

Potosi  
High School  
Course  
Handbook  
2017 - 2018

## **Educational Philosophy**

Education in the School District of Potosi should be a unified and continuous program, serving, and expressing the desire of the community for quality education for all students.

Therefore, all students should have opportunities to grow through student centered activities that emphasize the mental, emotional, behavioral, social, cultural, technological and physical aspects of living and learning.

All students should have opportunities to understand and appreciate American democratic principles.

All students should have the opportunities to achieve in environments most conducive to individual learning styles.

All students should have opportunities to develop and express their talents and abilities in diversified ways-to acquire, express, question, organize and apply knowledge.

All students should have opportunities to explore career possibilities.

## **School District Goals**

The school district of Potosi has been established to serve the educational needs of all children of the district. Therefore, the district shall strive to:

- a). Improve communication and community engagement.
- b). Maximize our use of Professional Learning time with an emphasis on:
  - the CESA 6 Teacher Effectiveness model
  - Response to Intervention and PBIS
  - Professional Learning Communities
  - Curriculum Development
- c). Increased use of data collection and data analysis
- d). Facility improvement and community communication

## **Scheduling Students for Classes**

Potosi School District develops class schedules for the following year each fall and spring.

Courses in the high school will be selected in consultation with parents, students, counselor and teachers. Registration for classes will be submitted through Skyward Access under the direction of the administration or during transition conference meetings.

At the discretion of the administration and the counselor, course changes may be approved through the first five days of each semester. After five days, the class will/may be recorded as an F if dropped.

Exceptions to the scheduling policy may be considered by the building principal.

**Students can take up to 8 classes each semester or could take 7 classes and have a studyhall.**

## Youth Options

Students in grades 11 & 12 may choose to enroll in a post secondary school for specific training. Applications must be authorized by the school board and the student will have to be admitted to the institution. Act 131 allows school boards to authorize a student to participate in classes, which are not offered at the high school. Any class which has a curriculum similar to that already taught at the high school will not be authorized unless it falls under the criteria established for attendance at a local technical college when 10 or more credits are taken. Under Act 131 technical colleges are only required to take students if there is space available. Act 131 states the district is only liable to cover the cost of 18 credit hours in a two-year period. This program also does not require school boards to allow students to take a class already passed or failed in the high school. Direct costs associated with the program are assumed by the school district if high school credit will be awarded. Act 131 also states, if a pupil receives a failing grade or fails to complete a course for which the school board has made payment, the school board may request reimbursement from the student/family. **If high school credit is not to be awarded, the cost of the YO Class is the student's/parent's responsibility. If there is a change in a student's college schedule you must notify the principal within 24 hours.** The local school board must be notified of a student's intent to enroll in an institution of higher learning. This is done by completing form PI8700A no later than **March 1** for a course to be taken in the fall, **October 1** for a course to be taken in the spring. This program does not eliminate current graduation requirements of the state or local school boards. A student who considers this program, will have to plan ahead, and **consultation with Miss Markham is a must.** If all conditions are met, including scheduling constraints, then the student must be admitted to a post-secondary school. This is based upon regular admission requirements, of the institution of higher education, and on a space available basis. For more information please call the principal or counselor at 763-2161.

## AP Course Options

AP Course Options are associated with Youth Options and are available online through the Wisconsin Virtual School. Interested students should contact Miss Markham or Mr. Uppena for more information. One of the main purposes for taking AP courses is to be able to take academically comparable college courses at the high school level for the opportunity to test out of college courses. AP courses must be scheduled in the fall semester in order to be eligible for the national AP exam that is offered in May.

## Programs for Children at Risk

It is the belief of the School District of Potosi that students need opportunities to develop fundamental qualities and abilities. Development of these qualities and upon the quality of experience the student has with home, school and community. This school program is designed to provide successful opportunities for students to become involved in school and extra-curricular activities. The intent is to develop a personal sense of responsibility for accomplishing expected social and academic tasks.

## Goals

To help students in need of assistance, as well as students at risk, learn to function in the school setting.  
To deal with personal, social and psychological needs as well as academic needs.  
To reinforce a student sense of values and morals.  
To communicate a sense of "caring" to the student and yet instill a sense of personal responsibility.  
To improve or maintain the academic performance of students in need of assistance and at-risk students.  
Students who are identified as at-risk for behavioral reasons will show an improvement in the following areas:

- a). a decrease in office referrals,
- b). a decrease in negative progress reports,
- c). a decrease in truancy or tardiness,
- d). a decrease in failure of class

## Graduation Requirements for the Potosi School District.

Students who graduate from Potosi High School are required to complete 25 credits through a combination of required and elective classes.

Required Classes: Computer Class	.5 Credits
Consumer Education	1 Credit
English	4 Credits
Math	3 Credits
Health	.5 Credit
Social Studies	3 Credits
Science	3 Credits
Physical Education	1.5 Credits

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Credits earned by required classes 16.5

Elective credits needed to complete 8.5

Potosi.....A Community of Character. Character comes from the home, the community, and the schools. Character brings out the best in all of us.

Challenge yourself – It's your future - Be the best you can be for the 2017-18 school year. We are very proud to have you be a part of our Potosi School District.

Mr. Uppena  
K-12 Principal

Potosi Schools  
Staff

Miss Molly Markham  
School Counselor

**Early Graduation – Students of Sophomore status may apply for early graduation if they meet the criteria set forth by the Potosi School Board approved policy – 345.61 / 345.61 Rule.** Early graduation applications may be picked up from the High School Office or the Guidance Office. Completed applications for Early Graduation of the 2018-2019 school year, must be submitted to by Feb. 4<sup>th</sup>, 2017.

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# **ART**

## **2D Art Concepts: Grades 9 – 12 One Semester – Course may be repeated.**

This course will allow students to study the Principles of Design and work with different mediums such as pencils, charcoal, pastels, pen and ink and printmaking. Drawing experiences will be extended to include painting with acrylic, watercolor and oil paints.

## **3D Art Concepts: Grades 9 – 12 One Semester – Course may be repeated.**

This course will allow students to learn advanced methods of hand building and throwing pots on the wheel. Sculpture is geared to the student interested in the three-dimensional concept of art and involves the exploration of various materials and their journey into space. Materials may include paper, plaster, wire, duct tape, paper mache and fibers. Realistic or abstract forms will be the result, providing student experimentation and imagination being utilized.

## **Studio Art: Grades 9 – 12 One Semester – course may be repeated.**

The course is designed for the serious art student who wishes to gain additional experience in advanced techniques in drawing and painting or ceramics and sculpture. It is geared to the student who has the desire to excel in one particular medium such as the potter's wheel, oil painting, watercolor painting, or a combination of media. Independent study will be encouraged.

## **Digital Photography One Semester: Grades 9 – 12 Prerequisite: None.**

This course offers students the opportunity to explore the world of photography. Students will use digital SLR cameras and state of the art imaging software to complete a variety of assignments including still life photography, portraiture, and photojournalism.

# **AGRICULTURE RELATED INSTRUCTION**

## **Introduction to Agriculture Grades 9 – 12 One Semester**

This class is designed to give a student an understanding of agriculture and its many related fields of study and the countless job and work opportunities available in Agriculture. Production agriculture will be discussed along with a look at weeds, farm safety, and the dairy industry. Areas of FFA including soils, crops, and livestock will also be discussed.

## **Agricultural Business/Farm Management Grades 9 – 12 One Semester**

This course is designed to give an extra edge to students entering America's #1 industry. This class will focus on employability skills that are crucial for today's graduates. Topics will include entrepreneurship record keeping, marketing, coops, taxes, agricultural law and successful management practices. Students will develop a concept of the importance of technology and an awareness of current issues in agriculture, which will help prepare the students for future success outside of the classroom.

## **Animal Science ES Grades 9 – 12 One Semester**

This class features an intense study of animal nutrition, animal production practices, reproduction, record keeping and livestock selection for show. It will also include a number of labs and fieldtrips that will enhance your learning in animal science. Completing this class with a B or better will earn the student credit in Animal Science at SWTC.



### **Environmental Science ES Grades 9 – 12 One Semester**

This class will consist of learning about the natural resources in our environment. Students will be involved with soil and water testing and analysis. Students will learn about fresh water systems and ecosystems that can be affected by pollution. Students will learn about prairies, watersheds and the history behind conservation. Wildlife management, outdoor safety, and recreation will also be topics for this class.

### **Horticulture I ES Grades 9 – 12 One Semester**

This class will consist of a basic learning of horticulture and practices involved in planting, transplanting, watering, fertilizing, pest control, harvesting and selling. Students will gain basic knowledge on how these processes are done and why. Knowledge of soil and the importance in horticulture will also be gained in this class.

### **Horticulture II ES Grades 9 – 12 One Semester**

The class will consist of a continuing learning of all the processes taught in Horticulture I. However, these processes will be expanded with many different types of growing media. Students will be able to select a specific project to be grown in greenhouse. Students will also be responsible for growing and keeping records of the plants for the annual spring plant sale. Different growing techniques and ways to grow plants will be examined and used.

### **Introduction to Food Science ES Grades 9 – 12 One Semester**

This class is an ideal resource for anyone interested in a comprehensive overview of the science of foods. Units that would be covered would be basic make-up of food and nutrition, to food composition and preservation, to environmental concerns and world food needs. You will learn about the science also get insight into career opportunities for those interested in working within food science industry.

### **Introduction to Veterinary Science Grades 9 – 12 One Semester**

This class is an introduction to the process of becoming a veterinarian and the things a veterinarian has to see and deal with. In addition to outlining career opportunities in this fascination field of study, this class will deal with topics on cells, tissues, systems nutrition, species comparison, principle of disease, disease prevention and diagnosis, basic surgery, and economic-decision making and veterinary practice.

### **Plant and Soil Science Grades 9 – 12 One Semester**

This class will consist of learning about the different types of crops grown in this area and throughout the U.S. The students will be required to make a weed and crop collection. Students will also learn about crop rotation, growing pastures, weeds, haymaking, and perennial forage grasses. Students will learn about soil content, conservation, and why or how plants are able to grow in soil. Nutrients needed to sustain plant growth will also be discussed.

### **Welding I Grade 9-12 One Semester**

This course will be focusing on the following welding techniques: selection and use of arc welding equipment, and the basic welding positions and types; also, selection and use of gas welding equipment and mastery of cutting, gas welding and brazing. Included in this will be safety, selection of steel, and spot welding.

## **Fish and Wildlife Management    Grades 9 -12    One Semester**

Interested in the wildlife that surrounds us? This course will focus on basic wildlife management, specifically the history, hunting regulations, upland game species, whitetail deer, waterfowl, fish, and endangered species. Wildlife management, outdoor safety and recreation will also be topics for this class. Projects include taxidermy, creating habitats for several wildlife, duck decoying and others.

## **Publications One Semester: Grades 10 – 12    Pre-requisite: None - Course may be repeated (Beginning to Advanced)**

This course focuses on graphic design and layout through production of the Potosi High School Yearbook. Students must be willing to work independently and cooperatively to meet publication deadlines. Students will develop a theme for the yearbook and provide all artwork, photography and copy. Students will also sell advertising for the publication. Students enrolled in the class should expect to periodically work outside the normal school day to cover extra-curricular events.

## **BUSINESS EDUCATION**

### **Accounting    I                    One Year    Grades 11-12**

This course provides an understanding of the basic elements and concepts of accounting systems. Activities include the accounting cycle, entering transactions in journals, posting to ledgers, end-of-period statements and reports, payroll systems, banking activities, taxes, uncollected accounts, depreciation, inventories and notes and interest. Some people use knowledge of accounting as a means of earning a living. Almost all people use knowledge of accounting in personal financial activities. Successful completion of this class can earn the student credit at SWTC. If you enjoy working with numbers and are interested in learning about managing money, accounting is the course for you! *This course is recommended for students who are pursuing careers in accounting, finance, business management, law, marketing, and the administrative assistant area.*

### **Accounting II                    Semester/One Year    Grade 12                                    Prerequisite Accounting I**

Students who enjoyed the first-accounting course will receive more in-depth training in this advanced course. Necessary skills will be developed for university business classes in accounting, related careers or for employment after high school. Students will expand their knowledge of manual and computerized accounting procedures. This course provides additional practice with the accounting system. Activities will include computer based application of the accounting concepts. This class most likely is on an individualized basis. Students taking this class must be motivated. Successful completion of this class can earn the student credit at SWTC.

### **Consumer Education –    1 Year    Grade 12 Required**

This course is required for graduation and provides practical, usable knowledge from which the students can benefit as they move into the rigors and demands of independent adult living. Consumer Education is designed for students to learn how to get the most from their hard-earned dollars. Students will be taught good management of personal business affairs, banking services, credit loans, installment buying, budgeting, housing, insurance, informed and skillful buying, consumer protection agencies, and the role of business and government in our economy. Emphasis is placed on developing personal economic decision-making competence.

### **Taking Care of Business One Semester Grades 9-12**

What is happening in the business world today? What are ethics? What is management? International Business? How do you plan a business trip? You will also be informed about how to succeed on the job, time management, and the 7 Habits of Highly Effective Teens. This course is an overview of management practices and principles. Major topics include management functions of planning, organizing and staffing. Time management and school and career management will also be discussed. *This course is recommended for all students planning to major in business in college.*

### **Virtual Business**

**One Semester – Grades 9-12**

This is a computer simulation class. Virtual Business is a business and marketing class centered around a highly visual computer simulation. You'll learn about marketing, entrepreneurship finance, and introduction to business. After lessons to learn about specific topics you will be in charge of a new store. You will be a convenience store owner in charge of all aspects of your store including pricing, purchasing, staffing, promotion, merchandising, location, security, financing and more. Lastly students in the class will compete to see whose store can make the most money.

## **COMPUTER SCIENCE**

### **Computer Applications One Semester Grades 9-12**

Take this class to put all of your computer knowledge together. The students will learn word processing, database, spreadsheets, and graphics software. Successful completion of this class can earn the student credit at SWTC.

### **Google Docs and MS Word One Semester Grades 9-12**

This class will teach you about using Google Docs to create, share, collaborate and publish your work. You will find that Google Docs can help you stay organized and keep on top of assignments. You never have to save your work; it happens automatically. Focus will be on learning the functions of both Google Docs and MS Word. Each has a place in your education and the workplace. A thorough coverage will enable you to transfer your knowledge and skills to other software packages. Successful completion of this class can earn the student credit at SWTC.

### **Introduction to Video Game Design**

**One Semester**

**Grades 10-12**

Are you ready to get in the game? **Introduction to Video Game Design** is a class that requires no previous knowledge of programming or game design. This class will introduce students to the fundamentals of video game design and provide hands-on experience using the freeware Game Maker game engine.

### **Advanced Video Game Design**

**One Semester**

**Grades 10-12 Prerequisite IVGD**

Advanced Video Game Design will pick up where Introduction to Video Game Design left off. The students will continue to create software for the computer, with an increased focus on learning a programming language and developing code to run in the background of the software. Both logical problem solving and mathematical skills will be required in order to create fully functional software.

## **WEB 2.0      One Semester      Grades 9 – 12**

This course is designed to teach students about emerging Internet technology such as blogs, wikis, social networking, google docs, glogster, edmodo, prezi, animoto, wordle, and the list goes on.... Students will explore not only how to harness the power of these new technologies, but the implications these technologies have on their lives. We will discuss proper use of web 2.0 technologies at home, school, and in the work place. We will also discuss digital citizenship and how student choices on the computer affect the world around them.

## **Web Quest Design      One Semester      Grades: 9 - 12**

This class will be designing a Web Quest for actual use in classrooms all over the country. You will survey the staff at our school to see what topics they would like to have a Web Quest for. The Web Quest you create might be anything from exploring history to predicting the future. You could design an activity to have students learn about the sinking of the Titanic as if they were actually there or maybe you will prepare a Web Quest that helps explain the structure of a cell. Ever wonder what life was like for teenagers when your parents were teens? Maybe your Web Quest will lead a student through what a day in the life of a teenager may have been like in the year back then or even in 1890! There are endless possibilities. This class is very hands on with unlimited possibilities!

## **ENGLISH**

### **English 9      One Year      Grade 9 Required**

This class is designed to introduce freshman to different types of literature, to continue to learn and implement the conventions of standard American English and to develop and strengthen student writing and communication. Students will study the basic literary elements through literature units on the short story, poetry, and drama. Students will read *Romeo and Juliet*, *Lord of the Flies*, *Tuesdays with Morrie* and *The Odyssey*. Students will have opportunities to write creative, informative and persuasive pieces. Additionally, students will plan, develop and execute group and individual projects and presentations.

### **English 10      One Year      Grade 10 Required**

This course is designed to review and expand the student's language skills, deepen their appreciation for complex literature and challenge them to improve their writing. Students will read Shakespearean comedy, contemporary fiction, and several short story selections. Students will conduct a self-directed unit in which they study the form and conventions of journalism, investigate a topic of their choice and write their own articles and present them to their class. Furthermore, students will conduct several writing projects that include ballad poetry, persuasive writing, and informative. There will be a focus on research and investigation throughout the year and students will participate in several group and individual projects that develop their research skills.

### **English 11      One Year      Grade 11 Required**

Through various American literary genres students will continue to develop oral and written communication skills. A continuing focus on writing will be to properly use sources to enhance writing. Using daily proofreading activities and weekly proofreading quizzes, students will develop language skills. Students will be required to complete three speeches: informative, entertainment and persuasive. Students will also be required to complete a research paper. Some emphasis will be given to testing for and exploration of post secondary options. A unit on media awareness and a unit on debate will also be included. Current events will be incorporated into the class. Students will be required to read a book of their choice per quarter outside of class. **\*\*Students may be assigned to an Honors class covering these topics based upon teacher recommendation.**

## **English 12 One Year Grade 12 Required**

Through various literary genres students will continue to develop oral and written communication skills through various presentations and writing assignments. The year's coursework focuses on preparing students for reading and writing at the post-secondary level. Students read challenging texts that include *Macbeth*, *Beowulf*, *Nineteen Minutes*, *Fahrenheit 451*, and *A Brave New World*. Students will have creative, informative, and persuasive writing tasks that correspond to the different texts read over the course of the year. Students will be challenged to develop their research skills in a variety of ways. The overall goal of this class is to utilize and expand upon previously learned skills so that students are prepared for the demands of post-secondary education.

## **AP English 12 One Year Grade 12 Required**

In this course, the equivalent of an introductory college-level survey class, students are immersed in novels, plays, poems, and short stories from various periods. The primary focus of this class is to enhance students' abilities to critically analyze various forms of literature. In doing so, students will be increase their college readiness. Students will read and write daily using a variety of multimedia and interactive activities, interpretive writing assignments, and there will be an emphasis on discussion. In addition, students will learn literary vocabulary and also recognize and understand literary devices. Students prepare for the AP Exam and for further study in creative writing, communications, journalism, literature, and composition as most of these classes are expected courses within the general education requirements for all universities. Students taking this course should be ready to dedicate time outside of the classroom as it is a college-level course.

## **DRIVER EDUCATION**

Driver Education will be offered through Southwest Technical College. Administration from SWTC will contact freshman during their spring semester.

## **WORLD LANGUAGE**

### **Spanish 1 (One Year) Grades 9-12**

This course is the first Spanish course offered to high schoolers and is suitable for students who have never had Spanish before or for students who have had some Exploratory Spanish in middle school. In Spanish 1, students learn to describe themselves and talk about their lives (school, family, extracurriculars, etc.). We study pre-conversation skills, speaking and writing in lists and simple sentences, and recognizing words and phrases when we're reading and listening. Topics in class are presented in Spanish and with real-world materials that show the culture of Spanish-speaking people around the world. Students will keep an electronic proficiency portfolio to demonstrate their progress throughout the course.

### **Spanish 2 (One Year) Grades 9-12 Pre-requisite: "C" or better in Spanish 1**

This course is the second Spanish course offered to high schoolers and is suitable for students who received a C or better in Spanish 1 (others with teacher permission). In Spanish 2, students learn to describe their daily lives and talk about familiar topics (vacations, daily routines, ordering food at restaurants, shopping, etc.). We study pre-conversation skills, speaking and writing in complete sentences and recognizing phrases and simple sentences when we're reading and listening. Topics in class are presented in Spanish and with real-world materials that

show the culture of Spanish-speaking people around the world. Students will keep an electronic proficiency portfolio to demonstrate their progress throughout the course.

### **Spanish 3/4 (One Year) Grades 9-12 Prerequisite: “C” or better in Spanish 2, 3**

This course is for students who have completed Spanish 2 or Spanish 3 with a C or better (others with teacher permission). It is a multi-level course in which Spanish 3 and 4 students learn together side by side. In Spanish 3/4, students learn to describe and discuss a variety of familiar topics (technology, cooking, driving, careers, the environment, etc.). We practice spontaneous conversation, speaking and writing in connected sentences and paragraphs, and recognizing the main idea and details when we’re reading and listening. Topics in class are presented in Spanish and with real-world materials that show the culture of Spanish-speaking people around the world. Spanish 4 students will complete a research project that involves writing and presenting in Spanish. All students will keep an electronic proficiency portfolio to demonstrate their progress throughout the course.

## **HEALTH**

### **Health 10 (Required) .5 credit One Semester 10 Grade**

Health is a half credit course, which alternates with Phy. Ed. 10. The class is designed to aid the student in developing into a healthy person on all levels: physical, mental and emotional. The class begins with units dealing with subjects such as emotions, self-image, stress, and mental health. Next they discuss physical health, nutrition, physical fitness, medicines, and drugs. The class ends with the focus Environmental Health and Human Sexuality.

## **MATHEMATICS**

To survive in the technological world today, every student with mathematical aptitude needs to study Algebra and Geometry. All universities require these two subjects for entrance. *Wisconsin Universities require three credits of high school math including Algebra I, Algebra II and Geometry. Algebra A and Algebra B is a two-year sequence which may be substituted for Algebra I with teacher recommendation.* For these reasons, all students with necessary skills will take Algebra and Geometry. Students with special academic needs may be granted a different sequence of high school math classes. The intent of this course of study is to provide an appropriate learning experience for everyone. **Note: Students successfully completing 8th grade Algebra I, will receive high school ELECTIVE credit – NOT – math credit and will still need 3 additional credits of high school math.**

### **Algebra A One year - Prerequisite: Recommendation of 8<sup>th</sup> grade teacher**

This is the first of a two-year sequence, which covers the same curriculum of the traditional Algebra class. The topics covered in this first of two year Algebra class are solving linear equations, graphing and writing linear equations, solving linear inequalities, solving systems of linear equations, linear functions, exponential functions, polynomial equations and factoring, and graphing quadratic functions.

### **Algebra B One year – Prerequisite: Successful completion of Algebra A**

This is the second of a two-year sequence, which spends time reviewing important topics learned in the first year and moves into solving quadratic equations, square root functions and geometry, rational equations and functions, and data analysis and displays.

**Algebra I      One Year      Recommended for Grade 9**

This course covers all the common core standards for an Algebra I class. Topics in this course include working with linear equations and graphing, linear inequalities and graphing, linear functions, exponential equations and functions, polynomials equations and factoring, graphing and solving quadratic functions, square root functions and geometry, rational functions and data analysis and displays.

**Algebra II      One-Year      Recommend for Grade 11**

**Pre-requisite: Algebra I and Geometry (minimum of a "C" average recommended).**

After an extensive review of Algebra I, Algebra II will cover the following new materials: type products, factoring, equations, fractional equations, functions and graphs, systems of linear equations, exponents and radicals, quadratic functions, logarithms, progressions, binomials, theorems, permutations, combinations, and probability.

**Applied Mathematics I      One Year      Pre-requisite: Teacher Approval**

This course is designed to help the student develop and refine job-related mathematics skills. This course includes material that focuses on arithmetic operations, problem solving techniques, measurement skills, geometry, data handling, simple statistics and the use of algebraic formulas. The main emphasis of this class is on the ability to understand and apply functional mathematics to solve problems in the world of work

**Calculus      Pre-requisite: Pre-calculus      One Year**

This calculus course is designed for those students who may be taking calculus sometime in college. By studying calculus in high school, the intent is to make the first course in calculus at the college level somewhat easier for the student. Topics covered in the first semester of calculus include Limits and their properties, Differentiation, Application of differentiation and Integration. Topics covered in the second semester of calculus include logarithmic, Exponential and other Transcendental Functions, Applications of Integration, Integration Techniques and Infinite Series.

**Geometry      One Year      Recommended for Grade 10      Pre-requisite: Algebra I**

Geometry is the study of the properties of plane and solid geometric figures. This course will emphasize the fundamental facts of geometry that are needed in everyday life. Students are encouraged to use the algebra they have learned in earlier courses to solve problems.

It includes the idea of deductive proofs and provides the students with an opportunity to learn to reason logically.

**Pre-Calculus      Prerequisite: Algebra II      One year      Recommended for Grade 11or 12**

Pre-calculus is intended for students who have completed 2 years of Algebra and one year of high school Geometry. Pre-calculus is designed for average and above average students who would like to prepare for college mathematics, review for college entrance examinations or simply to study more mathematics. Topics covered include functions, transforming graphs, inverse functions, polynomials & rational functions, exponential and logarithmic functions and their graphs, an in depth look into trigonometry including angle measure, right angle trigonometry, trigonometric functions, equations, and their graphs, and trigonometry identities. Systems of equations/inequalities and matrix work will also be discussed. It is not recommended that students take the second semester of Pre-calculus without taking the first semester of Pre-calculus.

**Technical Mathematics    One Year    Pre-requisite: Algebra, Geometry and Teacher Approval**

Technical Math is recommended for students going to Technical College who need a high level career based math. It is recommended for students who have completed Algebra I and Geometry, with a grade of “C” or better. Topics covered will include practical applications in solving problems with equations, roots and powers, working with statistics and probability, using right triangle relationships, geometry, and using linear equations.

**MUSIC**

**Vocal Music    One Year    Grades 9-12    Courses may be repeated.**

Concert Choir is offered everyday of the week, with students also in band alternately Tuesday, Thursday, and every other Friday. This class is open to any student interested in singing. Attendance at concerts, other performance opportunities and Large Group Choral Festival is mandatory. The content of this course is based upon the WI DPI standards for music education. Assessment of singing skills is based on performance guidelines for Wisconsin School Music Association and individual goals set by student and instructor. Students are encouraged to participate in the WSMA Solo/Ensemble Festival. Students will be required to prepare a solo/ensemble, but not required to perform at the festival. Concert performance and improvement of specific singing skills are the basis of grades.

**High School Band    One Year    Grades 9-12    Course may be repeated**

High School band is offered to any student who has had at least one year of individual lessons on an instrument. Emphasis is placed upon the further acquisition and improvement of skills throughout their years in band. Full band meets on Mondays, Wednesday and alternating Fridays, with individual or small group lessons required weekly. Activities include numerous public performances with the pep band, concert band, and other ensembles as well. The curriculum offers instruction in various musical styles.

**PHYSICAL EDUCATION**

The basic requirement for graduation is 1.5 credits of Physical Education.

Freshman = Required 1 Semester (may be taken entire year)

Sophomore = Required 1 Semester (1quarter in semester. 1, and 1qtr. in Sem.2)

Junior/Senior = Required .5 credits during JR or SR years (any additional can be taken as an elective)

**Note: Only 1 credit of Physical Education may be taken during a school year.**

**Physical Education    One semester or year – Grades 9 thru 12 – May be repeated.**

This course introduces students to different recreational and competitive activities. A variety of lifetime activities will be stressed. This class meets daily for one semester. Major units included in this class is golf, archery, flag football, soccer, volleyball, basketball, recreational activities, speedball, team handball, eclipse ball, floor hockey, lacrosse, softball, physical fitness testing, lifetime fitness (unit).



## **Physical Education 10**

One semester - This class alternates with Health 10 and meets on a quarterly basis. CPR certification will be added. The class builds upon skills and activities introduced in Grade 9, continuing the competitive atmosphere of peer contact and developing leadership and participation.

**Personal Fitness – May be repeated.** One semester or year - **Pre-requisite** - Second semester sophomore status, junior or senior.

This class is designed for the highly self motivated. The main focus will be participation in a personal strength and conditioning program. Students will implement their own individual program using basic to advanced strength and conditioning training principles. Students will participate in weight training, speed and agility programs and aerobic conditioning workouts. Grading will be based on participation, record keeping, knowledge of exercises, and improvement from various physical pre-tests.

## **SCIENCE**

### **Anatomy and Physiology    One-Year Pre-requisite: Biology**

This course will explore human anatomy and physiology extensively. The course begins by building a solid foundation in biochemistry, cellular biology, genetics, homeostatic mechanisms, and medical terminology. Having achieved the former, and intricate exploration into the systems associated with support and movement, integration and coordination, processing and transporting, and the human life cycle ensue. The dissection of preserved cats parallels the study of human anatomy and physiology. The course concludes with a look at human growth and development, as well as human genetics. To highlight the topic, a trip to UW-Platteville's cadaver lab will occur in the spring. Two major research papers are required throughout the year.

### **Biology    One year    Grade 10 (Required)**

This course will focus upon the diversity of life forms, while elucidating their relationships and fundamental unity in form and function. The biological themes upon which the course is based include unity within diversity, homeostasis, energy, systems and interactions, and natural selection. During the first semester, emphasis will be placed upon the nature of science, cell theory, biochemistry, genetics, disease, and simple life forms. During the second semester, emphasis will be placed upon both invertebrates and vertebrates, to include hands-on learning through the dissection of preserved specimens. The course will conclude with a study of humans and ecological principles, especially as they apply to the preservation and conservation of our environmental legacy.

### **Chemistry    One Year    Recommended for Grade 11    Pre-requisite: Algebra I is recommended**

This course is designed for students who are interested in continuing science study into the behavior of matter. The course includes the following topics: scientific observation and measurement; chemical symbols, formulas, equations, and reactions; nuclear and electron structure of atoms and molecules; the periodic table, solutions; acids, bases, and salts; electrochemistry; nuclear chemistry; and organic chemistry. Grades are earned on the basis of daily participation in class work, written assignments, lab activities and tests.

**Environmental Science & Biological Techniques****One Semester****Grades 9 - 12**

First priority is given to students taking the class both semesters. Students may choose to take only one section in either first or second semester. This class will expose students to our natural resources and the techniques and processes used to determine the quality and quantity of our natural resources. It will involve use of maps, compasses, Botany, Zoology, Water Quality, Tracking, Trapping, Specimen preparation & Identification.

**Physical Science****One-Year****Grade 9 (Required)**

The main part of this course studies facts, terms and applications of the physical sciences of chemistry and physics. Topics of study include: scientific career; methods; equipment and measurements; the make-up of chemicals encountered in everyday life; energy production, use and conservation; force and motion; general science news and science magazine topics. Grades are earned on the basis of daily participation in class work, written assignments, lab activities and tests.

**Physics One Year Recommended for Grade 12 Pre-requisite: Algebra I, Geometry and Trigonometry are strongly recommended.**

Physics is a science, which deals with forms of energy and their uses. The first semester covers the traditional physics topics of force, motion, energy, power, acceleration and inertia. The second semester is a selection from advanced topics such as electricity and electronics, light waves and sound waves, thermodynamics, energy production, astronomy, or nuclear physics. Grades are earned on the basis of group and individual lab work, daily assignments and tests.

**SOCIAL STUDIES****Current Events One Semester Grades 11-12**

This class will encourage students to investigate current issues in the news, engage students in discussion, and will review modern events of historical significance. Newspapers, magazines, and the Internet will be used as primary resources for information. Incorporating the smart board with interactive news sites, debates over current issues and presentations are new additions to this class. A great deal of time will be spent discussing current events, their impact, how they were dealt with, and people's reaction to them.

**Geography Grade 11 Semester 2 (Required)**

This class is designed to help students understand the basic physical, human, economic, political and cultural aspects of geography around the world. Students learn the location of countries around the world as well as their capitals and physical features. We also take a close look at the United States; the location of states, capitals and physical aspects of our country. The class will take what they have learned throughout the semester and students will create their own country.

**Government Grade 11 Semester 1 (Required)**

This class is concerned with the study of U.S. citizenship and how our government in the United States works. Emphasis is placed on the various levels of the government (Federal, State, and Local) and the 3 branches of government (Legislative, Judicial, and Executive). Investigating how these branches work and how the system of checks and balances keeps everything in order while maintaining equality is a high priority.

**Psychology      One Semester      Grades 9-12**

Psychology is the study of human behavior, developmental and mental process. We investigate topics such as memory, intelligence, infancy/childhood, personality, consciousness, as well as psychological research methods. Throughout the class you will learn about who you are and why many do some of the things you do through PSI'S – Personal Skills Inventories. We may also participate in and conduct several experiments.

**Sociology      One Semester      Grades 9-12**

Sociology is the study of why people behave the way they do. What motivates them to act in a certain way? This class will cover a wide variety of topics that may change due to the make-up of the class. We will dive into the criminal mind and investigate what makes a person commit a crime. How are they different from the rest of the people that don't commit crimes? We will look at the issue of racism and discrimination and try to understand what causes people to hate. We will look at the idea of family and the influence people close to us have on our daily decisions.

**United States History      One year      Grade 9 (Required)**

The study of U.S. History during the freshman year will cover the period of time from WWI to the present. It will involve an examination of major patterns and events that have involved our nation in its past. Major topics to be covered are as follows: WWI, the prosperity of the 1920's, the Great Depression, Prohibition, WWII, the Cold War, the Korean War, the turbulent 60's, the Cuban Missile Crisis, Vietnam, Watergate, the Equal Rights Movement, Desert Storm, and current topics of today.

**World History      One year      Grade 10 (Required)**

A survey course of all the elements, which have affected the development of the western culture as we know it today. Some topics are treated in more detail than other Greek and Roman civilization, medieval period, the reformation and the renaissance are major topics. Also covered are pre-historic and early history of the people of the Middle East, the native people of Africa and the Americans. The purpose is to give the students a basic knowledge of why societies have developed into what they have become today.

## **TECHNOLOGY EDUCATION**

### **Introduction to Computer Aided Drafting and Design**

**Grades 9 – 12   One Semester   *Pre-requisite: None.***

This course introduces the fundamentals of computer-aided drafting and design. Basic computer hardware, software, operating systems and file management will be discussed. A "hands-on" approach allows students to learn sketching and dimensioning techniques, how to construct 3-dimensional models and how to create and plot working drawings (2-dimensional orthographic projections). The course provides students with the skills to plan, prepare and interpret drafting documents. Students will develop these skills through hands-on experience producing construction and fabrication drawings at CADD workstations.

# Introduction to Engineering and Design

**Grades 9 – 12**

**One Semester**

*Pre-requisite: None.*

Introduction to Engineering and Design (IED) uses a “hands-on,” problem-solving approach that allows students to learn the fundamentals of engineering design and development through the use of dynamic, real world situations. Students learn to use the Design Process to solve problems in a way that drives product development and innovation. Students use leading edge technology, including 3D modeling (drafting) software, and summary statistics construct and test prototypes.

## Advanced Drafting and Solid Modeling

**Grades 9 – 12**

**One Semester**

*Pre-requisite: Introduction to Computer Aided Drafting and Design or Introduction to Engineering and Design. The permission of the instructor.*

This continuation of **Introduction to Computer Aided Drafting and Design** allows students to explore advanced concepts in Computer Aided Drafting and Blueprint Reading including: Geometric Constraints and Dimensioning and Tolerancing. Using a “hands-on” approach, students will learn how drafting activities coordinate with Rapid Prototyping and CNC Machining to form the backbone of today’s modern manufacturing.

## Engineering Physics 1

**Grades 10 – 12 One Semester** *Pre-requisite: None. An understanding of the Design Process is helpful.*

Students will utilize activity-project-problem-based (APPB) learning approach to learn about Science, Mathematics and Physics behind Simple Machines and Compound Machines; Electricity, Electrical Power, and Electronics; Thermodynamics and Fuel Cell Technology. Students will also learn about Vector forces and Projectile motion.

## Modern Manufacturing

**Grades 10 – 12 One Semester**

*Pre-requisite: Introduction to Computer Aided Drafting and Design or Introduction to Engineering and Design. The permission of the instructor.*

Students will develop real world skills used in modern manufacturing environments through a “hands-on,” problem solving approach that requires students to design and manufacture parts to specific tolerances. Students will learn how 3d-printers, CNC milling and machining, robotics and precision measurement are revolutionizing manufacturing.

## **Robotics**

**Grades 9 – 12                      One Semester**

***Pre-requisite:    Introduction to Computer Aided Drafting and Design or Introduction to Engineering and Design. The permission of the instructor.***

Students will utilize an activity-project-problem-based (APPB) learning approach to design, construct, program, evaluate and troubleshoot operator controlled and autonomous robots that can perform a variety of tasks from the simple to the complex. Students will learn to utilize Basic Output and Input Programming; While and If-Else Structures; Variables and Functions to operate robots and manage tasks.

## **Engineering Physics 2**

**Grades 10 – 12 One Semester    *Pre-requisite: None. An understanding of the Design Process is helpful.***

Students will utilize activity-project-problem-based (APPB) learning approach to learn about the Science, Mathematics and Physics that govern the design of modern structures. Emphasis will be placed on the physical properties of materials that influence the design of buildings and bridges. Students will also investigate Fluid Power, Hydraulics and Pneumatics.

## **Architectural Drafting and Design**

**Grades 10 – 12                      One Semester**

***Pre-requisite:    Introduction to Computer Aided Drafting and Design or Introduction to Engineering and Design. The permission of the instructor.***

Students learn about various aspects of architecture design and drafting. Students will use Architectural Drafting software as they learn to design residential and commercial structures from the ground up. Particular emphasis will be placed on topics including meeting the design concerns of clients, energy efficiency, building codes, green construction and water runoff.

## **Construction Systems**

**Grades 9 – 12                      One Semester**

***Pre-requisite:    Introduction to Engineering and Design, Introduction to Drafting and Design, Home and Auto or with the permission of the instructor.***

This course introduces students to the construction process and basic constructions systems. Students will study the planning process and the construction of foundation systems, floor, wall, and roof framing. This is a hands-on course. Students will be divided into work crews that will complete a variety of real world construction projects.

## Home and Auto

**Grades 9 – 12**      **One Semester**      *Pre-requisite: None.*

This course is designed for the student who has not taken other introductory Technology Education courses. The course is built around a wide variety of hands-on activities designed to provide an opportunity to experience and develop occupational, vocational and avocational (hobby/homeownership) skills that should be useful throughout their lives. Students begin by reviewing basic hand and power tools that are essential to home and automobile maintenance and repair. Students will learn the basics of home maintenance, energy efficiency, and electrical and plumbing repair. Students will also learn how to purchase automobiles and perform routine maintenance, and maximize auto safety and performance.

## Woodworking

**Grades 9 – 12**   **One Semester**   *Pre-requisite: None, but an understanding of Drafting and Design will be helpful.*

This course focuses on exploratory experiences that will provide students the basic skills necessary to function in any manufacturing environment. The course emphasizes project planning and power tool safety through the creation of woodworking exercises and projects. The course may be repeated with the permission of the instructor. Beginning students will complete projects selected by the instructor. Advanced students will develop and select their own projects with input from the instructor and their parents.

## Electromechanical Design and Development

**Grades 10 – 12**      **One Semester**

*Pre-requisite: Introduction to Engineering and Design, Introduction to Drafting and Design, or with the permission of the instructor.*

This course is Blue Collar STEM. Students will utilize activity-project-problem-based (APPB) learning to design and manufacture high-mileage/electrical powered vehicles and/or robots that can be utilized in competitive events. Students will be using their hands and their minds to put science, Technology, Engineering and math skills to work solving real world problems.

Students will have the option of forming discrete teams to research, develop and build battery powered vehicles, fuel efficient motor driven vehicles, or robots capable of operating autonomously to accomplish a variety of tasks.

Students will utilize:

- The Design Process to guide themselves through the design, development, construction and testing of their projects.
- A variety of industry based, software packages to design their projects and program their vehicles and robots.
- Modern manufacturing processes (CADD and CNC Machining) and traditional shop tools (welding, brazing and a variety of task specific processes) to build and assemble their projects.
- Knowledge of electricity, electronics and mechanical engineering to fine tune their projects.

## **LEARNING OPPORTUNITIES AND EDUCATION FOR EMPLOYMENT**

### **Learning Center – Course will be assigned by the instructor.**

Students enrolled in learning center will focus on meeting goals set for them in their Individual Education Plans. Learning Center curriculum will be modeled after what is happening in math, reading, and language arts classes. Special education staff will pre-teach, teach, and re-teach topics covered in the regular education classrooms. Various software and assistive technology will be introduced in an effort to support and accelerate academic growth. Students taking learning center will also have an opportunity to focus on social skills, life skills, and transitional skills.

### **Self-Advocacy - Offered for the 2015-16 school year.**

Self-advocacy is an opportunity for special education students to learn about their rights and responsibilities as they prepare to transition to adulthood, employment, and post secondary education. It is offered every other year and recommended for sophomores and juniors in the special education program. Students take this course in the fall of their sophomore, junior, or senior year in an effort to meet their IEP transition goals. The course aims to teach students about their individual disability and how to advocate for appropriate accommodations. Students will also learn about their legal rights and responsibilities under the government acts IDEA and ADA. In this course, special education students will develop a list of resources they may need upon entering post secondary education or the workforce, and they will create a plan for disclosure. Other topics covered include goal setting, employment and college searching, and the updating of employment documents such as a resume and cover letter.

### **Service Seminar    One Semester    Course may be repeated.**

#### **Grades 11 and 12    Student placement will be determined by the Counselor or Principal.**

**Service Seminar** is an opportunity for students to gain career experience by showcasing their leadership in real-life project development. Examples of work may include tutoring, making bulletin boards, making copies, helping with recess supervision, or program development. Placement by office will commensurate with district need/student ability.

### **Youth Apprenticeship**

Youth apprenticeship programs offer students the opportunity to earn while you learn. Students will engage in a variety of school-based and work-based learning activities. Depending upon the program the student selects, school based instruction takes place at either Potosi High School or Southwest Technical College. A student's employer delivers work-based learning. Opportunities exist in the following fields: Health Services, Auto Tech and Auto Collision, and Finance. There are two-year and one-year programs. **See instructor or counselor for more information.**

## Work Experience (First Semester Only)

Grades 11 – 12            One Semester

*Pre-requisite: Introduction to Engineering and Design, Introduction to Drafting and Design, or with the permission of the instructor.*

The work experience program offers students the opportunity explore their career goals and to study current issues in the workplace. Topics include employability skills, time management, employee/employer relations and how to deal with customers. **Students enrolled in the course can enroll in the Job Site Class** and be released from school in order to work in private industry. Students can receive school credit for employment outside the school (one hour/day first semester and up to 2 hours/day second semester with permission). **See Instructor or School Counselor for more information.**