, in some instances, test scores. Every university has an office with well-trained professional staff who will work with you to develop an appropriate financial plan. These offices are the best source for financial aid information, but it is important

that you carefully review all materials sent to you and make certain that you promptly respond to university requests for information. Students who take a challenging curriculum such as the one described in this booklet, score significantly higher on the ACT/SAT than those who take less challenging courses. The Michigan Competitive Scholarship and the Michigan Merit Award Program provide substantial financial support to students who achieve certain scores on the ACT and the Michigan Education Assessment Program, respectively. Additional information on these programs can be found at the following website:  
<http://www.state.mi.us/education.shtm>

### ***INSIDE THE CORE COURSES***

Completing the Core Courses recommended by the Presidents Council will increase your odds for future success. But what will you learn? Here's the inside scoop:

#### ***MATHEMATICS***

More than any other subject, colleges will pay special attention to how high you go in math when deciding whether to admit you to the many college programs that require strong math skills. Higher math skills will also give you far more job options in fields ranging from manufacturing to business, and science to technology. Go as high as you can on the recommended course list. If you can take extra math courses beyond the university prep list, go for it. The most useful would likely be an introduction to probability and statistics. You should also take math every year. Those who skip a year or slack off as seniors get rusty. Most will have to pay to redo high school math in college without even getting credit for it.

#### ***SCIENCE***

A good understanding of science will not only help you better understand how things work, it will open the doors to jobs in engineering, technology and health care. Four years of science will better prepare you for college level work. Each one adds value; students who stopped taking science after Biology and Chemistry scored much lower on the ACT college entrance exams than those who also took Physics. Look for yearlong courses that will help you develop greater mastery in a subject.

#### ***ENGLISH***

Success in college requires the ability to read and listen critically and to express your own ideas in writing and in speech. It's also fundamental to most careers. Take English all four years. Students who skip it senior year often have to make it up when they get to college. One important skill is reading critically. It includes the ability to recognize an author's assumptions, intentions and message. You should learn to use critical reading skills with a wide variety of literature-- both fiction and non-fiction from different cultural perspectives and in different formats: from novels to essays to instructional texts and beyond. You should also learn to evaluate the credibility of Internet, media and other research sources. Another key skill is writing clearly. You should learn to master spelling, grammar and sentence structure to convey your thoughts accurately. College courses will include lots of writing. Prepare now by taking courses and doing projects that give you plenty of practice with the writing process. That includes collecting and organizing information, developing a thesis, and preparing an outline of what you want to say. It also includes writing multiple drafts of a paper, editing, reorganizing, and rewriting your work. Like exercise, the more you do and the better coaching you get, the stronger you will grow. These communication skills are also important in the way you listen and speak. By training yourself to listen carefully, to ask critical questions and to take well-organized notes, you'll be able to learn and do more. Similarly, by learning to express your ideas concisely you'll gain more influence and clearer relationships.

#### ***SOCIAL STUDIES***

History and the social sciences will give you new ways of understanding your world. You'll learn how past events influence the present and see how different cultures have contributed to our world. You'll also learn how political, economic and social conditions relate to each other, and how to participate in a democracy.

#### ***FOREIGN LANGUAGE***

Language shapes the way people think and see the world. By studying a language other than English, you'll gain a better understanding of different worldviews and a fresh perspective on American language and culture. In a global economy, you'll also pick up a skill that can open more jobs and promotions to you. More colleges are requiring proficiency in a foreign language as a requirement for earning a degree. That's why you should aim for mastery in one foreign language rather than dabbling in several. Study extra hard and you may even test out of your college's requirement. Experiencing another culture first hand is another good way to address this goal.

### **OTHER IDEAS**

Beyond the Core Courses, the Presidents Council encourages you to use additional time to take courses or get experience in the arts and information technology. The fine and performing arts will not only give you new ways to express yourself and to enjoy life, they will also teach you more about the creative process, which will fuel your pursuit of other subjects. Knowing information technology is now a standard expectation at colleges where students use computers regularly for tasks such as word processing, spreadsheets, and Internet research.

### **PRESIDENTS COUNCIL CORE COURSES**

The Presidents Council supports the Michigan Department of Education's Michigan Merit Curriculum, which would bring the state's requirements closer to those recommended by Michigan's 15 public universities. But for students who wish to be fully prepared for a university education, the Presidents Council encourages them to take the full set of Core Courses below.

<b>Math – 4</b>		<b>Science – 4</b>		<b>English – 4</b>		<b>Social Studies – 4</b>		<b>World Language – 3</b>	
Algebra I	1 credit	Biology	1 credit	Hn Eng 9	1 credit	World History	1 credit	3 Years	3 credits
Geometry	1 credit	Physics	1 credit	Hn Eng 10	1 credit	US History	1 credit		
Algebra II	1 credit	Chemistry	1 credit	Hn Eng 11	1 credit	Econ/Gov	1 credit		
Trig/Pre-Calc	1 credit	Other Science	1 credit	AP Lit	1 credit	Soc. Studies Elect	1 credit		

**TOTAL= 19 credits**

### **OTHER IMPORTANT CONSIDERATIONS**

**Advanced Placement:** Take advantage of Advanced Placement (AP) course opportunities your school offers or consider taking AP courses offered by other providers such as the Michigan Virtual University ([www.mvu.org](http://www.mvu.org)). AP courses not only provided academic challenge, but can also accelerate your progress in college.

**Dual Enrollment:** Through a program called "Dual Enrollment," Michigan school districts will pay for high school students to enroll at a college or university to study material not offered by the district, such as advanced math or a foreign language. This means that high school students can earn college credit and also see what college is like. In order to be eligible for dual enrollment you must take the Michigan Merit Exam, so check with your guidance counselor for specific details.

**Applied Courses:** Depending on the college major that you choose, some universities may recognize that you have met certain requirements by taking applied courses. For example, technical education courses may have math or science content comparable to the typical courses in these areas. In such cases, each university decides whether certain applied courses satisfy requirements for admission.

**College Transition:** College offers you an enormous amount of freedom, with different approaches to instruction, evaluation, and scheduling. You will be challenged to make many independent decisions about using time wisely. Steps can be taken to help make a successful transition to college life, such as talking to students at the schools that interest you, consulting websites for practical information from each university, or visits to campuses to meet students and get a better feel for what life on campus is really like.

**College Fairs:** You are strongly encouraged to take part in special programs or events that universities sponsor during the year and especially in the summer. Make certain that you and your parents or guardian attend "college fairs" and visit several campuses to become more familiar with the wide range of choices that are available in Michigan and beyond.

### **IT'S YOUR FUTURE**

Make the best use of courses offered by your high school, but remember that simply taking courses, even difficult ones, will not guarantee college admission or work success in the future. What really matters is what you know and can do as a result of your high school experience. Push yourself to excel in all areas, as this will help you understand more about your personal strengths and also point out areas of deficiency which may need improvement. A good education provides a basis for making many important decisions about your future, so take charge and give yourself every chance to be successful in school and the career you eventually choose. By following the advice offered in this booklet, you will learn a great deal about your own abilities and interests. Most importantly, you will be better prepared to be a successful student. Copyright December 2006 by Presidents Council, State Universities of Michigan

## AGRISCIENCE

### ***Animal Biology***

***Prerequisite: None***

***1 credit/Two Semesters***

Animal Biology is the introduction to livestock, species and industry, breeding and genetics, behavior, growth and cells, evolution, handling, environment, market classes, nutrition, reproduction, safety, cells, genetics, and issues related to livestock production. Students will do this through group and individual work, videos, lectures, lab and dissections, and research projects.

### ***Plant Biology***

***Prerequisite: None***

***.5 credit/One Semester***

Plant Biology is a course to give students understanding and hands on experience with row crops and horticulture commodities. The class is a blend of coursework on cells, genetics, nutrients, nutrient cycles, soil, ecology, and reproduction. It also contains a hands-on practical section in the greenhouse where students learn how to grow flowers, trees, houseplants, and vegetable crops. Students will do this through group and individual work, videos, lectures, lab and greenhouse work, and research projects.

### ***Michigan Agriculture and Natural Resources***

***Prerequisite: None***

***.5 credit/One Semester***

Michigan Agriculture and Natural Resources is a peek at the Michigan agricultural industry. Students will study the history of agriculture and new industries of organic farming, and aquaculture. The class will also focus on environmental stewardship in forestry, and pest control.

### ***Leadership***

***Prerequisite: FFA Member***

***.5 credit/One Semester***

Leadership is a class for FFA members who wish to expand their knowledge of the organization, become better presenters and learn how to effectively motivate others. Competing in FFA leadership contests is a requirement for this class and students must be dues paying members.

### ***Fisheries and Wildlife Management***

***Prerequisite: None***

***.5 credit/One Semester***

Fisheries and wildlife management is an overview of the land and aquatic wildlife of north America. The class will cover habitat, anatomy, practices of animals. Students will also study conservation , ecology, and how populations change. As a class project fish will be raised in the greenhouse.

### ***Advanced Natural Resources***

***Prerequisite: Michigan Ag or Natural Resources***

***.5 credit/One Semester***

Advanced Natural Resources is an environmental science class that covers the topics of water, land, and resource use in a growing population. This class has outdoor lab time to learn conservation practices of agriculture.

## ART

### ***Introduction to Art***

***Prerequisite: Intro to Art***

***.50 credit /Semester***

Students will learn the basic skills taught in line, value, color, texture, space, and shape. Students will work with the principles of design and various media such as pencil, colored pencil, and tempera paints. Students will keep an art portfolio of their sketches and work and write a report on art careers as required to pass the class. Students will participate in presenting their works by mounting or matting them for display. Students will analyze, describe and evaluate works of art. When a student has successfully completed Introduction to Art, they will have an overall understanding of the basic principles and elements of art. There will be a studio fee of \$10.00.

### ***Drawing I***

***Prerequisite: None***

***.50 credit/Semester***

Students will learn the techniques and various skills needed to draw still life setups, animals, humans, and landscape drawings using various media such as pencil, charcoal, pastel, oil pastels and others. Students will create artworks that use organizational principles and functions to solve specific visual art problems. Students

will learn one and two point perspectives. Students will write a report about an artist in visual arts. At the end of Drawing I, students will be able to create an illusion of space on a two dimensional surface.

**DRAWING II**

**Prerequisite: Credit earned for Drawing I**

**.50 credit /Semester**

After completing Drawing I, students will develop a more focused theme and personal style of their choosing. They will maintain a sketch portfolio throughout the course of study. Students will describe the origins of specific images and symbols and explain why they are of value in their artwork and the artwork of others. Students will write a report on a historical period or style with ideas, issues, or themes in the arts or sciences. Students will have gained an understanding and appreciation of their own style and of others work.

**PAINTING I**

**Prerequisite: Credit earned for Intro to Art**

**.50 credit /Semester**

Students will use the knowledge acquired in Drawing I while working in a studio class that will develop the use of tempera, watercolor and acrylic paints. Students will demonstrate an understanding of color mixing, color values and color combinations. Students will apply materials, techniques and processes with sufficient skill, confidence and sensitivity that personal choices are carried out in their paintings. Students will write a short report on a famous painter of the 19<sup>th</sup> or 20<sup>th</sup> centuries critiquing his or her work and style, comparing it to the style of their own painting. Students will have demonstrated their understanding of the paint media sufficiently to produce several paintings. There will be a fee of not more than \$10.00 charged for this studio class.

**PAINTING II**

**Prerequisite: Credits earned for Painting I**

**.50 credit/Semester**

After completing Painting I, students will use oil paints and watercolors. Students will apply and adapt subject, symbols and creative ideas into their artworks and use the skill gained to solve problems in daily life. Students will become aware of the emotional impact that color and artworks have on the daily activities of people. There will be a studio fee of not more than \$10.00.

**SCULPTURE/CERAMICS**

**Prerequisite: None**

**.50 credit/Semester**

Students will participate in a studio class that will include three- dimensional projects like papier-mâché and clay. This class is for upperclassmen. Some techniques to explore will be coil method, slab method, wheel-thrown pottery and clay sculptures. Students will research the history and write a report on one of the projects they have made. Students will have a better understanding of the principles of art and the importance of balance on three-dimensional works of art. There will be a studio fee of not more than \$10.00.

**Yearbook**

**Prerequisite: Driver's License**

**.50 credit/Semester**

Students will learn the basics of photography, journalistic writing style, and layout design. The students will learn business skills through ad sales and 11subscription sales. The class will focus on building meaning and communication, using writing skills and processes, and establishing critical standards. The students will do this through the production of the Centralian yearbook. This course may be taken more than once.

**BUSINESS/COMPUTERS**

**Accounting I**

**Prerequisite: None**

**1 credit/2 semesters**

Students will learn the basic principles of accounting by completing three accounting cycles: for a service business, a merchandising business, and a corporation. They will become familiar with accounting as a career choice and learn the terminology known as the “language of business.” Automated accounting procedures using Excel are introduced. Career Pathways: Business, Management, Marketing & Technology

**Accounting II**

**Prerequisite: Accounting I (with a C+ or above)**

**1 credit/2 semesters**

Students in this advanced accounting class will learn the accounting fundamentals for departmentalized accounting, control systems, and corporate, management, and cost accounting. This course is primarily for students interested in pursuing a business career. Automated accounting procedures using Excel are covered. Career Pathways: Business, Management, Marketing & Technology

**Computers I****Prerequisite: None****.5 credit/1 semester**

Students completing this course will create documents in Word, create spreadsheets in Excel, and create publications in Publisher. They will use commands and proofing tools to enhance and revise their work; and learn to print and save their professional quality documents. This semester course is a prerequisite to enroll in Excel. Career Pathways: Arts & Communications; Business, Management, Marketing & Technology; Health Sciences; Human Services & Education; Engineering/Manufacturing & Industrial Technology; Natural Resources & Agriscience

**Document Design in Office 2007****Prerequisite: Computers I****.5 credit/1 semester**

This class will be offered to the motivated junior or senior who would like to practice more design work in Office 2007. Practical application of Word, Excel, PowerPoint or Publisher will be used to create original publishable documents. Assignments will be in project format in group or individual settings. Career Pathways: Arts & Communications; Business, Management, Marketing & Technology; Health Sciences; Human Services & Education; Engineering/Manufacturing & Industrial Technology; Natural Resources & Agriscience

**Introduction to Web Design****Prerequisite: Computers I; basic keyboarding skills****.5 credit/1 semester**

This class is designed to teach basic web design. Students will learn web design skills by hand-coding valid HTML and CSS. Should students go on to attain advanced knowledge and skills in the web design field, this foundational understanding of basic coding will serve them well. Background and history covering the development of the Internet and the World Wide Web will be included, and students will learn basic image editing as it pertains to web site development.

**ENGLISH****English 9****Prerequisite: None****1 credit/Two Semesters**

Students will review the parts of speech, phrases, fragments and run-on sentences, and subject/verb agreement through various exercises and practice these skills in their writing. They will expand their knowledge of literature and improve their vocabulary skills by reading a variety of authors in various genres including short stories, nonfiction, poetry, the Shakespearean tragedy *Romeo and Juliet*, and the novel *The Outsiders* and/or *The Chocolate War*. They will practice basic writing techniques including paragraph development leading to the study of the standard five-paragraph essay. Students may utilize these skills to write prompts in the form of a personal narrative, compare/contrast, cause/effect, and/or persuasive essay.

**English 10****Prerequisite: Credit earned for English 9****1 credit/Two Semesters**

Students will combine basic grammar skills learned in English 9 with the study of phrases, clauses, sentence structure, and agreement rules as well as basic punctuation including commas. Studies are continued in the genres of a short narrative, nonfiction, and poetry. Students will read the Shakespearean tragedy *Julius Caesar* as well as the novels *To Kill a Mockingbird* and *Tomorrow When the War Began*. Students will continue to improve vocabulary skills through the literature they are studying. They will practice writing skills through assignments designed to help the student write about the literature being studied as well as reflective, cause/effect, and persuasive prompts.

**Honors English 10****Prerequisite: English 9 (Recommend c+ avg.) and/or Teacher recommendation****1 credit/Two Semesters**

Students will combine basic grammar skills learned in English 9 with the study of phrases, clauses, sentence structure, and agreement rules as well as basic punctuation including commas. Studies are continued in the genres of a short narrative, nonfiction, and poetry. Students will read the Shakespearean tragedy *Julius Caesar* as well as the novels *To Kill a Mockingbird* and *Lord of the Flies*. Students will continue to improve vocabulary skills through the literature they are studying. They will practice writing skills through assignments designed to help the student write about the literature being studied as well as reflective, cause/effect, and persuasive prompts.

**Myths & Legends A****Prerequisite: None: (Recommend Credit earned for English 9)****.50 credit/1 Semester**

Students will read and study the ancient myths and legends from various cultures including creation myths, classic stories of Greek and Roman gods, hero legends, and epics such as the *Iliad*. Comparisons and contrasts between the different cultures, time periods, and geographical regions will be discussed and students will be able to relate them

to current times and situations.

### **Myths & Legends B**

**Prerequisite: None: (Recommend Credit earned for English 9)**

**.50 credit/1 Semester**

Students will read and study a variety of myths, legends, fables, and fairytales from a variety of sources such as Aesop and the Grimm Brothers as well as stories of the Arthurian legends and modern legends such as *The Lightning Chief* and *The Princess Bride*. Students will learn these concepts using reading, class discussions, note taking, individual/group assignments, and independent research.

### **Media Literacy**

**Prerequisite: None: (Recommend Credit earned for English 9)**

**.50 credit/1 Semester**

This is a course in media studies that includes but is not limited to studying camera angles, movement, pace, volume, music, conflicts, comic relief, inference, symbolism, setting, irony, theme, foreshadowing, and use of the three—second rule. Modern as well as classic films are utilized and analyzed in the class.

### **Honors Speech**

**Prerequisite: 2 credits earned in English**

**.50 credit/1 Semester**

Students learn to reduce their fears of performing and/or speaking before groups by practicing various forms of public speaking including persuasive, informative, and descriptive. Students will also practice the skills of job interviewing as well as making formal introductions and announcements. Students will be required to demonstrate their understanding of speaking techniques through both individual/group presentations and written work such as outlining, researching of topics, and possible resume writing. This course is highly recommended for the Honors English student.

### **English 11**

**Prerequisite: English 10 or Honors English 10**

**1 credit/Two Semesters**

Students will read a selection of American literature from the 17th century through the 20th century and will develop reading comprehension strategies. Some authors to be studied include Bradford, Emerson, Thoreau, Poe, Twain, Hawthorne, Douglass, Dickinson, Dunbar, and Wright. The study of Wright's autobiographical novel *Black Boy* and Miller's play *The Crucible* will be primary sources of study as well. The students will write a variety of persuasive prompts as well as a short research paper. The students will focus on refining grammatical and punctuation skills such as comma, semi-colon, and colon usage, subject/verb and pronoun/antecedent agreement as well as transitional and buzz words in writing.

### **Honors English 11**

**Prerequisite: English 10 (Recommend A/B avg.) or Honors English 10 & Teacher Recommendation**

**1 credit/Two Semesters**

Students will read a selection of American literature from the 17th century through the 20th century and will develop reading comprehension strategies. The students will write a variety of analytical, descriptive, and expository essays. Students will also develop and write a research paper. The students will focus on refining grammatical and punctuation skills. The students will do this through class discussions, individual exercises, lectures, and note taking.

### **English 12**

**Prerequisite: Credit earned for English 11**

**1 credit/Two Semesters**

Students will read a selection of British literature from the 9th century through the 19th century and will continue to build upon the reading comprehension strategies established in English 11. Literature to be studied includes *Beowulf*, *The Canterbury Tales*, Shakespeare's *Macbeth* or *Much Ado About Nothing*, and the poetry of Donne, Shakespeare, Pope, Wordsworth, and others. Students will focus on technical writing such as resumes, applications, scholarship essays, and other personal types of writing. Students will also learn to reduce their fears of performing and/or speaking before groups by practicing various forms of public speaking including personal, informative, and job interviewing techniques.

### **A.P. Literature**

**Prerequisite: Credit earned for Honors English 11 & Teacher recommendation**

**1 credit/Two Semesters**

Students will read a selection of British literature from the 9th century through the 19th century and will continue to build upon the reading comprehension strategies established in Honors English 11. The students will write a variety of creative, analytical, and expository essays, including a research paper. The students will focus on refining usage and rhetorical skills. Students will do this through class discussions, individual work, lectures, and note taking.

**Introduction to Drama****Prerequisite: None****.50 credit/ 1 Semester**

Students will learn the various aspects of theatre. Students will study the historical beginnings of theatre, the arts of set construction, make up, lighting, sound, and costuming as well as basic acting techniques. Students will do this through note taking and worksheets, practical application exercises in the auditorium, and individual/group improvisations and voice/movement exercises. (Not for English credit. Counts towards combination credit.)

**Theatre Production****Prerequisite: "C" avg in Intro to Drama and/or Teacher recommendation****.50 credit/1 Semester**

Students utilize the technical and acting skills learned in Introduction to Drama to study various aspects of acting including voice, movement, and character development. These skills are practiced through monologue and scene work, improvisation, character analysis, and by mounting a series of small productions through the course of the year. Students will be responsible for all aspects of production including performance, design, and construction tasks necessary to put on a production. Additional time outside of the regular class periods may be required. (This course, which may be taken more than once, counts as a combination credit not as English credit.)

**FOREIGN LANGUAGE****Spanish I****Prerequisite: None****1 credit/Two Semesters**

This course introduces the students not only to the language, but also to the Spanish-speaking world. It gives the students a solid understanding of other culture and appreciation for the language through role-playing, creative expression, cds that allow the students to listen to native speakers, songs, and use of Internet. It will provide useful strategies to develop reading, writing, listening, and speaking skills. Highly recommended for college.

**Spanish II****Prerequisite: Spanish****1 credit/Two Semesters**

This course is the continuation of Spanish I. Previously learned vocabulary and grammar will be revised before introducing new ones, so that the students will be able to internalize, retain, and actively use the language during the second year. Students will research the different countries to discover history, culture, government status, education in other countries and geographical position. Literature will be introduced. Highly recommended for college.

**Spanish III****Prerequisite: Spanish II****1 credit/Two Semesters**

Spanish III is the continuation of Spanish II. Students will do more research on the Internet and the World Wide Web to explore the possibility that the international marketplace offers. This class also provides a variety of reading, such as books, recipes, articles from magazines and newspapers to encourage students to look to real life in the Spanish-speaking world.

**Spanish IV****Prerequisite : Spanish III****1 credit/Two Semesters**

In this course, the study of grammar is completed. The students will be able to speak, read, write and comprehend spoken Spanish. The goal of this course is to meet the National Standards: communication, culture, connections, comparisons and community. It will increase the awareness that a language can have an impact on one's life. The students are ready to face many opportunities to apply language skills on the job an in the world.

**French I****Prerequisite: None****1 credit/Two Semesters**

This course introduces the students not only to the language, but also to the French-speaking world. It gives the students a solid understanding of other culture and appreciation for the language through role-playing, creative expression, cds that allow the students to listen to native speakers, songs, and use of Internet. It will provide useful strategies to develop reading, writing, listening, and speaking skills. Highly recommended for college.

**French II****Prerequisite: French I****1 credit/Two Semesters**

This course is the continuation of French I. Previously learned vocabulary and grammar will be revised before introducing new ones, so that the students will be able to internalize, retain, and actively use the language during the second year. Students will research the different countries to discover history, culture, government status, education in other countries and geographical position. Literature will be introduced. Highly recommended for college.

**French III****Prerequisite: French II****1 credit/Two Semesters**

French III is the continuation of French II. Students will do more research on the Internet and the World Wide Web to explore the possibility that the international marketplace offers. This class also provides a variety of reading, such as books, recipes, articles from magazines and newspapers to encourage students to look to real life in the French-speaking world .

**French IV****Prerequisite : French III****1 credit/Two Semesters**

In this course, the study of grammar is completed. The students will be able to speak, read, write and comprehend spoken French. The goal of this course is to meet the National Standards: communication, culture, connections, comparisons, and community. It will increase the awareness that a language can have an impact on one's life. The students are ready to face many opportunities to apply language skills on the job an in the world.

**It is highly recommended that students take at least 2 years of the same foreign language before attending college.**

**INDUSTRIAL TECHNOLOGY**

**Middle School Technology courses are not prerequisites for any High School Industrial Technology offerings.**

**Small Engines****Prerequisite: None****.50 credit/Semester**

This course is designed to give students an introduction to machines used to generate power, and more specifically the small four-stroke engine. Students will work to take apart, examine, troubleshoot and reassemble their engine. Engine theory will be covered as well as hands on activities.

**Introduction to Wood Technology****Prerequisite: None****.50 credit/Semester**

Wood Technology is offered to students with little or no previous woodshop experience. This course gives students a basic understanding of woodworking with an emphasis on planning, safety, hand & power tool use, fasteners, gluing & clamping techniques, proper sanding techniques, and wood finishing. This is a participation class and involves a project cost to the students. Careers in Wood Technology are discussed.

**Wood Technology****Prerequisite: Credit earned for Intro to Wood Technology****.50 credit/Semester**

Wood Technology includes detailed planning of a project, (drawing, cost estimating of materials, & step by step procedures), wood joint construction, wood identification, furniture & cabinet units, and types of hardware and it applications. Students will work on a furniture or cabinet project with an emphasis placed on proper tool usage and safety. This is a participation class and involves project costs to the students. Careers related to construction and cabinetry is investigated.

**Introduction to Metals Technology****Prerequisite: None****.50 credit/Semester**

This course is designed to give novice metalworkers experiences in casting, sheet metal, oxy-acetylene and stick welding, machining, and oxy-acetylene cutting. Included in the course topics will be the use of basic metalworking hand tools, material theory, and precision measuring. During this 12-week course safety will have a prevalent role in lecture and shop practices. Students that produce exemplary projects will have them entered in the Michigan Industrial Technology Education Society (MITES) Competition.

**Metals Technology****Prerequisite: Credit earned for Intro to Metals Technology****.50 credit/1 Semester**

This course is designed to expand on topics covered in Introduction to Metals. Students will have the option of building a project that they plan out, or they can focus on an area that improves their job-related skills. These areas include welding, machining, casting, and sheet metal. Students that produce exemplary projects will

have them entered in the Michigan Industrial Technology Education Society (MITES) Competition.

***Introduction to Drafting Technology***

***Prerequisite: None***

***.50 credit/Semester***

This is an introductory course into drafting, which teaches basic board drafting and computer aided drafting skills. Students will learn to use basic board drafting tools and techniques in first part of the class. The second part students will learn the skills and techniques used to create drawings using a standard industry CAD program. Topics covered: multiview drawings, and 3 dimensional drawings in the form of isometric, oblique, and 1 & 2 point perspectives. Career opportunities related to

***CAD Drafting***

***Prerequisite: Credit earned for Intro to Drafting Technology***

***.50 credit/Semester***

Computer Aided Design is a drafting course, which introduces the student to the use of the computer for drafting. Students will use industry standard software and be able to use either mechanical or architectural design software to do drawings. Career opportunities related to Engineering, Architecture, and Drafting are investigated.

***Architectural Drafting Technology***

***Prerequisite: Credits earned for Intro to Drafting Technology .***

***50 credit/Semester***

Architectural Technology is offered to students who have completed Introduction to Drafting Technology. Students will learn about 1) architectural designs, 2) plot plans, 3) foundations, 4) floor plans, 5) elevations, 6) electrical systems, 7) cross sections, and 8) stairway details. The student will develop a complete set of house plans. Careers related to the drafting field will be examined.

**MATHEMATICS**

***Algebra I***

***Prerequisite: None***

***1 credit/Two Semesters***

This course aligns with the H.S. Content Expectations outlined in the Michigan Curriculum Framework for Mathematics. Students in the Algebra I curriculum will be able to use statistics, probability, graphing techniques, technology, and estimation skills to describe the world around them. They will be able to solve equations and inequalities, simplify algebraic expressions, and apply various problem-solving skills. Students will integrate reading, writing, speaking, listening, and cooperative learning skills to expand their knowledge of algebra and apply it to real life situations. Students will do this through group and individual work, class discussions, and lecture. Students will also develop good note taking skills. This class is intended to prepare students for Geometry.

***Geometry***

***Prerequisite: Credit earned for Algebra I***

***1 credit/Two Semesters***

This course aligns with the H.S. Content Expectations outlined in the Michigan Curriculum Framework for Mathematics. Students in the Geometry curriculum will combine skills learned in Algebra I with the study of logical reasoning, segment measure, coordinate graphing, angles, parallels, triangles, congruence, quadrilaterals, proportions, similarity, polygons, area, circles, surface area, volume, introduction to trigonometry, transformations. They will integrate reading, writing, speaking, and listening to improve problem solving and logical thinking skills. Students will do this through group and individual work, class discussions, and lecture.

***Algebra II***

***Prerequisite: Credit earned for Geometry & Algebra I***

***1 credit/Two Semesters***

This course aligns with the H.S. Content Expectations outlined in the Michigan Curriculum Framework for Mathematics. Students in Algebra II curriculum will use functions, 1<sup>st</sup> and 2<sup>nd</sup> degree equations, graphing, systems of equations, polynomials, inequalities, and direct variation to solve real-life problems. They will integrate reading, writing, speaking, listening, and cooperative learning to improve problem solving and logical thinking skills.

***Trigonometry/Pre-Calculus***

***Prerequisite: "C" avg or better in Algebra II & Geometry***

***1 credit/Two Semesters***

This course is designed to prepare students for college mathematics and the ACT Test. The course will cover advanced algebra topics: functions, polynomials, matrices, systems of equations, and logarithms, and the fundamentals of trigonometry. Included in the trigonometry will be functions, identities, equations, sine and cosine rule, and applications that incorporate trigonometry data. This course also covers probability and statistics. Students will integrate reading, writing, speaking, and listening to improve problem solving and logical thinking skills. Use of a graphing calculator is mandatory.

**A.P. Calculus****Prerequisite: "C" avg or better in Trig/Pre-Calculus****1 credit/Two Semesters**

A.P. Calculus consists of a full academic year of work in Calculus; comparable to an introductory Calculus I course. Taking and passing the Advanced Placement exam may earn college credit. There will be an extensive use of Plane Geometry and Algebra, introduction to limits, derivatives and their application. In addition, students will be introduced to integration and its applications.

**Business Math****Prerequisite: None****.50 credit/Semester**

Students in Business Math will develop an understanding of the importance of math in a variety of careers. They will analyze problem situations, which may be encountered in real life. They will learn vocabulary and math skills necessary for running a business. Students practice employability skills such as cooperating in groups, organizing, evaluating, and analyzing data. This is an elective that will apply concepts learned in Algebra and Geometry classes to the real world. Students will do this through group and individual work, class discussions, and lecture.

**Personal Finance****Prerequisite: None****.50 credit/Semester**

Students in Personal Finance will focus on math skills needed to do daily tasks both at home and on the job. Students will be provided with a wide variety of application for daily life experiences such as banking skills, money management, buying and maintaining a car or home, and budgeting. Students will practice basic math skills including percents, decimals, and problem solving using a calculator. This is an elective that will apply concepts learned in Algebra and Geometry classes to the real world. Students will do this through group and individual work, class discussions, and lecture.

**MUSIC****Band****Prerequisite: Instrumental experience & Teacher recommendation****.50 credit/Semester**

An instrumental performing group whose double role of a marching band and a concert band, produces an ensemble that offers a wide variety of musical and performance experiences. Students are evaluated and graded in two categories: 1) content standards and 2) rehearsal techniques. Student assessments will cover performing, improvising, composing, arranging, reading and notating music, analyzing and describing music, evaluating music and music performances, describing the relationships between music and other arts, and describing music in relation to history and culture. Student progress is measured while performing on instrument and through written and verbal assessments. Band maintains a busy performance schedule beginning in August and continuing until graduation, thus students must understand that membership in the band will take extra time outside of the school day for after-school rehearsals and required performances outside of class i.e., parades, concerts, marching band festivals, home football games and concert band festivals. Students must have experience on an instrument to become a member of the band. Students without instrumental experience must meet with the director for membership approval.

**Jazz Band****Prerequisite: Instrumental experience & Teacher recommendation** **.50 credit/Semester**

An instrumental ensemble that will focus on the historically American music styles of jazz and blues – including all the various forms these styles have become over the years. Styles include but are not confined to swing, bebop, cool jazz, fusion, funk and the multitude of styles simply labeled “pop” music. As is the tradition in Jazz music, opportunities for solo improvisation are plentiful. As a performance ensemble, the jazz band student will be graded while performing on instruments – in concerts and in class, and through written and verbal assessments. Experience playing Jazz music is not necessary. If warranted, an audition process will be implemented to determine membership.

**Choir****Prerequisite: None****.50 credit/Semester**

Choir is an opportunity for students in all grades (skill levels) to experience the art of singing. Various levels of abilities are welcome with no audition. Proper vocal production and exposure to many styles of choral music are the main goals of the class. Concerts and field trips are the main grading opportunities; therefore, they are a required part of the class. Daily participation and individual progress are also evaluated.

## PHYSICAL EDUCATION

### ***Basic Physical Education***

***Prerequisite: None***

***.50 credit/Semester***

Basic P.E. is an introduction to the facilities and practices of the high school physical education program. It includes physical fitness testing and monitoring, basic swim instruction, weight room safety and technique instruction. Other areas of instruction include aerobic and aerobic conditioning methods, flexibility training and basic injury care. Team and sport activities are included in this class. This course is required for graduation.

### ***Health Education***

***Prerequisite: None***

***.50 credit/Semester***

Students will learn how the choices they make in any single aspect of their life will have an effect on the entire person. Making good decisions about substance use, nutrition, exercise, mental health, disease prevention, which includes STI's, HIV/AIDS, sex education and healthy relationships, will lead to a healthier and more productive life. Students will learn how these topics affect their body's systems as well as their behaviors and those individuals around them. The students will also have the opportunity to become certified in adult, child, and infant CPR.. This course is required for graduation.

### ***Life-Time Activities***

***Prerequisite: Basic Physical Education***

***.50 credit/Semester***

This class is designed to allow students to learn individual skills, become familiar with rules, scoring and etiquette while socially interacting with other students in golf, archery, bowling, horseshoes, and volleyball. Each student will have the opportunity to demonstrate competence in badminton, shuffleboard, and table tennis. The student is often involved in individual activities that emphasize sportsmanship, cooperation, self-discipline and fair play. The exposure to these can be used in later life pursuits as adults. C.P.R. certification is included. Cost – fall, \$24; winter, \$44; spring, \$5. Major emphasis; fall-golf; winter- bowling; spring - racket sports. Two trimesters may be taken for full credit.

### ***Team Sports***

***Prerequisite: Half Credit earned for Basic Physical Education***

***.50 credit/Semester***

Students participating in Team Sports class will learn the rules and skills involved in a variety of games. The students will use those skills and strategies in competing against other teams in class. Students will learn the value of team play, which includes sportsmanship, leadership and captaining skills and the importance of being part of a team and working together.

### ***Strength Training I***

***Prerequisite: Basic Physical Education***

***.50 credit/Semester***

Students in Strength Training I class will learn the correct techniques in performing weight lifting exercises and in "spotting" others. Students will also learn some of the current philosophies and practices in strength, speed and power development. Daily workouts will enhance each student's physical fitness, self-esteem and social skills. Teacher approval, based on performance and participation in previous physical education classes, is required for enrollment in this class.

### ***Strength Training II***

***Prerequisite: One Credit earned in Strength Training I***

***.50 credit/Semester***

Strength Training II is a class offered to 11 and 12 grade students who have successfully completed Strength Training I and have a sincere interest in strength and conditioning or have special needs in terms of injury rehabilitation or strength development. Teacher approval, based on performance and participation in previous physical education classes, is required for enrollment in this class.

### ***Basic Dance and Aerobics***

***Prerequisite: Basic Physical education and/or Team Sports***

***.50 credit/Semester***

The students will learn a variety of paired and individual dances, participate in numerous video aerobics such as step, kickboxing and Pilates and aquatic swim. Through these activities the students will develop better posture, strength, flexibility, muscle tone, improve lung capacity and resting heart rate, lose weight and improve one's overall health.

## SCIENCE

### **Physical Science**

**Prerequisite: None**

**1.0 credit/Two Semesters**

Topics of study include properties of matter, states of matter, atomic structure, the periodic table, chemical bonds, chemical reactions, solutions, acids & bases, carbon chemistry and nuclear chemistry. Topics of study include motion, forces and motion, work, power, machines, energy, mechanical waves and sound, the electromagnetic spectrum and light, optics, electricity, and nuclear reactions.

### **Biology**

**Prerequisite: None**

**1.0 credit/Two Semesters**

Topics of Biology cover most of the life science benchmarks found on the Michigan Merit Exam. Students will use skills from Chemistry A to study the structure and function of cells. Cellular processes of photosynthesis and cellular respiration, and cell division will be the focus for first semester. Second semester, students will study genetics, evolution, classification, ecosystems and ecological relationships. The student will integrate reading, writing, lectures, videos, lab work and research projects.

### **Animal Biology**

**Prerequisite: Physical Science**

**1 credit/Two Semesters**

Animal Biology is the introduction to livestock, species and industry, breeding and genetics, behavior, growth and cells, evolution, handling, environment, market classes, nutrition, reproduction, safety, cells, genetics, and issues related to livestock production. Students will do this through group and individual work, videos, lectures, lab and dissections, and research projects.

### **Plant Biology**

**Prerequisite: Animal Biology A**

**1 credit/Two Semesters**

Plant Biology is a course to give students understanding and hands-on experience with row crops and horticulture commodities. The class is a blend of coursework on cells, genetics, nutrients, nutrient cycles, soil, ecology, and reproduction. It also contains a hands-on practical section in the greenhouse where students learn how to grow flowers, trees, houseplants, and vegetable crops. Students will do this through group and individual work, videos, lectures, lab and greenhouse work, and research projects.

### **Chemistry B**

**Prerequisite: Biology, & Geometry**

**.50 credit/Semester**

This course aligns with the H.S. Content Expectations outlined in the Michigan Curriculum Framework for Science. Students will review some topics learned in Chemistry A with a few more advanced concepts. Students will then study topics including chemical quantities (the mole), chemical reactions, Stoichiometry, states of matter, gas laws, solutions, acids-bases-salts, and thermochemistry. Mathematical applications associated with all of these topics will be studied, especially dimensional analysis.

### **Physics**

**Prerequisite: Biology & Algebra II**

**1 credit/Two Semesters**

This class is designed to explore advanced concepts of the physical world. The course will extend beyond many topics covered in the essential physics benchmarks for the high school Michigan Merit Exam. Topics included are motion, vectors, forces, gravity, work, energy, collisions, rotations, fluid mechanics, waves, sound, light, and electronics.

### **Human Anatomy & Physiology**

**Prerequisite: Credit earned for Biology**

**.50 credit/Semester**

This yearlong course is designed to introduce students pursuing careers in the allied health fields to the fundamental concepts of human anatomy, the inner workings of the body and some review of the life science benchmarks. Students will gain an understanding of anatomical terminology, human disease & dysfunctions and the workings of body systems including skeletal, muscular, digestive, respiratory, circulatory and more. Students will participate in laboratory activities, dissection and investigation of current topics.

### **Advanced Placement Biology**

**Prerequisite: "C" or better in Biology**

**1.0credit/Two Semesters**

This is a full year class (three semesters) that prepares students for the Advanced Placement (AP) Exam. There will be extensive study of cells, genetics, classification

and ecology. The student will integrate reading, writing, lectures, videos, lab work and research projects.

### SOCIAL STUDIES

#### ***U.S. History***

***Prerequisite: None***

***1 credit/Two Semesters***

Students in **this required class** will study the history of America from 1865 to the present. They will learn about the political, cultural, and social history of the nation. Students will be able to construct timelines of events during this timeframe. They will be able to identify Presidents, economic crises, major wars, and conflicts. Through group work, research, videos, discussion, and individual work, students will make comparisons, contrasts, and reach conclusions about America's role in the world.

#### ***Current Issues***

***Prerequisite: None***

***.50 credit/Semester***

Students will use magazines, newspapers, TV, and other recent media to gather information and discuss issues that are a part of our present world. Some topics covered will be terrorism, wars, environmental problems, and disease. Class activities will include writing, research, informed discussion, and semester projects.

#### ***Global Studies***

***Prerequisite: None***

***.50 credit/Semester***

Global Studies is an issues-related class focusing on the idea that a reorganization of the geographical, social, cultural, political, and economic structures of the world is occurring. Through texts, maps, the Internet, films, and other sources, students will study the impact of globalization on various places and groups. This is a one-semester class.

#### ***You and Political Science***

***Prerequisite: None***

***.50 credit/Semester***

This semester course will focus on the many parts of the law. This class will be broken into basic definitions of laws, the criminal justice system, and career opportunities related to law. The class will visit actual trials and will enjoy many guest speakers. There will be lectures, group activities, and research.

#### ***Consumer Economics***

***Prerequisite: None***

***.50 credit/Semester***

Consumer Economics deals with the ways in which individuals, households, firms, industries, and governments decide to employ their talents and resources to meet their many desires. A fuller understanding of economics will enable the students to better understand the U.S. economy and to participate in it more successfully. Students will take on the roles of consumers and manufacturers to investigate how economic decisions are made. Students will mathematically analyze economic behavior to predict economic events. Through comparative economics and economic history, students will discover how our successful U.S. model has developed and the problems it faces. This is a one-semester class. **It is required for graduation.**

#### ***Government***

***Prerequisite: None***

***.50 credit/Semester***

Students will learn the different branches of government, (legislative, executive, and judicial). Active participation in class activities, lecture sessions, and textbook reading will help the students prepare to successfully function in our democracy. They will also study the history of the U.S. political system. **This class is required for graduation.**

#### ***World History***

***Prerequisite: None***

***.50 credit/Semester***

This is the study of mankind from prehistoric to modern times. It covers the ancient civilizations of Egypt, the Middle East, and Asia. The Middle Ages, Renaissance, and Reformation will be discussed. Other topics included are, Enlightenment, the Industrial Revolution, Western Imperialism, and World Wars. This course is recommended for college bound students. Methods of instruction may be lecture, group activities, research, and discussion.

#### ***Wealth Accumulation***

***Prerequisites: Economics***

***.50 credit/ Semester***

A hands-on course designed to assist students in establishing, planning for, and meeting their financial goals. It will examine job hunting and career skills; employment benefits; money management and savings strategies; entrepreneurship and starting a personal business; investment strategies; tax policies; and insurance and liability

control. Business Math or Personal finance are recommended.