

2016-17 Course Planning Handbook

Fredericktown High School

Every day, everyone learning and adapting to excel in a changing world

Dear FHS Parents and Students,

Selecting appropriate courses is an important process requiring time to research courses, to discuss proper course selections with teachers, and to look ahead at areas of interest after graduation. This sounds like a lot, and it is, but certainly well worth it considering the long-term implications.

Choosing courses is important to all students and equally important to the operation of the high school and the district. Once course requests are compiled, the department leaders, principal and school counselor determine the number of sections and teachers needed to fulfill the requests. The need for books, desks, and other equipment is considered. All of these decisions have financial implications. It is crucial that careful consideration be given to course choices.

Be sure to take time to read these sections:

- Graduation requirements
- Honors and awards requirements
- Procedures and deadlines for adding and dropping classes
- Athletic eligibility

The best schedules are made when students and parents have conversations about current interests and possible plans after high school. Consulting the school counselor and teachers is also encouraged. If there is anything my office can do to assist you, please do not hesitate to contact us.

Sincerely,

Doug Potts
Principal

TABLE OF CONTENTS

EDUCATIONAL PHILOSOPHY	4
PARENTAL RESPONSIBILITY	4
GENERAL REMINDERS	5
COURSES OF STUDY	5
GRADUATION REQUIREMENTS	6
GRADUATION REQUIREMENTS 2016-2017	6
GRADUATION REQUIREMENTS 2018-BEYOND	7
GRADE CLASSIFICATION	8
HONOR ROLL AND MERIT ROLL	8
SELECTION OF VALEDICTORIAN/SALUTATORIAN	8
CLASS RANK AND GRADUATION RECOGNITION	8
CREDIT FLEXIBILITY	9
COURSE FEES	9
CRITERIA FOR AWARDING THE DIPLOMA WITH HONORS	10
NCAA @ NAIA ATHLETIC SCHOLARSHIP/ELIGIBILITY	13
ART	15
BUSINESS	16
ENGLISH	17
FOREIGN LANGUAGE	18
HEALTH	19
MATHEMATICS	19
PROJECT LEAD THE WAY	21
MENTORSHIP PROGRAM	21
MUSIC	21
PHYSICAL EDUCATION	22
SCIENCE	22
SOCIAL STUDIES	24

EDUCATIONAL PHILOSOPHY

The Fredericktown Board of Education believes that:

- Education contributes to the continuous improvement of our democratic society, and the cultures which exist through the development of concerned, contributing and patriotic citizens.
- The dignity and worth of individuals will be respected, and everyone will be given the opportunity to participate in our society to the best of his/her ability.
- The educational program should be conducive to the maximum intellectual, physical, social, and emotional development of all students.
- Basic knowledge, skills, understanding, and appreciation of differences are necessary for full life functioning.
- The development of self-appraisal skills and decision-making techniques should help students to assume the responsibility for setting realistic, immediate, and long-range academic and career goals.
- The development of moral and ethical values is an important aspect of personal maturity for which parents should assume the primary responsibility; however, the school will strive to reinforce their efforts.
- Continuous physical, mental, and emotional growth and development should be prompted through the maintenance of a personalized and appropriate educational program for our students.
- The development and implementation of a program of continuous evaluation based upon stated goals and objectives is necessary for effective program revisions and improvements.

PARENTAL RESPONSIBILITY

Parents need to become involved in their student's education at all levels. Following is a list of parents' responsibilities:

- Parents are expected to speak directly with the teacher or principal about any concerns or matter the parent believes is important to the academic or social welfare of a student.
- Parents are expected to become knowledgeable about their child's progress in school. Grade reports are periodically sent home, grades can be viewed on line, and parents are encouraged to contact teachers at school. If necessary, parent-teacher-student conferences should be arranged to discuss the student's overall progress.
- Parents are expected to encourage their students to complete homework assignments, and to provide students with a supervised time and place at home to complete schoolwork.
- Parents are expected to inform the school about changes in address, phone numbers, e-mail addresses or special information about a student concerning medical, social, or custody matters that may affect their student at school.
- Parents are expected to share responsibility for their student's behavior and academic progress in school. Parents may provide the essential influence needed to assist the school staff when discipline or academic concerns occur.

GENERAL REMINDERS

1. Guidelines for schedule changes:
 - a. Students will receive a copy of their schedule for verification by the middle of May.
 - b. Students will have until June 15th for a "Change of Mind" schedule change. Review both first and second semesters.
 - c. After June 15th, **only** the following changes will be allowed during the first five days of school and the first three days of the second semester: **(A \$25.00 fee will be assessed)**
 - Upgrading your schedule - adding a class in place of study hall
 - Dropping a class because of "no" study hall
 - Level change - teacher recommendation only
 - A sound educational reason as evaluated by the Guidance Counselor and/or Principal
 - d. Students must submit a completed Add/Drop Form to the Guidance Office by June 15th in order for changes to be implemented. The Guidance Counselor or Principal must approve all changes.

2. Guidelines for scheduling procedures:
 - a. A full time student is expected to take a minimum of 6.0 credits per year. The exceptions are students in the CCP program.
 - b. Students may have no more than 2 study halls per day.
 - c. Students will receive a "DF" (Drop/Fail) grade for courses dropped after the first three weeks of school. They will be assessed a \$25.00 fee, a "DF" will appear on their transcript, and this will count in determining their GPA. The exception to this is approved level changes. Exceptions may be made for extenuating medical circumstances.

3. Students may not take an independent study that mirrors courses offered within the regular program of study, unless they are not available when needed, or will not be taken for credit.

4. Students may not retake courses for credit or to increase their GPA.

5. Some courses listed in the handbook may not be offered due to conflicts or lack of enrollment.

COURSES OF STUDY

Classes offered at Fredericktown High School are arranged in Courses of Study, each designed to meet the different interests and needs of students.

1. College Preparatory - The College Preparatory Course of Study is designed for students intending to continue their education after high school. Students should pay particular attention to the requirements of colleges, and should consult frequently with their guidance counselor regarding proper course selection. College preparatory classes are marked as such in this handbook.

2. Vocational Agriculture Education -The Vocational Agriculture Department introduces and prepares students for a broad range of careers in agriculture. While FHS is not a trade or industrial school, the experiences and knowledge gained in the classes prepares students for gainful employment.

Students who wish to go into this field can do so by taking the courses required by the State and Local Boards of Education and those courses offered in this vocational field, in addition to some elective courses. Students not going to college but who desire farming for a career should select general subjects that would most benefit them after graduation. Students who plan to attend college can take four years of agriculture, along with college preparatory courses.

3. Vocational/Knox County Career Center - The Knox County Career Center (KCCC) provides students with in-depth training in specific vocational skills. Normally, students apply for admission in January of their sophomore year for a two-year program. Some juniors apply for a one-year program for their senior year.

- a. To apply, a student must satisfactorily complete nine credits during his/her freshman and sophomore years at FHS that include requirements for graduation.
- b. Career Based Intervention (CBI) is offered for selected sophomores. Selection is made at the conclusion of the ninth grade year.
- c. Selection for the KCCC is also based on grade average, attendance records, counselor recommendations, and the size or enrollment in courses at the Career Center.
- d. Junior students may apply for admission to the KCCC in January for admission as a senior in the areas open to senior students.
- e. Students at the Career Center are members of the Fredericktown student body and may take part in all extra-curricular activities. Upon completion of a course of study at the KCCC and all other graduation requirements, students will receive an FHS diploma.

GRADUATION REQUIREMENTS

GRADUATION REQUIREMENTS	
CORE ACADEMIC AREAS	CREDITS
ENGLISH	4
MATHEMATICS: must include Algebra 2 or an equivalent unless an exemption is granted	4
SOCIAL STUDIES: must include 1 credit of World Studies, 1 credit of American History, and 1 credit of American Government	3
SCIENCE: must include 1 credit of Physical Science, 1 credit of Life Science, and 1 credit of advanced science (see Science Department offerings)	3
HEALTH	0.5
PHYSICAL EDUCATION: must include PE 1 and PE 2. PE exemption may be available.	0.5
ELECTIVES: Any credits attained in core areas above the graduation requirement or courses offered in the following departments: Agriculture, Business/Technology, Fine Arts, or Foreign Language. FHS requires .5 credit of Personal Finance and .5 credit of Economics. 1 credit must also be Fine Art.	6
TOTAL CREDITS REQUIRED TO GRADUATE	21

The following are the new graduation requirements that take effect with the class of 2018. This information can be found on the Ohio Department of Education website at: <http://education.ohio.gov/Topics/What-s-Happening-with-Ohio-s-Graduation-Requiremen/Graduation-Requirements-2018-Beyond>

REQUIRED COURSES

The new requirements did not change the current courses or number of course credits that students must complete to be eligible for graduation.

ASSESSMENTS

In addition to course credits, students will earn points toward graduation on seven end-of-course exams. These exams will replace the Ohio Graduation Tests.

The courses in which students take an end-of-course exam will be: English I and II, algebra I, geometry, integrated math I and II, physical science, American history and American government. Beginning in 2015-16 districts may have the option to use the state end-of-course exams to replace their current course final exams and use the state’s test as part of the class grade. This will help avoid double testing in future years.

Students can earn from 1-5 points for each exam, based on their performance.

- 5 – Advanced
- 4 – Accelerated
- 3 – Proficient
- 2 – Basic
- 1 – Limited

Students who take physical science, American history or American government as part of Advanced Placement, International Baccalaureate or college dual credit programs can use their scores from the programs’ end-of-course exams in place of the state end-of-course exam scores to accumulate graduation points.

A student who earned high school credit in any of the above courses before July 1, 2014, automatically will receive a score of three points per course exam toward the total points needed for graduation. Middle school students this year who take one of these courses for high school credit must take the corresponding state end-of-course exam in this school year.

EXAM RETAKES

Students that score below proficient on an exam may retake it after they receive some extra help on the material. Students that score proficient or higher on an end of course exam can retake exams only if, once they take all the exams, they have not met the minimum graduation points to graduate. In this case, a student can retake any exam after receiving some extra help on the material. The same rules apply to substitute exams, which may be used interchangeably with approved tests.

GRADUATION POINTS

With few exceptions, students must accumulate a minimum of 18 points from scores on their end of course exams to become eligible for a diploma.

MORE FLEXIBILITY WITH STUDENTS AND FAMILIES

Students who do not earn the required number of graduation points can still meet the requirements for a diploma if they earn a remediation-free score on a national college admission test. This assessment will be given to students free of charge in the fall of their junior year starting with the graduating class of 2018.

Students also can qualify for graduation by earning an approved industry-recognized credential and achieving a workforce-readiness score on a related job skills assessment. The selection of those assessments is in progress.

GRADE CLASSIFICATION

All students need to complete 21 credits to be eligible to graduate. Therefore, class designation is assigned by the number of credits earned toward graduation at the end of the regular school year.

- Freshman – 1st year student or student who has earned up to 5.49 credits
- Sophomore – 2nd year student or student who has earned 5.50 – 10.99 credits
- Junior – 3rd year student or student who has earned 11 – 16.49 credits
- Senior – 4th year student or student who has earned 16.5 or more credits

HONOR ROLL AND MERIT ROLL

The honor and merit rolls are compiled at the end of each grading period. The honor roll designation recognizes students earning a quarterly GPA of 3.9 or above. The merit roll designation recognizes students earning a quarterly GPA of 3.00 – 3.89.

In calculating the overall average, all courses will be used and one-quarter and one-half credit classes count only one-quarter and one-half the value, respectively, of full credit subjects. Grades will be carried out to the hundredths place.

SELECTION OF VALEDICTORIAN/SALUTATORIAN

1. The valedictorian shall be the graduate(s) who has/have the highest cumulative GPA at the end of the eighth semester.
2. The salutatorian shall be the graduate(s) who has/have the second highest cumulative GPA at the end of the eighth semester.
3. To be eligible for selection as valedictorian or salutatorian, a student must take at least one AP class.
4. Co-valedictorians and/or co-salutatorians may be selected where there are slight differences in GPAs occurring as a result of either weighted or un-weighted classes and/or where other factors or circumstance exist, which an administrative committee determines relevant in making such decisions.
5. Any violation of the student conduct code or the student handbook during a student's high school career may be grounds for a student being ineligible for consideration for valedictorian or salutatorian, or for removal from the position after being selected.

CLASS RANK AND GRADUATION RECOGNITION

Cumulative GPA will determine class rank. All students earning the same GPA shall receive the same class rank. GPA will be figured using final course grades and be computed to the hundredths place.

To recognize academic achievement, the following designations have been established:

Highest Honor and Academic Distinction	GPA of 4.01 and above
High Honor	GPA of 3.8 to 4.0
With Honor	GPA of 3.5 to 3.79

A student must take at least one AP class to be considered for highest honors.

CREDIT FLEXIBILITY

The Fredericktown Board of Education recognizes that an effective educational program is one that provides opportunities for students to customize aspects of their learning around their respective needs and interests. Credit Flexibility is one method to motivate and increase student learning by allowing access to more resources, customization around individual student needs and the use of multiple measures of learning.

Credit Flexibility shifts the focus from 'seat time' to performance. Students can earn units of high school credit based on an individually approved Credit Flexibility plan. The intent of Credit Flexibility is to meet increased expectations for high school graduation in response to globalization, technology and demographics, and to meet the demand for 21st century skills.

To successfully earn credit, mastery of content and certain abilities and skills must be demonstrated through a formal examination, a culminating project, and/or a presentation.

WHO MIGHT BENEFIT?

- Highly motivated students who would like to accelerate graduation or learning and bypass one or more classes by taking an exam, writing a major term paper, creating a project or presenting research without taking a partial or full year instructional class to earn the credit.
- Students who dropped out or have been out of school for more than one year and would like to re-enroll and complete a high school education.
- Students who have been home schooled and wish to enroll in a public high school and accelerate their progress toward graduation.

COURSE FEES

Students are required to pay fees in some courses. Fees are used to purchase lab materials, workbooks, and other consumable products. The fees appearing in this document are estimates. Invoice statements sent in the fall and spring may differ slightly. Please note that fees will not be refunded for courses dropped after the second week of the semester. Students with outstanding balances may not participate in prom, senior trip, or graduation.

CRITERIA FOR AWARDING THE DIPLOMA WITH HONORS

To be awarded a diploma with honors, students are required to meet at least all but one of the criteria listed in this paragraph for either the college preparatory or the vocational education curriculum. A student shall not be required to meet more than the specified number of criteria, nor shall any student be required to meet any one specified criterion.

SUBJECT	HIGH SCHOOL ACADEMIC DIPLOMA WITH HONORS	CAREER-TECHNICAL DIPLOMA WITH HONORS
ENGLISH	4 credits	4 credits
MATHEMATICS	4 credits to include Algebra 1, Geometry, Algebra 2 or equivalent and/or other higher level course or a four-year sequence of courses containing equivalent content	4 credits to include Algebra 1, Geometry, Algebra 2 or equivalent and/or other higher level course or a four-year sequence of courses containing equivalent content
SCIENCE	4 credits including physics and chemistry	4 credits including 2 of advanced science
SOCIAL STUDIES	4 credits	4 credits
WORLD LANGUAGE	3 credits including at least 2 in the same language	Not counted toward requirements
FINE ARTS	1 credit	Not counted toward requirements
CAREER-TECH	Not counted toward requirements and may not be used	Counted in electives
ELECTIVES	Not counted toward requirements	4 credits of Career-Technical minimum. Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which leads to post-secondary credit
GPA	Minimum 3.5 on a 4.0 scale (7th semester, un-weighted)	Minimum 3.5 on a 4.0 scale (7th semester, un-weighted)
ACT/SAT SCORE (excludes writing scores)	27 ACT/1210 SAT	27 ACT/1210 SAT
Additional Requirements	None	Achieve proficiency benchmark established for appropriate Ohio Career-Technical Competency Assessment or equivalent

COLLEGE CREDIT PLUS

College Credit Plus is Ohio’s dual enrollment program where students can earn both high school and college credit at the same time, in the same course.

What is it?

Eligible students can take a course and earn high school and college credit that appears on both their high school and college transcripts. Teachers who teach a College Credit Plus course in a high school must receive professional development and be an adjunct professor at a college or university. All courses offered through College Credit Plus—even courses offered in the high school—must be the same course that the college offers. The course must apply to a degree or professional certificate. College Credit Plus replaces the Post Secondary Education Option, also known as PSEO, and redefines “alternative dual enrollment” programs as advanced standing programs.

Why?

Ohio needs more students who graduate college- and career- ready. College Credit Plus increases access for students who have not taken full advantage of the opportunity to earn college credits while in high school.

Where?

The student is enrolled in both high school and college and can attend the class in any setting arranged by the college.

Who?

Ohio public school districts and Ohio public colleges and universities must participate in College Credit Plus. Nonpublic high schools and colleges or universities may choose to participate. To be eligible, students must meet the admission standards of the participating college or university to which they apply for enrollment.

When?

College Credit Plus was implemented in the 2015-16 school year and continues this year.

How does a student get started?

There will be an annual informational event for students and parents. Visit the school guidance website for details.

Cost:

There is no cost for the student to participate in College Credit Plus when the student is enrolled in a public college or university. The high school and college or university share the cost for the course. Students choosing to enroll in a participating private college or university might incur costs.

DECIDING TO PARTICIPATE

Before deciding to participate in the program, the student and his/her parents should consider the following points:

FUTURE PLANS - This program can assist in making future education and career decisions and in exploring post-secondary education opportunities.

HIGH SCHOOL GRADUATION - Participation in this program does not change high school graduation requirements. The requirements and academic standing must be reviewed with the high school counselor or principal. Make sure that the number and types of courses taken will meet local graduation requirements. Grades earned in post-secondary courses may affect the student’s GPA, and may affect eligibility to graduate and scholarship opportunities.

SCHEDULING - Participating in this program on a part-time basis means that classes must be scheduled at the high school and at a post-secondary institution. Yearly schedules and vacation times usually are different between the two. Sometimes it may be difficult or impossible to take preferred courses at both schools because of scheduling conflicts.

COLLEGE LEVEL WORK- College-level classes may be more accelerated and academically challenging than high school courses. Students need to be able to work without supervision and to have self-discipline both academically and socially. Students must be sure that they are ready for these responsibilities.

TRANSPORTATION -If classes are attended at both a high school and post-secondary institution, transportation between the two schools must be considered. Be sure that arrangements to get to classes on time can be made.

EXTRACURRICULAR ACTIVITIES - If participating in this program, students will not be in the high school full-time. Participation in some high school activities as a result of enrollment in post-secondary courses may be impossible because of scheduling issues.

Below are examples of how a student could earn 15 or 30 credits by the end of high school.

College Credit Plus Pathways

15 Hour Core Pathway

Course #	Course Name	Sem. Credits
ENG 1083	College Writing	3
ENG 1063	Introduction to Literature	3
PSY 1013	Psychology	3
MAT 1023/34	Pre-Calculus/Calculus	3-4
COM 1023	Public Speaking	3

30+ Hour Pathways

These pathways incorporate the Core Pathway above and build on it with the courses geared toward the named disciplines below. (Minimum of 15 credit hours in each specific track)

<u>STEM Pathway</u>		<u>Education Pathway</u>	
Course Name	CR	Course Name	CR
Intro to Zoology w/ Lab	4	Intro to Biology & Lab	4
Calculus I, II or III	4	Intro to Mathematical Systems	3
Trigonometry	3	Principles of Health & Fitness	2
<i>Science:</i> General Chemistry I w/ Lab	4	Art/Music in the Western World	2
<i>Engineering:</i> University Physics w/ Lab	5	Educational Technology	2
<i>Computer Science:</i> Computer Science I	4	US History to 1865 OR USH Since 1865	3
Total Credit Hours	15	Total Credit Hours	16
<u>Health Science Pathway</u>		<u>Business Pathway</u>	
Course Name	CR	Course Name	CR
Introduction to Chemistry & Lab	4	Intro to Biology & Lab	4
Nutrition for Health Professionals	3	Principles of Management	3
Zoology & Lab	4	Macroeconomics	3
Organic & Biological Chemistry & Lab	4	Spreadsheet Applications in Business	3
Total Credit Hours	15	Principles of Accounting I	3
		Total Credit Hours	16

NCAA @ NAIA ATHLETIC SCHOLARSHIP/ELIGIBILITY

To be eligible to receive a scholarship from and/or be eligible to practice or to participate in intercollegiate competition at an NCAA Division 1 or 2 institution, a student must graduate from a high school and meet the NCAA academic requirements listed on the website <http://eligibilitycenter.org>.

Athletic participation at an NCAA Division 3 school or at a Junior College is based only upon admission to the institution. Accepted students are eligible to participate in athletics.

NEW STANDARDS FOR NCAA DIVISION 1 COLLEGE-BOUND STUDENT-ATHLETES

College bound student-athletes first entering a Division 1 college or university on or after August 1, 2015 will need to meet new academic rules in order to receive athletic aid (scholarship), practice or compete during their first year. A Full Qualifier must complete 10 of the 16 core courses before the seventh semester of high school and 7 of the 10 core courses must be in English, Math, or Science.

To be eligible to receive a scholarship from and/or be eligible for intercollegiate competition at an NAIA institution, a student-athlete must register with the NAIA Eligibility Center <http://www.playnaia.org>.

NCAA approved/accepted CORE courses from Fredericktown High School as of 8/22/2013:

ENGLISH	SOCIAL SCIENCE
American Literature	World History
Speech & Drama	US History
English 9	AP US History
English 10	Economics
English 11	Social Issues
English 12	Government
Honors English 11	AP Government
Research Paper	
Writing Production	MATHEMATICS
Yearbook	Algebra 1
Production Journalism	Algebra 2
	Geometry
NATURAL/PHYSICAL SCIENCE	Honors Algebra 2
Anatomy/Physiology	Honors Geometry
Astronomy	Math Seminar
Biology	Pre-Calculus
Chemistry	AP Calculus
Environmental Science	
Unified Science	ADDITIONAL CORE
Physics	Spanish 1, 2, 3 & 4

The above listed courses are NCAA approved courses for Fredericktown High School. The NCAA reserves the right to approve or decline submitted courses. The NCAA list of approved courses is subject to change at any time. For more information: www.ncaa.org.

AGRICULTURE

902 Agriculture, Food and Natural Resources (Ag. Sc. I) -- Grade 9 1 ¼ Credits/Full Year
Course Fee - \$15.00

This course is designed for first year members to the Ag Program. It will teach students how to work in groups and develop their leadership abilities through hands on activities. Students will use the opportunities the FFA provides for growth and build upon their interpersonal skills. This is an introductory course that will cover a wide variety of topics from plant, animal, and soil science, livestock production, record keeping, environmental sciences, and natural resource conservation. The history of the FFA organization will be covered and basic parliamentary procedure and public speaking skills will be taught. This class will also be learning Agricultural and Industrial Power components in the shop as well. Being enrolled in this class, students will become members of the Fredericktown FFA Chapter and will be required to purchase and FFA Jacket (since we are “Home of the FFA Jacket”) and pay annual membership dues to the District, State, and National FFA Associations. There are various opportunities for leadership and personal development as well as travel opportunities through the FFA activities. **The FFA is an intra-curricular component of this program and must be enrolled in an Ag class to become an FFA member.** Students will also be required to choose and establish a Supervised Agricultural Experience (SAE) program by the beginning of the second semester.

906 Plant and Animal Science (Ag. Sc. II) -- Grade 10 1 ¼ Credits/Full Year
Pre-requisite: Ag. Science I Course fee - \$15.00

This course focuses on skills and technologies essential for plant and animal sciences for the agricultural industry. They will be introduced to the value of production animals relative to the agricultural marketplace. Students will engage in animal classifications and selection, body systems, along with animal welfare and behavior in relation to the production of animals. Students will learn principles of plant anatomy and physiology, and the role of nutrition, deficiencies, and growing environment on plant production. The course will also include equipment used in the industry. Projects and activities will enable students to develop communication, leadership, and business management skills. This class will also be learning Agricultural and Industrial Power components in the shop as well. Being enrolled in this class, students will become members of the Fredericktown FFA Chapter and will be required to pay annual membership dues to the District, State, and National FFA Associations in addition to class fees. There are various opportunities for leadership and personal development as well as travel opportunities through the FFA activities. **The FFA is an intra-curricular component of this program and must be enrolled in an Ag class to become an FFA member.** Students will also be required to choose and maintain their Supervised Agricultural Experience (SAE) program throughout the year.

907 Forestry and Woodland Ecosystems (Ag. Sc. III) -- Grade 11 1 ¼ Credits/Full Year
Pre-requisite: Ag. Science I and II Course fee - \$15.00

This course will introduce the learner to career options and skill development including business leadership, problem solving and communication skills. Students will learn and apply principles of botany, dendrology, and silviculture to the management of forests and forest ecosystems. They will apply principles of timber cruising with surveying and mapping techniques to take forest measurements. Students will develop the skills necessary for forest reforestation, timber stand improvement, and timber harvesting and forest product utilization. They will learn the variety of forestry equipment, and understand related laws, and policy issues. This is an upper level class. This class will also be learning Agricultural and Industrial Power components in the shop as well. Being enrolled in this class, students will become members of the Fredericktown FFA Chapter and will be required to pay annual membership dues to the District, State, and National FFA Associations. There are various opportunities for leadership and personal development as well as travel opportunities through the FFA activities. **The FFA is an intra-curricular component of this program and must be enrolled in an Ag class to become an FFA member.** Students will also be required to choose and maintain their Supervised Agricultural Experience (SAE) program throughout the year.

905 Ag Business Management for Agricultural and Environmental Systems (Ag. Sc. IV) -- Grade 12 1 ¼ Credits/Year
Pre-requisite: Ag. Science I, II and III Course fee - \$15.00

This course is an upper level class, designed for seniors. Students will learn the components of agricultural business by developing a business plan, applying marketing and sales techniques, and identifying business structures. They will

learn about leadership and management styles and the impact they have on business. Students will learn that agro-security, finance, career development, and human resources are important components of business management. This class will also be learning Agricultural and Industrial Power components in the shop as well. Being enrolled in this class, students will become members of the Fredericktown FFA Chapter and will be required to pay annual membership dues to the District, State, and National FFA Associations. There are various opportunities for leadership and personal development as well as travel opportunities through the FFA activities. **The FFA is an intra-curricular component of this program and must be enrolled in an Ag class to become an FFA member.** Students will also be required to choose and maintain their Supervised Agricultural Experience (SAE) program throughout the year.

910 A&E (Agricultural & Experience) Capstone -- Work Study-- Grade 11, 12 -- 1 Credit for every 180 hours of work
(the only Ag class offered that does not include the FFA component)

This course is an upper level class, designed for juniors and seniors. Students will learn about how to become a good employee, tips for resume writing, accurate banking, sources of income, sources of credit, appropriate work habits, resolving conflict in the workforce, cash flow sheets, etc. Students will learn and be required to maintain proficient record keeping thru the Agricultural Experience Tracker. Students will need to obtain and successfully maintain employment by the 3rd week of the class. Employers will be required to evaluate your performance for class credit. A scoring rubric will be used quarterly to class grades. A sample of that scoring rubric might include: 4=A, 3=B, 2=C, 1=D, and a 0=F.

ART

111 Crafts -- Grades 10, 11, 12 ½ Credit/One Semester
Course Fee: \$25.00
 Pre-requisite: Art I, Art II

Diversity of subject matter and media will be encouraged. Students will have the opportunity to explore various mixed media techniques including printmaking, sculptural bookmaking, basic weaving, and papermaking and textile arts.

112 Drawing Foundations -- Grades 11,12 ½ Credit /One Semester
Fee - \$25.00

In Drawing Foundations students will develop their technical and compositional skills by using a wide range of drawing media such as, graphite, colored pencil, charcoal, India ink, pastel and oil pastel. The emphasis of the class will be drawing from observation and composition studies. Students will also keep a sketchbook or a visual/verbal journal.

122 Art I -- Grades 9, 10, 11, 12 ½ Credit/One Semester
Course Fee: \$25.00

This fundamental art course offers studio experiences with concentration on basic drawing, color mixing, and care of materials. Special emphasis will be given to the elements of art. Students will be expected to obtain and maintain a daily notebook for assessment. Students will work in a variety of techniques and media including pencil, colored pencil, charcoal, oil pastel, watercolor, and acrylic paint. This class is a prerequisite for all other art classes.

123 Art II -- Grades 9, 10, 11, 12 ½ Credit/One Semester
Course Fee: \$25.00
 Pre-requisite: Art I with "C" or above

This course is an analysis and application of the elements and principles of design and their possibilities in two-dimensional and three-dimensional media. Students will be expected to obtain and maintain a daily notebook for assessment. Students will work in a variety of techniques and media including pencil, colored pencil, scratchboard, chalk pastel, oil pastel, watercolor, acrylic paint and mixed media.

124 Ceramics I -- Grades 10, 11, 12 ½ Credit/One Semester
 Pre-requisite: Art I and Art II with "C+" or above Course Fee: \$30.00

Students will study three-dimensional art forms through the use of clay as their medium. This class emphasizes various hand-building techniques such as pinch, coil, and slab construction. Design concepts will be explored, as well as basic terms, equipment, tools, and methods.

125 Sculpture and Ceramics II -- Grades 10, 11, 12 ½ Credit/One Semester
 Pre-requisite: Art I and Art II, and Ceramics I with "B" or above Course Fee: \$30.00

Students will study three-dimensional art forms in a variety of media. The ceramic portion of the class will emphasize various hand-building techniques to create self-portraits and large format sculptures. Students may also complete projects in wire, paper mache, and mixed media. Design concepts will be explored, as well as the study of contemporary sculpture and sculpture from other cultures.

BUSINESS

201 Accounting I -- Grades 10, 11, 12 1 Credit/Full Year
 Course Fee: \$40.00

This course is designed to provide students with a strong foundation in accounting principles and is essential for students considering majoring in accounting in college and/or considering a career in the business world. Students will learn how accountants use a double-entry accounting system to keep track of transactions.

202 Accounting II -- Grades 11, 12 (Independent Study) 1 Credit/Full Year
 Pre-requisite: Accounting I Course Fee: XXX

This course is designed for students who have a strong interest in accounting. Advanced accounting concepts and application of those concepts will be investigated. Since much of this class is self study, students interested in this course must be independent learners and have achieved a grade of B or higher in Accounting I.

203 Personal Finance -- Grade 11, 12 ½ Credit/One Semester
 Required Course

Personal finance is a course required for all seniors. The intent of this class is to provide information about your financial responsibilities and to provide information that will allow you to make wise financial decisions. Topics to be covered include budgeting, credit management, banking services, insurance, car and house buying, investing, banking services, taxes, and job-seeking skills.

205 Computer Applications -- Grade 9, 10, 11, 12 ½ Credit/One Semester
 Ability to accurately type 30 words per minute

In this course, students will learn the skills necessary to have a working knowledge of technology tools used to create personal and professional publications, such as documents, spreadsheets, and presentations.

206 Keyboarding -- Grade 9, 10, 11, 12 (Independent Study) ¼ Credit/1 Quarter
 Course fee - \$10

This course is designed for students who have not previously taken a keyboarding class or those who did not successfully complete keyboarding. In this course, students will use an online keyboarding program to learn how to type by touch.

- 314 Production Journalism -- Grades *10, 11, 12
 (*With consent of instructor)
 Pre-requisite: English 9
- 1 Credit/Full Year
 Fee for workbook
- Basic journalistic writing is the focus of this course, as students will become skilled in creating the many types of writing used in both newspapers and magazines. Computer layout, advertising, and photography are other components of this course. Students will be involved in publishing a monthly school newspaper. This course may be taken a second year (Production Journalism - two credits total earned) with consent of the instructor.
- 316 Yearbook
- ½ Credit/One Semester
- This semester course encompasses all aspects of the publication of a yearbook. Skills in graphic design and layout, digital photography, PageMaker 7.0, plus headline and caption writing will be the main focus. Students will be trained to use a digital camera and then manipulate the image on the computer for production. Selling ads, yearbooks, and participating in other fund-raisers will provide practice in marketing skills. Students in this non-traditional class must be willing to work in a team setting and demonstrate leadership. Attending some after-school/evening events will be expected. Work outside of class (e.g. during study halls, before or after school) will be needed to complete deadlines. Students must be willing to accept responsibility, meet deadlines, and be self-motivated. In addition, Digital Scrapbooking will provide students with an innovative way to produce a personal publication utilizing the skills taught and mastered. This is a tool for organizing, analyzing, and sharing information. By the end of the semester, students will be able to reproduce a DVD that includes photos, music, still photography, and video footage. In this class, production is the name of the game. Permission of instructor is required. Experience in PageMaker 7.0 or concurrent enrollment in Writing/Production or Production Journalism is preferred.
- 327 Speech and Drama -- Grades 9, 10, 11, 12
- ½ Credit/One Semester
 Course fee - \$8.00
- Students who complete this course will be able to demonstrate the basic principles, practices and techniques of public speaking, oral interpretation of literature, and ensemble acting. This 18-week course consists of two segments: 10 weeks focusing on individual presentation and 4 weeks developing scenes with 2-4 persons.

FOREIGN LANGUAGE

- 411 Spanish I -- Grades 9, 10, 11, 12
- 1 Credit/Full Year
 Fee for Workbook
- This course is to enable the beginner to acquire mastery of a useful vocabulary and to assist in understanding the fundamentals of Spanish grammar. The course will also introduce the lands, culture, and history of Spanish-speaking people.
- 412 Spanish II -- Grades 9, 10, 11, 12
 Pre-requisite: A "C" or better in Spanish I
- 1 Credit/Full Year
 Fee for Workbook
- The second year is a continuation of Spanish I. The two courses together are intended to give the student a program of training in all four basic language skills, understanding Spanish when it is spoken, speaking it, reading it, and writing it. There is much emphasis on grammar and using verbs in different tenses.
- 413 Spanish III -- Grades 10, 11, 12
 Pre-requisite: Spanish I and an 80% or better in Spanish II
- 1 Credit/Full Year
 Fee for workbook
- This course will emphasize communication, increasing greatly the student's ability to read, write, speak and understand Spanish. After continuing grammar study, students will develop skills further through discussions in Spanish and readings of native authors.

414 Spanish IV -- Grades 11, 12 1 Credit/Full Year
 Pre-requisite: Spanish I, II, and III

This course will further the listening, speaking, reading and writing skills of the language student. It will include selections from Hispanic writers, advanced grammar structures, and vocabulary. Students will acquire more knowledge of geography, history and customs of Spanish speaking countries.

HEALTH

525 Health -- Grade 9 ½ Credit/One Semester
 Required Course

Health deals with personal and community health. Personal health is approached from the individual in society concept. Health problems prominent today are studied in the community health phase. Study areas include communicable diseases, water fluoridation, various medical plans and the function of the health organizations, both voluntary and public. A study of the social diseases, like alcoholism, smoking, use of narcotics, and problems of promiscuity, are also discussed. A unit on Cardiac Pulmonary Resuscitation (CPR) will be included in this course. The textbook and outside materials from professional literature and films from many health associations are incorporated into the study plans.

MATHEMATICS

**No math course will be scheduled that does not represent an acceleration of math concepts for a given student.

Ex: After a student has completed Algebra I he/she cannot schedule Interactive Geometry for the next year.

Exception: In the opinion of the instructor/principal the less challenging course is appropriate because of a mistake in placement of the first course.

601 Pre-Calculus -- Grades 11, 12 1 Credit/Full Year
 Pre-requisite: Algebra I, Algebra II, Geometry and teacher recommendation

Pre-Calculus combines both trigonometry and analytic geometry. It will include such topics as straight line, polar and trigonometric equations, vectors, conics and polynomial, rational, trigonometric, logarithmic, and exponential functions. A TI 84 or 84 plus calculator is required for this course.

602 AP Calculus -- Grade 12 1 Credit/Full Year
 Pre-requisite: Algebra I, Algebra II, Geometry, Pre-calculus and teacher recommendation

The real number system, the rectangular coordinate system, operations on algebraic and trigonometric functions are reviewed. The concept of limits is developed as the basic foundation for calculus. Both differential and integral calculus are studied with much time spent in practical application of the derivative and integral. The natural logarithm function and the natural exponential function are studied, with emphasis placed on practical application. The course concludes with techniques of integration. A TI 84 or 84 plus calculator is required for this course.

603 Algebra I -- Grade 9 1 Credit/Full Year
 Pre-requisite: Pre-Algebra or Mathematics 8 and teacher recommendation

Use of the following in practical applications/problem-solving: writing and evaluating algebraic expressions, operations with rational numbers, properties of the real number system, solving equations and inequalities and graphing, operations with polynomials and algebraic fractions, and factoring. *A scientific calculator is required.*

- 604 Algebra II -- Grades 10, 11, 12 1 Credit/Full Year
Pre-requisite: Algebra I and Geometry (or equivalent) and teacher recommendation
- Review of Algebra I, with more emphasis on understanding real number system. More emphasis on graphing techniques, systems of equations and inequalities, radical expressions and complex numbers, quadratic functions, polynomial functions, exponential functions, series and sequences, practical applications. A TI84 or TI84 plus calculator *is required* for this course.
- 605 Fundamental Algebra II -- Grades 10, 11, 12 1 Credit/Full Year
Pre-requisite: Algebra I, Geometry (or equivalent) and teacher recommendation
- Recommended for those who completed Fundamental Geometry or those earning a D+ or below in Geometry. This course will cover many of the same topics as those covered in Algebra II, but on a basic level. Students will be able to graph polynomial functions such as linear, quadratic and higher degree polynomials and learn how to solve polynomial equations mathematically. This course is not part of the college prep curriculum and is not recommended for the bachelor degree bound student.
- 608 Geometry -- Grades 9, 10, 11 1 Credit/Full Year
Pre-requisite: Algebra I (or equivalent) and teacher recommendation
- This branch of mathematics deals with the study of lines, angles, polygons, and circles. The major emphasis is on the techniques of discovery and proof. Much drill is used to train students to demonstrate the mathematical proofs, in a clear, concise form, as a preparation toward solving more complicated mathematical problems and life situations.
- 609 Fundamental Geometry -- Grades 9, 10, 11 1 Credit/Full Year
Pre-requisite: Algebra I (or equivalent) and teacher recommendation
- Recommended for those earning a C- or below in Algebra I. This course will stress the basic concepts of Geometry. It will focus on relationships between lines and angles; properties of polygons; perimeter, area, and volume; transformations; and constructions using a straight-edge and compass and interactive geometry software.
- 614 Math Seminar -- Grade 12 1 Credit/Full Year
Pre-requisite: Algebra I, Geometry, Algebra II and teacher recommendation
- This course is modeled after a general liberal arts curriculum specifically for non-science students. It is designed to acquaint students with the nature of mathematics and applications such as set theory, logic, sequences and series, finance, combinatorics, probability, statistics, and functions and graphs.
- 630 Honors Geometry -- Grades 10, 11, 12 1 Credit/Full Year
Pre-requisite: A grade of B or better in Algebra I, if the student has just completed 8th grade Algebra I or a grade of A is required if the students has just completed 9th grade Algebra I and teacher recommendation.
- Honors Geometry is an in-depth study of two and three-dimensional figures. This course extends the content of the standard geometry course with a rigorous exploration of proofs and applications. Students develop the ability to construct formal, logical arguments in geometric settings. Honors students will be encouraged to use a variety of critical thinking techniques to solve geometric problems. Because development of precise mathematical language is stressed, reading and problem solving are emphasized throughout.
- 635 Honors Algebra II -- Grades 10, 11, 12 1 Credit/Full Year
Pre-requisite: At least an A or B in Algebra I and Geometry and teacher recommendation
- The curriculum will be similar to the Algebra II curriculum. However, the class will go more in-depth on some concepts, and will cover additional concepts in preparation for Pre-Calculus. The course will cover systems of equations and inequalities, radical expressions and complex numbers, quadratic functions and inequalities, polynomial functions, rational expressions and equations, exponential and logarithmic relations, sequences and series, and matrices. Graphing techniques will be emphasized. Thus, a TI-83 or TI-83 *Plus* calculator is required for this course.

PROJECT LEAD THE WAY

- 620 Introduction of Engineering Design -- Grades 9, 10, 11, 12 1 Credit/Full Year
 Pre-requisite: Algebra grade of “C” or better Course Fee - \$25.00
- Using computer-modeling software, students learn the design process. They design problems, develop, create, and analyze product models, and print 3D models of designs.
- 621 Principles of Engineering -- Grades 9, 10, 11, 12 1 Credit/Full Year
 Pre-requisite: Algebra I (C or better) Course Fee - \$25.00
- Students explore technology systems and engineering processes to find out how math, science, and technology help people.
- 624 Digital Electronics -- Grades 11, 12 1 Credit/Full Year
 Pre-requisite: Intro of Engineering and Principles of Engineering Course Fee - \$25.00
 and recommendation of teacher.
- A course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.
- 623 Engineering Design and Development Capstone -- Grades 11, 12 1 Credit/Full Year
 Pre-requisite: Intro of Engineering, Principles of Engineering, Digital Electronics Course Fee - \$25.00
 and recommendation of teacher.
- In this course, teams of students spend the year solving problems of their own choosing. The teams apply principles developed in the two preceding Project Lead The Way core courses and are guided by a community mentor. They brainstorm possibilities, research current patents and regulations, construct a working model, test the model in real life situations (or simulation), document their designs, and present and defend the design to a panel of experts.

MENTORSHIP PROGRAM

- M299 Mentorship -- Grades 10, 11, 12 ¼ Credit/Full Year
 Pre-requisites: 3.0 GPA and a teacher recommendation
- A mentor program as an educational option is based on the recognition that students may benefit from individual study with a person within a particular tradition, discipline, progression, or craft. A mentor program represents a form of individualized study and permits students to pursue specific curricular areas in depth and beyond the scope of the course of study offered by the school. The program also serves those students demonstrating superior ability in the visual and performing arts. A student may participate all three years.

MUSIC

- 150 Instrumental Music III -- Grades 9, 10, 11, 12 1 Credit/Full Year
- For students who wish to be in band all year. Must be academically eligible for the 1st nine weeks. Must currently be in band or with permission of Band Director (this may include playing audition).
- 153 Chorus -- Grades 9, 10, 11, 12 1 Credit/Full Year
- A very vital and growing area in the department of music is the mixed choir. This group appears at assemblies, concerts, and contests. Student will find a wide variety of music covered. The basic requirements for membership in chorus are ability to carry a tune and desire for this type of performance. There are voluntary music clinics and field trips involved with the group. Permission of the instructor is required.

155 Intro to Music Theory -- Grades 9, 10, 11, 12 ½ Credit/One Semester

Students will learn basic aspects of music theory such as: Circle of 5ths, major/minor scales, chord studies, part writing, and musical dictation. Analysis of different genres of music along with an introduction to arranging will be emphasized.

PHYSICAL EDUCATION

All freshmen and sophomores are required to take physical education unless a medical certificate is on file in the student's records. Students who are unable to take physical education will be required to complete non-physical activities to receive credit for physical education.

587 Physical Education I -- Grade 9
Required Course ¼ Credit/One Semester

Because it is a part of the total education program, physical education has the same goals that give purpose to all learning experiences. It is particularly important in helping each student to develop useful physical skills, to control their emotions, and act in socially useful ways, and to apply their skills, rules and knowledge effectively. Both individual and team sports are offered, as well as co-educational physical education, which will have a carry-over value for the students. (Maximum credit for all PE classes taken cannot exceed one credit over 4 years.)

588 Physical Education II -- Grade 10
Required Course ¼ Credit/One Semester

Individual and team sports will be taught.

SCIENCE

701 Anatomy/Physiology I -- Grade 11, 12 ½ Credit/One Semester
Pre-requisite: "C" or better in biology or Achievement Team permission Course fee - \$15.00

This course is the study of human anatomy (structures) and physiology (function). The topics focused on this semester will be epithelial tissues, respiratory system, urinary system, and digestive system. The structures associated with the systems as well as how each structure works and how they work together will be studied. Small groups will be doing a dissection of a fetal pig to better understand the structures and their orientation in the body.

712 Anatomy/Physiology II -- Grade 11, 12 ½ Credit/One Semester
Pre-requisite: "C" or better in biology or Achievement Team permission Course fee - \$15.00

This course is the study of human anatomy (structures) and physiology (function). The topics focused on this semester will be connective tissues, skeletal system, muscular system, circulatory system and nervous system. The structures associated with the systems as well as how each structure works and how they work together will be studied. Individuals will be doing a dissection of a rat to better understand musculature and circulation.

* Anatomy/Physiology I and II can be taken for a full credit. Courses DO NOT have to be taken in order.

702 Biology -- Grades 10, 11, 12 1 Credit/Full Year
Course fee - \$10.00

Students will explore the complexity, diversity, and interconnectedness of living organisms and the different ecosystems which they occupy. Topics studied will include such concepts as scientific method, cells, cellular processes, organic chemistry and molecules, genetics, ecology, microbiology, evolution, and current topics in life science. Students will be involved in some classic biological laboratory exploration as well as inquiry based, and interactive online lab simulations. Students will be asked to learn and apply such lab skills as quantitative and qualitative observation and data collection. Biology will discover how the field of science is a dynamic and constantly changing body of knowledge based upon the most current evidence and support available.

- 703 Chemistry -- Grades 11, 12
 Pre-Requisite: Algebra I
- 1 Credit/Full Year
 Course fee - \$25.00
- Chemistry is the study of the chemical structure, properties and composition of substances, and the changes that substances undergo. The course will cover metrics and measurement, atomic structure, writing and balancing chemical reactions, stoichiometry, solutions and gases, quantum mechanics, ionic and covalent bonding, thermodynamics, acids and bases, oxidation-reduction, electrochemistry, nuclear and organic chemistry. The course requires three hours of preparation per week.
- 704 Environmental Science -- Grades 11, 12
- 1 Credit/Full Year
 Course fee - \$15.00
- This course will introduce students to general ecological principles of the interactions of living organisms with one another and their environment. It will also provide students with the scientific principles, concepts, and methodologies required for a better understanding of the natural world. It is a multidisciplinary science, incorporating different branches of science and how they impact daily life. The course will focus on a variety of topics including ecology, populations, biodiversity, water, air, and land, energy resources, and our health and future. Parts of this course will take place beyond the classroom, therefore appropriate attire must be worn at given times.
- 705 Physics -- Grades 11, 12
 Pre-requisite: Algebra I, Algebra II, and Geometry
- 1 Credit/Full Year
 Course fee - \$10.00
- Physics is the branch of knowledge that studies the natural physical phenomena of the world. Topics include the study of linear motion, projectile motion, circular motion, Newton's Laws, vectors, gravity, momentum, energy, waves, light, sound, mirrors, lenses, static electricity, electrical circuits and magnets. Student should plan to use one hour per day outside of the classroom for preparations.
- 706 Physical Science -- Grade 9
 Required Course
- 1 Credit/Full Year
- Unified science will address physical science and related principles in earth and space sciences. Physical sciences include the nature of matter and energy, identifiable physical properties of substances, and properties of forces that act on objects. Earth and space science topics will address astronomy and plate tectonics. Students will investigate ways in which science and technologies combine to meet human needs and solve human problems. Ninth-graders trace the historical development of scientific theories and ideas, explore scientific theories and develop their scientific literacy to become knowledgeable citizens.
- 708 Organic Chemistry -- Grade 12
 Pre-requisite: Chemistry or Honors Chemistry
- ½ Credit/One Semester
 Course fee - \$15.00
- This class is an introduction to organic chemistry, focusing primarily on the basic principles to understand the structure and reactivity of organic molecules. Emphasis is on substitution and elimination reactions and chemistry of the carbonyl group. The course also provides an introduction to the chemistry of aromatic compounds.
- Topics Covered:
1. Review of VSEPR Theory
 2. Hybridization
 3. Nomenclature of organic compounds
 4. Polar and nonpolar molecules
 5. Resonance
 6. Alkanes and Cycloalkanes
 7. Isomerism and chirality

- 710 Astronomy -- Grades 11, 12 ½ Credit/One Semester
- This course is a survey of basic astronomy concepts. It begins with a math review and then explores the history of astronomy, followed by a tour of the solar system. Students will be evaluated on tests, quizzes, lab work and classroom projects each student will be required to complete.
- 720 Honors Biology -- Grade 10 1 Credit/Full Year
Pre-requisite: A or B in Unified Science and teacher recommendation Course Fee - \$10.00
- A rigorous and more in depth version of Biology. It will explore the topics of biology in greater depth and detail. Students will explore the complexity, diversity, and interconnectedness of living organisms and the different ecosystems which they occupy. Topics studied will include such concepts as scientific method, cells, cellular processes, organic chemistry and molecules, genetics, ecology, microbiology, evolution, and current topics in life science. Students will be involved in some classic biological laboratory exploration as well as inquiry based, and interactive online lab simulations. Students will be asked to learn and apply such lab skills as quantitative and qualitative observation and data collection. Honors students will be challenged to examine their own thinking about current theories as well as solve their own questions pertaining to biology through experimental design and analysis. Honors biology will discover how the field of science is a dynamic and constantly changing body of knowledge based upon the most current evidence and support available.
- 725 Honors Chemistry -- Grades 11, 12 1 Credit/Full Year
Pre-requisite: A grade of B or higher in Algebra I, Geometry and Algebra II Course Fee - \$25.00
and teacher recommendation
- This course introduces students to key concepts and theories that provide a foundation for further study in other sciences as well as advanced science disciplines. Chemistry comprises a systematic study of the predictive physical interactions of matter and subsequent events that occur in the natural world. The study of matter through the exploration of classification, its structure and its interactions are addressed. Investigations are used to understand and explain the behavior of matter in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications. An understanding of leading theories and how they have informed current knowledge prepares students with higher order cognitive capabilities of evaluation, prediction and application.

SOCIAL STUDIES

- 800 AP American Government -- Grade 12 1 Credit/Full Year
- The AP Government course addresses how individuals behave politically. The goal of this college level course is to increase our understanding of the American system and its design. The course requires participation in a political campaign, a political philosophy research paper, opinion papers on topics of current interest and a senior project. We will visit Washington, D.C. on a government trip. An Advanced Placement exam will be given in May. A score of three (3), four (4), or five (5) on the exam may qualify the student for college credit in the area of political science. The number admitted to the class will be limited.
- 801 American Government -- Grade 12 1 Credit/Full Year
Required Course
- The course goal is to graduate voting, participating young Americans into our political system. Representative government, voter registration and election problems of our society, and daily affairs of our nation will be included. Inquiry, participation, attendance at public meetings and a visit to our nation's capital emphasize the fact that a democracy functions best with citizens who are knowledgeable and involved.

