

# Course List

## ART & MUSIC

+Art I - (9-12)  
Beginning Painting & Drawing- (9-12)  
Advanced Drawing & Painting- (9-12)  
Three-D Design- (9-12)  
Independent Art - (12)  
+High School Band - (9-12)  
+High School Choir - (9-12)  
+Ceramics - (9-12)  
+Advanced Ceramics (10-12)

## BUSINESS EDUCATION

\*Accounting I- (10-12)  
\*Accounting II- (10-12)  
\*Independent Accounting- (11-12)  
\*Personal Finance - (11-12)  
Business Management – (9-12)

## COMPUTER SCIENCE

Computer Applications (9-12)  
Website Design- (9-12)  
Website Design II - (9-12)

## ENGLISH

English 9 - (9)  
English 10 - (10)  
English 11-(11)  
English 12 - (12)  
AP English (11 or 12)  
Student Publications (10 -12)  
Creative Writing (10-12)

## FOREIGN LANGUAGE

Spanish 1- (9-12)  
Spanish 2- (9-12)  
Spanish 3- (10-12)  
Spanish 4- (11-12)  
Japanese 1- (9-12) IVN  
Japanese 2- (10-12) IVN

## INDUSTRIAL TECHNOLOGY

+Engineering Design A- (9-12)  
+Engineering Design B -(9-12)  
+ \*Drafting/CAD II- (10-12)  
+ \*Drafting/CAD III- (11-12)  
+ \*Independent Drafting- (11-12)

Construction Trades Fundamentals- (9-12)  
+ Construction Trades A & B - (9 -12)  
+ \*Interior Construction Trades A & B (10-12)  
+ \*Interior Construction Trades 2 A & B- (11-12)  
+ \* Construction Trades 2- (10-12)

## MATHEMATICS

Algebra I- (9-12)  
Algebra II- (9-12)  
Geometry- (9-12)  
\*Precalculus- (10-12)  
\*Trigonometry- (10-12)  
\*AP Calculus AB- (11-12)

## PHYSICAL EDUCATION

Basic Physical Education (9-12)  
Team Sports - (10-12)  
Powerlifting - (10-12)  
Health- (9-12)

## SCIENCE

Physical Science - (9-12)  
Biology - (9-12)  
AP Biology (10-12)  
Chemistry - (10-12)  
Advanced Chemistry (11-12)  
Anatomy & Physiology- (11-12)  
Physics - (10-12)  
Botany- (10)  
Zoology - (9)  
Ecosystems - (11)  
Agribusiness - (11-12)  
Mechanical Applications (11 -12)

## SOCIAL STUDIES

American Government- (10 -12)  
AP American Government - (11-12)  
World History- (9 -10)  
American History-(9 -10)  
AP American History- (11-12)  
Economics- (11-12)  
Psychology (10-12)  
Contemporary American History (10-12)

## SPECIALIZED AREAS OF STUDY

Nurse Aide-Training (11-12)  
Auto Body Repair- (11-12)  
Cosmetology - (11-12)  
Dual Enrollment (9 -12)

\*- may be used as senior year math course

+ - may be used as Visual, Performing and Applied Arts credit.

# ART AND MUSIC

## **Art I (One Semester)**

**(9-12)**

Students will focus on the importance of art and learn the elements of design while exploring color theory, drawing, design, scratchboard, painting and sculpture. This course will introduce fundamental techniques and concepts of representational and expressive drawing and painting within a variety of media. Knowledge of famous artists and time periods will also be addressed. Successful completion of this course with at least a C average is a prerequisite for all other art courses.

## **Beginning Drawing & Painting (One Semester)**

**(9-12)**

This course is an introduction of design including line, shape and perspective. Students will examine how light creates highlights and shadows on objects and the gradation of value. Students will develop a strong sense of design through decision-making and problem-solving projects that may include media such as graphite, oil pastel, colored pencil, chalk pastel and charcoal. Students will also be developing painting skills and techniques using tempera, watercolor and acrylic paints. Knowledge of famous artists and time periods will also be addressed. Prerequisite: C+ or above in Art I.

## **Advanced Drawing & Painting (One Semester)**

**(9-12)**

Students will use the foundation skills from previous art courses to explore landscapes, still lifes and the human figure and abstract creations in watercolors and acrylics. There will be special emphasis placed on the different stages of the painting process. Students will learn how to set up a palette, mix colors, as well as see and draw from life. Knowledge of famous artists and time periods will also be addressed. Prerequisite: C+ or above in Art I and Beginning Drawing and Painting.

## **3-Dimensional Design (One Semester)**

**(9-12)**

This course is a beginning study of basic principles of three-dimensional visual organization and skills. It includes line, value, texture, color, shape and other elements of form as they relate to three-dimensional art and design. Students will focus on the design elements while exploring paper, wire, paper mache, plaster and clay. Students will learn importance of using recycled goods in art. Knowledge of famous artists and time periods will also be addressed. Prerequisite: C+ or above in Art I.

## **Ceramics I (One Semester)**

**(9-12)**

This course is intended for those studying ceramics for the first time and is a comprehensive introduction to the craft of clay working. Students will work on the following clay building methods: pinch pot, coil, slab, drape mold and the potter's wheel. They will begin to develop a personal style of working with clay and learn about clay, glazes and the firing process. Knowledge of famous artists and time periods will also be addressed. Prerequisite: Art I recommended, but not necessary.

**Advanced Ceramics (One Semester)****(9-12)**

This class is designed for the more advanced clay students who have an interest in developing their craftsmanship and style with clay. Students will experience making functional as well as sculptural pieces, using a variety of techniques. Well thought out forms, designs and functional uses along with good craftsmanship are emphasized. The processes, techniques and aesthetic concepts in the ceramic media are further developed and intensified. Students will view and critique works of master ceramists, past and present, as well as work created in class. Prerequisite: C+ or above in Ceramics I.

**Independent Art Study (One Semester)****(12)**

This course is for the serious senior art student who has taken as many previous art courses as possible and intends to continue art after graduation. A portfolio of art work will be prepared for scholarship application; participation in area art competitions will be required. Prerequisite: All Art Classes.

**High School Band (Two Semesters)****(9-12)**

High School Band is an elective subject for experienced instrumental music students. Students will rehearse as an ensemble, receiving instruction on techniques and concepts of musical performances. High standards of achievement in the areas of performance, musical knowledge, responsibility, self-discipline teamwork and leadership are emphasized and developed. Students will perform in marching and concert activities, such as home football games, basketball games, parades, concerts, festivals and competitions during and after school hours. All rehearsals and performances are mandatory. Band is an all year class. Students will not be allowed to drop between semesters without having a conference with the principal, band director and parent.

**High School Choir (Two Semesters)****(9-12)**

This course is an elective for singers who would like to perform with a group and develop music skills. Choir is for the entire year. Choir students are expected to have a serious interest in choral music and new members must meet with the director for a vocal assessment before joining. In the choir, students will develop their singing voices and will learn to use good choral tone. They will study and perform a variety of musical styles and will practice skills in sight singing and music reading. Students are required to participate in a fall, winter and spring concert and a performance at the MSVMA Choral Festival. There will also be performances during the school day and at least one field trip. Students are graded on their participation, effort and behavior during rehearsals and performances and on their ability to work as a team, develop their skills and learn their music.

## BUSINESS EDUCATION

### **Accounting I (A) (One Semester)**

**(10-12)**

Accounting I (A) is a one semester course which gives students a background in basic accounting procedures used in business. Students will be introduced to different areas of accounting such as Management Consulting, Forensic Accounting, Financial Planning, Auditing and Tax Services and Technology Services. Computerized accounting software will be used to prepare financial information. As part of the course, students will play the board game Monopoly and prepare financial information based upon the games played.

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

### **Accounting I (B) (One Semester)**

**(10-12)**

Accounting is a one semester course and a continuation of Accounting I (A). Students will learn how to calculate and prepare payroll checks and forms, state and federal payroll tax returns and individual tax returns. Accounting for inventory and retail companies will also be covered. Computerized accounting software and spreadsheet applications will be used as part of this class. Students will learn how to analyze financial statements and how investors use financial information to make investment decisions. Prerequisite: Accounting I (A).

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

### **Accounting 2A and 2B (Two Semesters)**

**(10-12)**

Independent Accounting will provide students with the opportunity to acquire knowledge of accounting systems design and financial statement analysis for management decision making purposes. Real life business cases, Excel spreadsheets and Access databases will be integrated into the course. Topics to be covered include: accounting framework and concepts, control systems and cost accounting.

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

### **Personal Finance (One Semester)**

**(11-12)**

This course is designed to help students in the management of money and personal finances. Topics covered include financial planning, money management strategies including budgets, banking, stocks and bonds, mutual funds, retirement planning, tax preparation and planning, long and short term investing styles and insurance. Prerequisite: Introduction to Computers and two years of mathematics.

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

**Business Management (One Semester)****(9-12)**

The number one college major is Business. Business Management is a one-semester course for students interested in entering the business field and will develop student leadership and management skills. Areas of study include the basic functions of business management, including starting a business and developing a business plan, credit and financing, computer information systems, production, marketing, human resources management, government regulations, and business ethics. The material covered in this course is reinforced and enhanced through the use of technology, videos and hands-on activities whenever possible.

# COMPUTER SCIENCE

## **Computer Applications (One Semester)**

**(9-12)**

Computer Applications is a course designed to teach students how to use the computer as a business and personal tool through the use of applications software. This course reinforces concepts with hands on activities and areas covered will include:

- Creating websites using Weebly
- Generating presentations using Prezi
- Processing and formatting documents in Word
- Producing citations easily using Word features
- Using spreadsheets, functions, and creating charts in Excel
- Creating a databases and queries using Access
- Discussing current trends in technology
- Computer ethics and security

## **Website Design I (One Semester)**

**(9-12)**

Be creative by using Dreamweaver and Fireworks software to design and create professional, up-to-date web sites that are pleasing to the eye and easy to use.

- Website planning, design, and architecture
- Working with text and graphics
- Cascading style sheets
- Working with links and flash text
- Dynamic pages
- Drawing objects using Flash
- Managing websites
- Inserting flash, shockwave, MP3, and videos.

## **Website Design II (One Semester)**

**(9-12)**

Focus on expanding your web design skills and build on what you learned in Website Design One. Explore several advanced features of the Macromedia Web Design Suite. Build on your existing Dreamweaver skills, and become familiar with several interactive design techniques using Flash and Fireworks.

- Understanding Macromedia Flash
- Drawing objects in Flash
- Working with symbols and interactivity
- Creating animations
- Creating special effects in Flash

# ENGLISH

## **English 9 (Two Semesters)**

**(9)**

Students will identify and analyze plot, setting, characters, voice, point of view and themes in various short stories, novels and plays. In response to these, they will write in various genres, demonstrating their ability to narrate, define, explain, defend and persuade. In order to do so with a greater level of sophistication, students will work to improve their vocabulary and sentence variety with correct usage. Students will also develop research skills that will enable them to write a research paper and deliver a persuasive speech.

## **English 10 (Two Semesters)**

**(10)**

English 10 is a course designed to improve students' composition skills, reading comprehension and grammar. This class will focus on improving writing skills in the areas of content, organization, voice, mechanics and style through a variety of written assignments which include various essays, position/reaction papers and journals. This course will include the study of literature, vocabulary, poetry and plays. Students will read to interpret meaning, symbolism, themes and other literary devices in a variety of works throughout this course.

## **English 11 (Two Semesters)**

**(11)**

Students will read and interpret a wide variety of American literature from the course text and selected novels. Students will work toward developing their reading skills, learning to critically analyze, synthesize and evaluate works of American literature and will demonstrate an ability to respond through writing short papers with their individualized, critically supported points of view. They will also learn to identify the characteristics of an author's style. In addition, students will concentrate on the writing process, from grammar and vocabulary to examining paragraph structure, write descriptive, personal narrative and several types of expository essays based on a variety of reading selections. Students will write a persuasive/argumentative research paper using MLA format and proper documentation.

## **English 12 (Two Semesters)**

**(12)**

Students will read to develop an insight into the philosophies of life in different periods and different cultures. They will understand and analyze drama, poetry, fiction and non-fiction, reading to recognize the writer's style, intent and time period. Students will be comfortable using the library for research or leisure reading. They will polish their writing skills, presenting papers with correct documentation and editing and a final emphasis will be placed on vocabulary and spelling skills.

**Advanced Placement Literature and Composition (Two Semesters) (12)**

Advanced Placement English Literature and Composition is a college-level course that prepares students for the AP test offered each May. Successful performance on the test may result in college credit for the class. This course stresses close reading, analysis, critical thinking, and writing. The readings for the course include contemporary and traditional classic works of fictional literature, and students will be expected to analyze the thematic and literary elements that the author employs. Preparing students for college writing is also a primary focus for this class.

**Advanced Placement English Language and Composition (Two Semesters) (11)**

Advanced Placement English Language and Composition develops the reading and writing skills that students need for college success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. This course cultivates the understanding that writing is historically, culturally, and social produced by studying various formats such as political satires, personal narratives, scientific arguments, in addition to traditional literary formats. Reading and writing activities in the course also deepen students' knowledge and control of formal conventions of written language. The goals of this course are developing critical literacy and facilitating informed citizenship.

**Student Publications (Two Semesters) (10-12)**

This is a workshop class in which the high school yearbook and school newspaper will be produced and distributed. This class is designed to teach students the process and procedures involved with creating, printing, and distributing a school newspaper and yearbook. Students will be responsible for writing journalistic copy, taking photos, completing layouts as well as selling advertising for production of the yearbook and/or school newspaper. Because of publication costs, students will be held responsible for advertising sales. Exact dollar amounts will depend on the number of students in the class. Students will be organized in staff positions with understood jobs and responsibilities. Those positions will be applied for and special consideration will be given to those with a greater interest in one area over another. It is often necessary to put extra time into this class outside of school, as will be expected by the instructor, for completing deadlines and taking photos. Assignments will vary. Students working on the yearbook during the second semester may have to work at school to complete pages after the school year has ended. An "I" grade will be given until the yearbook assignment is complete. Failure to comply with this policy will result in a failing grade for the semester. Students will be required to sign and have parent signatures for a yearbook class contract. The goal of this class is to produce a quality yearbook publication at Dundee High School in a professional and timely manner. Prerequisite: "C+" average in English AND student must have application submitted and instructor approval.

**Creative Writing (One Semester)**

**(10-12)**

Creative Writing is a one semester class that will help students to gain skills in expressing themselves with originality, intelligence, creativity, and clarity in stories, poetry, memoir, personal essays, and experimental works.

Students will identify the successful elements of an effective piece of creative writing.

Students will experience being in a writing community and learn to give and receive useful feedback. Students will experience writing as a tool for intellectual exploration, self-discovery, and creative expression. Hopefully the rewards of this process will encourage you to be writers-for-life, whether or not you choose creative writing as a career.

# FOREIGN LANGUAGE

## **Spanish I (Two Semesters)**

**(9-12)**

This beginning course includes the development of basic reading, writing, speaking and listening skills. Students will also learn about the culture and geography of Spanish speaking countries.

## **Spanish II (Two Semesters)**

**(9-12)**

Spanish II involves a review and a more intensive study of all grammatical items and cultural information. Strong emphasis will be placed on reading and speaking in Spanish. Students will be required to write short essays in Spanish and research projects will be assigned. Prerequisite: "C" average in Spanish I or permission of instructor.

## **Spanish III & Spanish IV (Two Semesters)**

**(10-12)**

Spanish III involves an intense review of all grammatical items as well as the memorization of all verb tenses in Spanish. Strong emphasis will be placed on speaking and writing and students will be required to read short stories and essays in Spanish. Latino culture and history is also incorporated in the curriculum. Prerequisite: "B" average in Spanish I and II.

## **Japanese I (Two Semesters)**

**(9-12)**

Take advantage of an opportunity to discover Japanese language and culture for yourself. Forget what you may know about foreign languages or about English. This language takes a completely different approach to communication. As we learn, we'll investigate many aspects of Japanese culture. From *ukiyo-e* to *umeboshi*, Japanese culture will intrigue you. Students will be introduced to basic conversation patterns and to the two Japanese syllabries, *hiragana* and *katakana*, as well as a few basic ideographs, *kanji*. The course will meet in the Distance Learning Lab at Dundee High School and will cover the four basic language skills in a culturally contextualized format.

## **Japanese II (Two Semesters)**

**(10-12)**

A continuation of Japanese I. This class will be taught over the IVN network. It will continue to teach the four basic language skills in a culturally contextualized format. Students will increase their mastery of the syllabries, while adding additional kanji to their knowledge base, and increasing their understanding of Japanese vocabulary, grammar, and culture.

# INDUSTRIAL TECHNOLOGY

## **Engineering Design I (A), formerly Drafting I (One Semester)** (9-12)

This is a beginning Drafting/CAD class where you will learn mechanical drawing skills using our manual drafting desks and equipment in a lab setting. You will also be introduced to the CAD software and draw extensively with the computer graphics stations. Drawings covered will include single view, geometric construction, multi-view and auxiliary drawing. After successfully completing Engineering Graphics & Design and Drafting II, you will obtain four college credits at Monroe County Community College in the Drafting/Design area. This course is a prerequisite to Drafting/CAD II.

## **Engineering Design I (B), formerly Drafting I (One Semester)** (9-12)

This is a beginning Drafting/CAD class where you will learn mechanical drawing skills using our manual drafting desks and equipment in a lab setting. You will also be introduced to the CAD software and draw extensively with the computer graphics stations. Drawings covered will include multi-view drawings, dimensioning, sections and pictorials. After successfully completing Engineering Graphics & Design and Drafting II you will obtain four college credits at Monroe County Community College in the Drafting/Design area. This course is a prerequisite to Drafting/CAD II.

## **Drafting/CAD II (A & B) (Two Semesters)** (10-12)

This course is an extension of Drafting/CAD I in that it covers some of the same topics in more depth and also includes areas not covered, such as cams and gears, architectural drawing, technical illustration and pattern development. This course also deals with more challenging machine drawings in which you can apply the basic techniques you learned in Drafting/CAD I. AutoCAD and manual drafting will be used throughout the course. After successfully completing this course you will be given four college credits at Monroe Community College in the Drafting/Design area. Prerequisite: "C" average in Drafting/CAD I.

## **Drafting/CAD III (A & B) (Two Semesters)** (11-12)

Drafting/CAD III is a study of the basic principles and techniques of architectural plans, which includes all areas from basic drawing techniques to a finished set of house plans. Design is emphasized as part of the course. You will design and draw a complete set of house plans with all necessary detail drawings. You may also make an architectural model and presentation drawing as part of your class work. You will be required to collect and organize a file with construction materials and processes to help in planning a home. Maximum use will be made of the architectural software. Prerequisite: "C" average in Drafting/CAD I & II.

## **Independent Drafting/CAD (Two Semesters)** (11-12)

Independent Drafting/CAD is designed for the serious drafting student who has the maturity and skill developed to work independently. This course is for the student who plans a career related to drafting and wishes to advance in a specific area or areas of Drafting/CAD and pursue that area in greater depth than otherwise possible. Prerequisite: "B" or better in Drafting/CAD I, II, III and permission of instructor.

**Construction Trades Fundamentals (Two Semesters)** (9-12)

This class will teach students/future homeowners basic construction practices to prepare for a career in construction or simply being able to do basic home maintenance. The students will create, design, and construct selected projects while learning about and using many different hand tools. Emphasis is placed on shop safety and proper use of hand tools. Areas highlighted: design process, problem solving, measurement, technology skills, employability skills, drafting equipment and hand tools. The class will be taught using both lab and classroom activities.

**Construction Trades A & B (Two Semesters)** (9-12)

This class will allow students to prepare for a career in construction. The students will create, design, and construct selected projects while learning many basic construction skills and techniques. Emphasis is placed on shop safety and use of power equipment. Areas emphasized: worksite safety, construction tools and equipment, layout and design, wood joints and finishes. Possible projects for this course include but are not limited to a tic-tac-toe board, picture frame, foot stool and lamp.

**Interior Construction Trades A & B (Two Semesters)** (10-12)

This course is designed for the student who wants to develop skills in the finish carpentry area. Emphasis will be placed on the following: advanced construction design and plan development, materials, carcass construction, advanced joinery, trim work, drawer construction and industry overview. Possible projects for this course include but are not limited to entertainment centers, night stands, end tables and coffee tables.

Prerequisite: Construction Trades

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

**Interior Construction Trades 2 A & B (Two Semesters)** (11-12)

This course is designed for the student who wants to develop skills in the finish carpentry area. Emphasis will be placed on the following: advanced construction design and plan development, materials, carcass construction, advanced joinery, trim work, drawer construction and industry overview. Possible projects for this course include but are not limited to entertainment centers, night stands, end tables and coffee tables.

Prerequisite: Construction Trades and Interior Construction Trades.

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

## **Construction Trades 2 (Two Semesters)**

**(11-12)**

This class will allow students to prepare for a career in construction. The students will create, design, and construct selected projects while learning many common construction skills and techniques. Emphasis is placed on shop safety and proper use of power equipment. Areas highlighted: layout and design, site preparation, foundations, building codes, carpentry, green building materials, civil construction techniques and construction business management. The class will be taught using both lab and classroom activities. Prerequisite: Construction Trades

**\*\*\*When taken as a senior, this course qualifies towards the senior math requirement necessary for graduation\*\*\***

# MATHEMATICS

## Foundations Algebra II (Two Semesters)

(9-12)

This course will continue the study of algebraic functions. More emphasis will be placed on quadratic equations, rational functions, radical functions, exponential and logarithmic functions. Students will also study probabilities and statistics. This course covers the same material as Algebra II at a slower pace. Must have teacher approval.

## Algebra I (Two Semesters)

(9-12)

This course will introduce students to a variety of algebraic equations and functions. It will focus on methods for solving linear, quadratic and exponential equations and will explore properties of these and other functions. Students will learn the tools of algebra needed to simplify expressions and to solve equations and inequalities.

**This course is required for all students.**

## Algebra II (Two Semesters)

(9-12)

This course will continue the study of algebraic functions. More emphasis will be placed on quadratic equations, rational functions, radical functions and exponential and logarithmic functions. Students will also study probabilities and statistics.

**This course is required for all students.**

## Geometry (Two Semesters)

(9-12)

This course covers two main areas, spatial relationships and logical thinking. Students will work with plane and solid figures and the relationship within and between them. Logical and systematic techniques for finding and proving these relationships will be studied. **This course is required for all students.**

## Pre-Calculus (One Semester)

(10-12)

This course focuses on the algebra of functions, which plays a central role in Calculus. Functions are explored from algebraic, graphical and numerical perspectives. This course solidifies the mathematical skills needed for Calculus. **This course is recommended for students who plan to continue their education past high school, particularly in the areas of science and engineering.** Prerequisite: Algebra I, Algebra II, Geometry, C average in math or permission of instructor.

## Trigonometry (One Semester)

(10-12)

This course explores trigonometric functions from an algebraic, graphical and numerical perspective. This course lays the trigonometric foundation needed for future coursework in mathematics and science. This course solidifies the mathematical skills needed for Calculus. **This course is recommended for students who plan to continue their education past high school.** Prerequisite: Algebra I, Algebra II, Geometry, C average in math or permission of instructor.

**Advanced Placement Calculus AB (Two Semesters)**

**(11-12)**

This course is recommended for students planning careers in math or science related fields including engineering, manufacturing and business. Students should have a working knowledge of algebra, geometry and trigonometry. The class will focus on single variable calculus and will include such topics as limits and their properties, differentiation and integration. The syllabus for this course has been approved by the College Board. **Students taking this class will have the opportunity to take the College Board AP Exam.** Prerequisite: Pre-Calculus and Trigonometry or permission of instructor.

# PHYSICAL EDUCATION

## **Basic Physical Education (One Semester)**

**(9 -12)**

This is a basic physical education class that is available to all students, boys and girls. The class will emphasize youth physical fitness and major team sports. Co-educational activities will be offered at various intervals throughout the year. You will be graded on class participation, individual skill performance, team performance and written tests covering rules and strategy. You must provide your own uniform, meeting school criteria and be responsible for your own personal hygiene (showering). There is some weight-lifting involved in this course as well.

## **Health (One Semester)**

**(9 - 12)**

This is a comprehensive health curriculum dealing with health concerns of today. Topics covered will include sexuality and reproduction education. Sexually transmitted disease, substance use and abuse, identifying sex roles, wellness, stress management, emotional and mental health, disease prevention and control, nutrition and dietary fads. **This course is a graduation requirement.**

## **Team Sports (One Semester)**

**(9-12)**

This course is open to all grade levels. Students should be interested in participating in team sports in a tournament setting, i.e., football, basketball, volleyball. Focus will be on the rules, skills and strategies that enable participation, individual skill performance, team performance and written tests covering rules and strategies. Students must provide their own uniform meeting school criteria and be responsible for their own personal hygiene. Once a student fails the semester or drops out they may not reenter without the permission of the PE Department.

## **Powerlifting & Fitness (One Semester)**

**(10-12)**

This class is designed for the athlete or individual interested in intense fitness and weight training. The focus will be on power lifting, strength development and cardiovascular training. To gain benefits from a class of this nature, it requires very intense student participation. Students will not simply be participating, but will be pushing their body to its maximum potential. Students must provide their own uniform meeting school criteria and be responsible for their own hygiene. Once a student fails a semester or drops the class, they may not reenter without permission of the PE Department.

## **SCIENCE**

### **Physical Science A (One Semester)**

**(9-10)**

This course introduces the general principles of Chemistry and Earth Science. Topics include: forms of energy, energy transfer and conservation, properties of matter and changes in matter, earth systems, the solid earth and the fluid earth. Upon completion, students will be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced. This course includes concepts of Chemistry and Earth Science and serves as an excellent introduction to the concepts of Chemistry and Earth Science.

### **Physical Science B (One Semester)**

**(9-10)**

This course introduces the general principles of Physics and Earth Science. Topics include: The Earth in space and time, motion of objects, forces and motion, forms of energy and energy transformations, light, energy and work. Upon completion, students will be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced. This course includes concepts of Physics and Earth Science and serves as an excellent introduction to concepts of Physics and Earth Science.

### **Biology (Two Semesters)**

**(9-12)**

This course is designed to acquaint students with an overview of main topics in Biology. The course will cover a development of biological principles from simple levels of organization to complex levels. You will be required to take part in labs and hand in formal laboratory reports. Topics will be studied from all major branches of Biology. This is a required class. **This course is a graduation requirement.**

### **Chemistry (Two Semesters)**

**(10-12)**

During this course, students will gain a detailed understanding of essential Chemistry concepts in a collaborative learning atmosphere. This course will involve many hands-on and project-based learning activities that are designed to prepare students for success in college or a career in a technology-based economy. Throughout the course, students will be encouraged to think creatively and be given multiple opportunities to demonstrate their learning by choosing to study Chemistry topics that are of personal interest to them while working to master challenging course material.

### **Advanced Chemistry (Two Semesters)**

Advanced Chemistry will be a challenging class where we learn more about the fascinating science of Chemistry. If you are considering a career in the sciences, this course is a must. It will prepare you for college level work in Chemistry, which is a class that typically can be a struggle for college freshmen. Expect to spend lots of time working independently and with peers to complete hands on learning activities and projects that will help master tough material.

**Anatomy & Physiology (Two Semesters)** (11-12)

This course is an advanced level science class designed to prepare students for success in a college as well as a potential career in the medical field. Students will study the structures and functions of the systems of the human body, including detailed study of the reproductive system, nervous system, skeletal system, muscular system, cardiovascular system, digestive system, and immune system. Throughout the course, students will work collaboratively and independently to design projects that will demonstrate their learning. Current medical treatments and technology as well as associated ethical issues will be emphasized as students focus on building higher level thinking skills that will benefit them regardless of their chosen career after high school.

**Physics (Two Semesters)** (11-12)

The study of such concepts as motion, heat, energy and electricity through problems and several hands-on activities. Great emphasis is placed on mastering basic Physics concepts through labs. Several projects such as the egg drop, thermal containers, mouse trap cars, toothpick bridges and hot air balloons are used to make abstract physics concepts concrete. Prerequisite: Algebra I, Geometry and Advanced Algebra.

**Botany (Two Semesters)** (10)

An agricultural approach to the science of plants and specific forms of plant production. Instruction will cover all aspects of plant growth including soils, pesticides, forestry, landscaping, crops and hydroponics. This vocational class will allow students lab time in the greenhouse to practice classroom skills. This course has been designed to prepare students for work in plant science related occupations through class experience and work assignments. Students in Botany will receive instruction about the FFA (related student organization) and be urged to join.

**Ecosystems (Two Semesters)**

**Mechanical Applications (Two Semesters)**

**Zoology (Two Semesters)** (9)

A full year course centered on the production of farm animals (cattle, sheep, swine, horses, poultry). This class covers all aspects of livestock production from birth through marketing. Topics include breeds, feeding, skills, genetics, handling and financing. Labs and hands-on training will be experienced.

**Agribusiness (Two Semesters)** (11-12)

This is an introductory course that surveys a variety of topics important for a person pursuing an agriculture related career. Among the topics covered include: marketing of agriculture projects, sale and application of fertilizers, herbicides and pesticides, conservation practices and soil and water management. Some after school activities will be required.

**Advanced Biology (Two Semesters)**

**(10-12)**

This course is designed to challenge students with a college level Biology curriculum.

This course is recommended for students planning careers in a science related field.

Students should have a working knowledge and have received at least a "B" in Biology.

Prerequisite: Biology, Chemistry

## **SOCIAL STUDIES**

### **American Government (One Semester)**

**(11-12)**

Government is a required course and can be taken by students in their junior or senior year. Students will gain a better understanding of the operation and functions of the United States Government. Areas will include the role, qualification and responsibility of the three branches of government at the State and Federal level. How the checks and balances in our representative democracy compares to the different governments of the world. Emphasis will also be placed on understanding the core democratic values along with the Declaration of Independence and the Constitution.

**This course is a graduation requirement.**

### **Advanced Placement American Government (Two Semesters)**

**(11-12)**

This course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. This course will include topics such as constitutional underpinnings, political beliefs and ideals, political parties and interest groups, institutions of national government, public policy, and civil rights and liberties. **NOTE: this class is for the serious, college-bound student. Students will have the opportunity to prepare and take the AP exam in American Government.**

### **World History A (One Semester)**

**(9-10)**

World History will teach students to use and interpret maps and other geographical representations that help organize information spatially. Students will examine human cultures, populations and activities and evaluate the interactions between humans and their environment. The class leads students through the early physical and cultural development of humankind. Students will compare and contrast river valley civilizations and other civilizations. They will pay particular attention to the ancient Greek and Roman civilizations and how they impact future civilizations. Moreover, the class compares and contrasts early civilizations in Asia and how they impact modern civilizations in those regions. **This course is a graduation requirement.**

### **World History B (One Semester)**

**(9-10)**

The second part of the World History class expands on the foundation laid in World History A, teaching students to describe human cultures and populations and their activities: migration, commerce, conflict and cooperation and the effect on the world today. Students look at the impact of European expansion on Asia, Africa and the Americas as well as the historical roots of the Renaissance and the Reformation and the far-ranging implications of each. Students will identify the major inventions of the Industrial Revolution and how they affected society. The class then delves into the causes, events and effects of World War I and World War II as well as the Russian Revolution and the formation of the Soviet Union. Students will look at the Post-World War II world, with special attention paid to Korea, Vietnam, the modern state of Israel and the Cold War. **This course is a graduation requirement.**

**American History (Two Semesters)****(10-12)**

This course introduces students to the broad themes of American History as is outlined in the standards and benchmarks of the plan for the statewide assessment of social studies. Students will investigate the interrelated problems of a democratic republic, economic growth, political and social institutions and how they affect cultural stability. The role of the United States in the world arena will be examined as it relates to national security and the promotion of the general welfare. Students develop an understanding of their historical heritage and apply the ideals of that heritage in making prudent decisions for themselves and the problems facing modern America.

**This course is a graduation requirement.**

**Advanced Placement American History (Two Semesters)****(11-12)**

AP American History is a yearlong course designed to cover the United States history from the American Revolution to the present. The class will be taught in a progressive order hitting such topics as Twain's Gilded Age, Theodore Roosevelt's Progressive America, WWI, The roaring twenties, the Civil Rights Era, FDR and the New Deal and WWII. Other topics will include Vietnam, Nixon and Watergate, as well as modern political events (which is just the tip of the iceberg). The AP American History differs from the traditional American History class by the amount, speed and depth in which material is covered. There is also a much greater emphasis on critical thinking and writing skills. Therefore, additional reading and formal writing is required of students. Focus is also on evaluation of material through both discussion and free response and document-based written essays. Students that choose to enter this class must also purchase class assigned novels, which will be decided at a later date by the teacher.

**NOTE: this class is for the serious, college-bound student. Students will have the opportunity to prepare and take the AP exam in American History.**

Prerequisite: Two letters of recommendation (forms can be obtained by the instructor) and a one page, typed essay on why you want to enter the AP American History class.

**Psychology (One Semester)****(10-12)**

This course provides a basic introduction into the world of psychology. Students will identify the goals of psychology and become familiar with the contemporary perspectives of psychology. Areas of psychology that will be studied in this class include personality, memory, intelligence, dreams and psychological disorders. This class will also cover social interaction and human behavior, with a goal of understanding why humans feel and act in certain manners in various situations.

**Economics (One Semester)****(9-12)**

This course introduces students to the basic principles of economics. The problem of scarcity is examined as it relates to individual choices, business choices, the interplay between economics and government, systems of economics and trade in an increasingly global economy. Students investigate environment, economic stability and prosperity, population growth and the distribution of wealth. They learn how to work with economic data and to interpret graphs and charts. Students develop an understanding of their economic rights and responsibilities which enable them to make prudent decisions for themselves and society.

**This course is a graduation requirement.**

**Contemporary American History (One Semester)****(10-12)**

Contemporary American History is an elective class for individuals who desire to learn about recent American History not covered in the standard American History class. The primary focus of the course is on the decades of the 1980's, 1990's, and the 2000's. Items to be covered fall into the categories of traditional American History: Politics, Economics, Society, and Culture. This course will place a special focus on cultural and societal shifts by studying changing trends in, fashion, music, television, films, and other events.

## **SPECIALIZED AREAS OF STUDY**

### **ISD Nurse Aide Training (Two Semesters)**

**(11-12)**

Students earn ½ credit toward high school graduation and a certificate for employment after successful completion of this training course. Students attend classroom and clinical training in nurse aide care. Parents must sign a parental consent form and must agree to ensure that the student has transportation to and from clinical sites. A TB test is required. Course work and clinical begin after school. The locations will be announced.

### **Cosmetology (Two Semesters)**

**(11-12)**

Juniors and/or Seniors may apply to the Michigan College of Beauty in Monroe, Michigan for the purpose of becoming a licensed cosmetologist. Students will attend Michigan College of Beauty in the afternoons and on Saturdays. Each year, students can earn three credits toward graduation for participation in this program. The Michigan College of Beauty encourages interested students to begin this program in their junior year.

Limited spots are available for Dundee High School students. Students will elect the cosmetology program on their course selection forms and then must interview at the Michigan College of Beauty. The Michigan College of Beauty makes all final selections for participation in the program.