

## PLANNED COURSE DESCRIPTION

## 2015-2016

The availability of elective courses depends entirely upon the feasibility of scheduling meaning the scheduling of individual students, space, availability, teacher and classroom availability.

## COURSE REGISTRATION

During the registration period each student should select carefully those subjects that will comprise his/her grade or program for the next school year. Students are encouraged to seek assistance and advice from teachers, counselors and parents. Once a student registers for a program, this becomes a CONTRACT. Every effort will be made to provide the student with his/her selection. However, certain courses may be cancelled due to insufficient enrollment and alternate courses must be selected to complete a schedule. Entrance to a class or course may be denied because of over enrollment or under enrollment. Minimum enrollment is 10 students. Maximum enrollment is dependent upon the course.

## SCHEDULE CHANGES

Please be advised of the school's policy regarding schedule changes. Students will be given TWO CALENDAR WEEKS following the distribution of next year's schedules in June to request any necessary schedule changes for the entire year. Students must have a valid reason for making changes, such as computer error or being double scheduled. Reasons such as teacher preferences, class is not required for graduation and lunchtime choice are not valid reasons.

1. No subject may be dropped unless a subject is added to replace it.
2. All schedule changes must be approved by an administrator.
3. A student may change courses after 10 school days if recommendation is made by the teacher and approved by the principal. The student's grade may/may not transfer to the new course based on teacher recommendation.
4. A student dropping a course after 10 school days without administrative approval will receive an " $F$ " in the course and may be required to schedule another course.

## COURSE SELECTION

The likelihood that a student will have a satisfactory experience in the next sequence of a course where he or she has had a "D" in the previous sequence is limited. Most courses are organized to move into a sequence of learning experiences. Therefore, teachers who are teaching courses in sequence expect students to have a minimum level of skills and knowledge in that field. Otherwise, a teacher spends a great deal of time teaching the skills and concepts of a previous course.

Students may be assigned additional time to focus on the essential concepts that are on the state mandated Keystone Exams in Algebra 1, Literature and Biology based upon predetermined criteria.

## ACADEMIC COMPONENT

Student must select from one of two academic teaching styles that will:

1. Be compatible with the student learning style.
2. Prepare the student for the post-secondary experience necessary to reach the desired career goal.

University Prep Academic Courses:
These are courses that are taught in a theoretical manner that are necessary if a student wishes to pursue a four-year college required career.

## Tech Prep Academic Courses:

These are courses that are taught in an applied, practical manner that are necessary if a student wishes to pursue a two-year/one-year post-secondary college-tech school required career.

## GRADUATION REQUIREMENTS FOR STUDENTS

In order to graduate from Everett Area High School, a student will demonstrate achievement of the academic standards under Chapter 4 (relating to academic standards) and the academic standards required by the school district and specified in Everett Area School District's strategic plan. The credit requirement for graduation is $\mathbf{2 6}$ credits.

Graduation requirements will consist of successful completion of planned courses in the students' elected program of study. The following courses are required of all programs of study in Grades 9-12:

Culminating Project
Communications (English) - 4 planned courses
Students must successfully complete either 4 math or 4 science courses Mathematics - 3 planned courses ( 4 planned courses for University Prep)
Science - 3 planned courses (4 planned courses for University Prep)
(1 biological science, 1 chemical science, 1 physical science)
Social Studies - 3 planned courses
Other Courses:
Physical Education - 4 planned courses
Family Living - 1 planned course
Problems of Democracy (P.O.D.) - 1 planned course
Health 10/Driver Education - 1 planned course
Computer Tech $1 / 2-1$ planned course
Electives - 8 planned courses
Service Learning Requirement
Proficiency Requirement
Successful completion shall be defined as passing each planned course with a letter grade of "D" or higher or its equivalent and demonstrated achievement of the academic standards associated with each planned course. The above planned courses are minimum standards.

All seniors must check to see that they have successfully completed the subjects required in the program of study in which they intend to receive recognition on their permanent record. If there are any questions, consult your guidance counselor immediately.

All Seniors must take a full schedule of classes (8 credits) their senior year.

## University Prep

Beginning as a $9^{\text {th }}$ grader, students must always progress to the next course in the course sequence. In order to graduate with university prep status, the following classes must be successfully passed: Advanced English 9, 10, 11, and 12 (or 2 semesters of Freshman English and Speech Communication courses at a Dual Enrollment College), Algebra 1B, Geometry, Algebra 2, Pre-calculus, Calculus, Spanish 1, Spanish 2, Biology, Chemistry, Environmental Science, and Physics. All University Prep students that opt to attend high school during their senior year must take 4 math and 4 science courses in order to meet graduation requirements.

## Valedictorian Status

To be eligible for consideration for valedictorian status, each nine-week grade, including final exams, will be included in the permanent record so that they can be factored into the valedictorian selection. For instance, if a student earns all A's for each of the nine weeks and the final exam in credited courses, they will be selected as the valedictorian over a student who earns any B's for nine-week grades and/or final exams. Thus, a student may graduate with a 4.0 GPA and not be valedictorian due to earning one or more B's for a nine-week grade and/or final exam. A student repeating a class will be ineligible for valedictorian recognition. All university prep students must complete the university prep track as listed in the Curriculum Guide and Tech Prep students must complete the tech prep track as listed in the Curriculum Guide for valedictorian consideration.

## STUDENTS ARE RESPONSIBLE FOR THEIR GRADUATION REQUIREMENTS

They should consult with a guidance counselor as often as needed.
--- Only those students meeting all the requirements for a diploma will be permitted to participate in the Commencement Program.
--- All seniors must have all State Proficiency requirements completed, class work and test assignments completed and graded prior to the start of Commencement practice. NO INCOMPLETE GRADES.

## GUIDELINES FOR COURSE SELECTION

1. All students must select a sufficient number of courses to meet a yearly minimum of eight periods in each grade.
2. Student must select the required courses for graduation.
3. Read the description of each course you select and be familiar with the prerequisites and correct sequences for the program of study you select.
4. Always check course prerequisites in the curriculum guide before selecting.
5. Discuss your course selections with your parents, counselors, and teachers.
6. A STUDENT MAY EARN CREDIT ONLY ONCE FOR A COURSE.
7. A student may repeat a course only if he/she achieves a $\underline{C}$ or below in that course.
8. Every effort will be made to schedule the student for those courses he/she requests. However, in the event of insufficient registration and/or staffing or faculty limitations, the administration reserves the right to cancel any course.
9. Preference will be accorded to upper classmen, seniors, juniors, and sophomores in descending order, if any course needs to be limited in enrollment.

## COLLEGE LEVEL AND ADVANCED PLACEMENT COURSES

College level courses are available from Allegany College of Maryland (ACM) for students in grades $10,11 \& 12$. Eligibility to register for these courses is governed by the admission requirements of the college and the recommendation/approval of the high school administration. A student must turn 16 years old before or during the semester they are registering for and have a suggested GPA of 3.25 or higher. Students will be responsible for tuition and fees for ACM courses while the Everett Area School District will provide the textbooks for courses taken during the regular school day.

Likewise, advance placement (AP) courses may be available to students in Grades 10, $11 \& 12$. These AP courses are offered on a limited basis to qualified and independently motivated students and require the recommendation/approval of the high school administration. Students will receive credit for taking AP courses and ACM courses, but their grade does not count toward a student's GPA or class rank. Students must meet with the high school counselor before scheduling college or AP courses. Scheduling rules for ACM and AP advance placement courses are the same as the regular high school courses (See Schedule Change Policy for details).

## DUAL ENROLLMENT

The following provisions apply to achieving academic standards in higher education courses:
(1) High school students enrolled in an accredited institution of higher education may, with the prior approval of the high school principal, receive credit for college courses when all of the following provisions are met:
(A) The course is taught at the college level and is recognized by the higher education institution as a credit-bearing course.
(B) The college course is approved by the high school administration as a dual enrollment course.
(C) The student satisfactorily completes the requirements of the college course or passes the College Advanced Placement Examination in the subject.
(D) The record of the college course completion has been submitted by the higher education institution to the sending high school.
(2) Students may also leave high school prior to their senior year to attend accredited institutions of higher education on a full-time basis under procedures and policies established by the superintendent and the board of school directors. The high school diploma shall be awarded in June to these students upon successful completion of requirements set forth by the superintendent and board of school directors.

## SENIOR CHALLENGE PROGRAM

Senior Challenge is a program built on academic rigor, the relevance of learning, and building relationships with community partners. This program is offered to seniors who demonstrate exemplary character and academic excellence. Senior Challenge students have a flexible schedule in order to take advantage of expanded high school curriculum choices, enroll in online and college courses, and participate in authentic, experiential learning opportunities. Senior Challenge affords the students the opportunity to pursue an area of passion or academic interest. Acceptance into Senior Challenge is not automatic. Students must meet the program guidelines and demonstrate proficiency on state academic standards.

During this course, students will use their knowledge of the fundamentals of art (line, texture, color, and shape), to learn and focus on techniques used to create various art forms. This will enable students to develop higher-order thinking skills, and create interesting and fun pieces in both 2 and 3-Dimensional forms. Students can expect to complete projects in Drawings (still life and faces), Paper Sculptures, Printmaking, Painting, and Pen and Ink Designs.

0310-Art 2
1 Credit
Grades 10, 11, 12
Prerequisite: C or better in Art 1
During this course, students will use their new-found knowledge of the elements and principles of design to create intriguing design-based art. This will enable the students to develop higher-order thinking skills, and challenge them to think innovatively and abstractly. Students can expect to complete projects in Drawings (animals, portraits, landscapes, architecture), Ceramics and Sculptures.

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0315-\mathrm{Art} 3
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## 1 Credit

Grades 11, 12
Prerequisite: C or better in Art 1 and Art 2/Teacher Approval Required
This course is designed to use the students' prior knowledge of the elements and principles of design to create intriguing, innovative and challenging works in multiple types of media. This will continue to enable each student to develop higher-order thinking skills, and work at a college level. Students can expect to complete projects in Metals, Wood Burning, Fibers, Painting, Ceramics and Sculptures.

## 0320-Art 4

1 Credit
Grade 12
Prerequisite: C or better in Art 1, Art 2 and Art 3/Teacher Approval Required
During this class, students will work independently to create innovative and challenging pieces in order to complete their art portfolios.

## BUSINESS

0615-Accounting 1
1 Credit
Grades 10, 11, 12
The students will learn the theory of double-entry bookkeeping and gain experience in journalizing, posting, and the end-of-period work necessary to prepare financial statements. They will become familiar with several journal systems and the combination journal. Accuracy, neatness, and efficient work habits are stressed. Presentation of theory is coupled into a single problem by completion of accounting cycle problems in the workbook and a business simulation project. Students must achieve a C or better in the course to progress to Accounting 2.

Prerequisite: C or better in Accounting 1
This course builds and expands the theory learned in Accounting 1, and takes a more practical approach to accounting. The student is able to work problem situations on his/her own. The student will prepare payroll reports, analyze financial reports, maintain a petty cash system, use various depreciation methods, and maintain a set of books on the accrual basis of accounting. Corporate accounting fundamentals are also taught.
$\frac{0605-\text { Computer Technology } 1 / 2}{\text { Semester }}$
Grade 9
Proper keyboarding techniques will be reviewed. This course provides a review of microcomputers and information processing with an emphasis on word processing and spreadsheets. Students must achieve a C or better in the course to progress to Computer Technology I.

## 0622-Intro to Business

. 5 Credit
Semester
Grade 9
In Introduction to Business, you will study the concepts, principles and operations of private enterprise. You'll compare and contrast sole proprietorships, partnerships, and corporations - and the advantages and disadvantages of each. You will explore the functions of modern business management, ethics, and social responsibility that can improve or tarnish a brand. You'll also look at the human resource management side of running a business, and learn how employers can motivate their employees. This course is designed to encourage creativity and entrepreneurial thinking!

## $\underline{0610-B u s i n e s s} 1$

1 Credit
Grades 10, 11, 12

This subject is designed to provide a basic understanding of business functions in our society. The course includes a study of the nature and function of business, the importance of business activities in our personal, social, civic, and national life, banks and money, marketing functions, etc. Filing, telephone, and budgeting skills, along with career exploration will be learned in this class. Students must pass this course before being eligible to take other business courses/electives.

0623-Business Economics
1 Credit
Grades 10, 11, 12
Do You Want to Develop "Life Skills" Necessary for Economic Success? Business Economics will help you develop knowledge in personal finance, time management, organizational skills, and goal setting. This information will be used in important decisions related to buying a house or car, choosing the appropriate insurance, filing tax returns, budgeting, and investing. The "Stock Market Game" will be an integral component of this course.

> 0625-Business Law

1 Credit
Grades 10, 11, 12
Students will be introduced to the relationship between law and business. This course will include topics such as personal law issues, fundamentals of contracts, sales contracts, property law, the law of jobs, forms of business organizations, borrowing money and paying bills. Students will study true situations that show how business and personal law impact not only
business, but the lives of young people and adults as well. Business law will help students achieve an understanding of legal principles they will use throughout their life. This course will be offered on opposite years to Marketing.

## 0640-Computer Technology 1

1 Credit
Grades 10, 11, 12
Students will improve keyboarding skills, learn advanced word processing skills, use advanced spreadsheet operations, use presentation software, use the Internet for advanced research and learn desktop publishing skills. This course will provide students with a good understanding of computer terminology. Students must achieve a C or better in the course to progress to Computer Technology II.

0645-Computer Technology 2
1 Credit
Grades 11, 12
Prerequisite: C or better in Computer Tech 1
Students will use database software (Microsoft Access) to produce professional printouts of reports, tables, and forms. Students will learn all of the important database features, from creating and editing tables, to developing forms and queries. Students will complete a simulation in which they will incorporate all programs in the Microsoft Office Suite.

## 0655-Entrepreneurship

## 1 Credit

Grades 10, 11, 12
This course takes students step-by-step through the entire process of owning their own business. They will select a product or service to sell, determine who their customers will be, learn how to market their business, how to obtain financing; manage their employees, and more. They will also learn how to create a business plan and will have completed their business plan by the end of the course.

## 0650-Marketing

1 Credit
Grades 10, 11, 12
Students will study the process of developing, promoting, and distributing products in order to satisfy customer's needs and wants. Students will learn about consumer habits, advertising, retailing, and banking. Students will learn a desktop publishing package to create marketing materials for a business. This course will be offered on opposite years to Business Law.

0379-Multimedia 1
1 Credit
Grades 9, 10, 11, 12
Students will study graphic design techniques including text, layout design, digital photography, advertising, and dynamics of color using Adobe Fireworks. They will also learn to create basic web pages using Adobe Dreamweaver. The final project will be an electronic portfolio created using Adobe Dreamweaver of the course creations. Students must earn a C or better to continue in Multimedia 2.

0380-Multimedia 2
1 Credit
Grades 10, 11, 12
Prerequisite: C or better in Multimedia1
Students in this class will study graphic design techniques including text layout designs, digital photography and manipulation of photographs, advertising and dynamics of color using Adobe Photoshop. Adobe Flash will be studied to learn computer animation. Audacity will be used to manipulate audio files and to record narration. Advanced Dreamweaver skills will be studied if
time permits. The final project will be an electronic portfolio of the course creations. Students must earn a C or better to continue in Multimedia 3.

## 0385-Multimedia 3

1 Credit
Grades 11, 12
Prerequisite: C or better in Multimedia 2

Students will learn advanced techniques using Adobe Dreamweaver and then learn digital video techniques using Microsoft Movie Maker and Pinnacle Studios. Students will also study graphic design principles in detail during this course. The final project will be an electronic portfolio of course creations or a final video production on a specific assigned topic.

## DRIVER EDUCATION

## 0019-Driver Education

. 25 Credit 9-Weeks

Grade 10

Students will learn the following information in Driver Education:

1. Responsibilities as a driver in our society.
2. Examine the benefits of Driver Education.
3. Identify and apply the steps in decision-making.
4. Identify the five major traffic events in the HTS.
5. Define perception, and identify the steps in the process of perception.
6. Identify traffic controls and their meaning.
7. Identify highway conditions and ways to deal with these conditions.
8. Describe ways to identify other user clues.
9. Identify parts of intended path of travel.
10. Identify proper procedures for obtaining a permit and license in PA.
11. Distinguish between static and dynamic decisions.
12. Identify problems related to night driving and ways to deal with them.
13. Identify how alcohol and drugs affect the driving task.

## ENGLISH

## 0110-English 9-Advanced

1 Credit
Grade 9
Prerequisite: Recommended Grade 8 average should be at least a C

Advanced English 9 emphasizes the study of literature, including drama, advanced grammar and mechanics, public speaking exercises, and extensive composition development skills. This course introduces students to different forms of prose and poetry. Training in vocabulary building that prepares the student for college studies is emphasized. Research skills will be studied.

0115-Communications 9
1 Credit

## Grade 9

This course offers study in grammar, paragraph writing, short stories, the novel, drama, and basic public speaking. Students will be introduced to different forms of prose and poetry. Vocabulary aligned with Common Core standards is part of the course. Extensive study of nonfiction will be implemented.

Prerequisite: Recommended Grade 9 average should be at least a C
Advanced English 10 is designed to extensively improve the students' writing abilities. Writing assignments include narrative, persuasive, and informative prompts. Students will write a research paper using APA and/or MLA guidelines. Literary terms will be explored through literature of the world, including drama. Students will receive reinforcement in different forms of prose and poetry. Vocabulary building, traditional grammar and mechanics, and public speaking are covered throughout the course.

0125-Communications 10
1 Credit
Grade 10
Communications 10 is designed to improve the student's ability to communicate. Students will study grammar and usage skills, mechanics, public speaking, and world literature, including drama. Vocabulary building and writing skills will be intricate parts of this course. Students will receive reinforcement in different forms of prose and poetry. Extensive study of nonfiction will be implemented.

0130-English 11-Advanced
1 Credit
Grade 11
Prerequisite: Recommended Grade 10 final average should be at least a C
Advanced English 11 includes the study of select American writers and their works, including drama. Students will demonstrate their abilities to recognize various forms of prose and poetry and be able to identify literary devices used by these writers. Instruction is given in the organization of a paragraph and in the preparation of a research paper. Emphasis is placed on the correct principles of grammar, mechanics, and college-level vocabulary. Students will complete a job skills unit that will include job applications, résumés, and job interviews. Advanced English 11 is designed for those students who are planning to continue their formal education after high school.

## 0135-Communications 11

1 Credit
Grade 11
Communication 11 reinforces different forms of prose and poetry. Students are given the opportunity to react through discussion and writing to the major themes in American literature, including drama. Correct techniques of paragraph writing are stressed with special emphasis placed on the review and refinement of basic skills of grammar, mechanics, usage, and sentence construction. Students will study a job skills unit that will include job applications, résumés, and job interviews. Vocabulary building is stressed.

0140-English 12-Advanced
1 Credit
Grade 12
Prerequisite: Recommended Grade 11 final average of at least a C
Designed for college-bound students, Advanced English 12 consists of units in English literature, including drama, and a review of grammar and mechanics, advanced vocabulary, and in-depth composition. Focusing on improving writing skills, students will study examples of writing, engage in various writing activities, and submit individual papers. A career research project will include various informative, documented segments (with deadlines to be met), a research paper using APA or MLA guidelines, and the presentation of a documented speech based on the research paper.

Communications 12 includes a review of basic grammar, mechanics, public speaking, and writing skills. English literature, including drama, will be emphasized, with reading for cultural enrichment, information, career, and pleasure also being encouraged. Vocabulary building will be included. Writing for practical purposes, job requirement, and coherence will be stressed.

> 0899/0902-0903- Keystone Prep

1 Credit
Grades 9, 10, 11
This course will provide selected students with an intensive course of study to prepare for Keystone Exams above and beyond their required courses. Students will focus on the essential concepts that are on the state mandated Keystone Exams in Algebra 1, Literature and Biology based upon predetermined criteria.

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1 \text { Credit } \quad \frac{0137-\text { SAT Prep }}{\text { Year }}
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Grade 11

This course will provide interested students with a course of study designed to help prepare them for the SAT exam generally taken during the Spring of their Junior year. Students will focus on the essential concepts that are typically found on this standardized test as well as test-taking strategies to help students feel more confident in their test taking ability.

## FAMILY AND CONSUMER SCIENCE

. 5 Credit

## 0021-Family Living <br> Semester

Grade 11
Family living is a class designed to help students continue to develop the skills they need that contribute to a successful family life. Together, we will explore the pathways to a successful transition from adolescence into the world of relationships, adulthood, marriage, and parenthood. Students will begin to apply the management process to areas of their lives that include learning, careers, wellness, time and relationships. Included in the relationship management is the understanding of the role of parents and caregivers in the growth and development of young children.

## 0022-International Foods

## 1 Credit

Although you'll make your way around the World in this unit, what better way to begin exploring than right at home? The United States, by itself, offers many opportunities to experience ethnic cuisines. The people who have made the United States their home over the years have a rich and varied heritage. Wherever immigrants have put down roots, their own unique foods and dishes become woven into the local food tapestry. In addition, we will explore the cultures, traditions, mealtime customs and food preparation of various regions of the World, including Latin America, Europe, the Mediterranean, and Asia. Increase your cultural awareness and appreciation of diversity as you prepare and sample new foods!

This course will consist of a combination of food preparation and sewing skills. The students will learn basic cooking skills and preparation techniques. They will also learn clothing construction by working from a pattern with directions, identifying proper and appropriate fabric choices and machine sewing. The students will need to provide their own fabric for the sewing projects.

## WORLD LANGUAGES

Spanish is offered at Everett Area High School. Other foreign languages are available via online courses. For example: Arabic, Mandarin Chinese, Japanese, German and Russian.

0353-Spanish 1
1 Credit
Grades 9, 10, 11, 12
Prerequisite: C or better in English 8
The study of elementary Spanish language is pursued in this beginning language course with emphasis placed on listening, speaking, basic grammatical structures and vocabulary. Also, the student becomes acquainted with various aspects of Spanish and Spanish American culture such as history, family life, food, holidays, etc. Optional field trips may be offered to enhance the study of culture. Students will also explore the Internet for language and cultural study.

## 0355-Spanish 2

## 1 Credit

Grades 9, 10, 11, 12
Prerequisite: C or better in Spanish 1
In Spanish 2 the students strengthen their language skills by increasing their control of the basic grammatical structures. Basic reading and writing skills are developed and the students also gain further insight into the Hispanic world. Optional field trips may be offered. Students will also explore the Internet for language and cultural study.

0360-Spanish 3
1 Credit
Grades 10, 11, 12
Prerequisite: C or better in Spanish 2
Spanish 3 offers an opportunity to pursue the development of listening comprehension, speaking, reading, and writing skills. Students will use vocabulary in speaking situations, short oral presentations and will prepare short written assignments. Reading selections will include cultural and topical articles. Optional field trips may be offered. Students will also explore the Internet for language and cultural study.

0363-Spanish 4
Grades 11, 12
1 Credit
Prerequisite: C or better in Spanish 3
In this advanced language course, emphasis is on perfecting the four language skills and acquiring language proficiency while reviewing and broadening their grammar foundation. Reading materials are theme related. Cultural studies focus on Latin America, Spain, and current events. Optional field trips may be offered. Students will also explore the Internet for language and cultural study.

In the senior high health course, students will learn about the following:

1. Students will examine ways to build healthy relationships.
2. Students will examine the physiological and psychological effect associated with the use of alcohol, tobacco, and drugs.
3. Students will identify ways to deal with and control violence in life.
4. Students will describe and examine friendships, dating, love and marriage.
5. Students will identify STD's and prevention of, with emphasis on abstinence prior to marriage.
6. Students will discuss symptoms of AIDS and HIV, means of transmission and effective methods of prevention.
7. Students not wanting to take the regular sex education portion of the class can be excused with parental consent. Those students will then be given an independent study unit dealing with a different area.

## MATHEMATICS

0430-Algebra 1B
1 Credit
Prerequisite: Algebra 1A with a C or better
An introduction to the use of variables for numbers, the properties of numbers, the use of both positive and negative numbers, graphing of equations, solving inequalities, rational and irrational numbers and problem solving. Basic geometry concepts will be introduced.

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\underline{\text { 0440-Geometry/Geometry TP }}
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1 Credit
Grades 9, 10
Prerequisite: Algebra 1 or 1 B with a C or better
The traditional geometry course will include a study of points, lines, planes, angles, triangles, quadrilaterals, circles, area, surface area, and volume. Geometry always includes reasoning and proof. In addition, similarity and congruency of triangles will be studied in depth.

0435-Algebra 2
1 Credit
Grades 10, 11
Prerequisite: Geometry with a C or better, Geometry TP with an A
The course is an extension of skills developed in algebra 1. Topics will include; equations, inequalities, relations, functions, systems of equations, matrices, polynomials, rational expressions, rational equations, and exponential equations. The course may extend into some discrete math, probability and statistics and elementary trigonometry.

0445-Pre-Calculus
1 Credit
Grades 11, 12
Prerequisite: Algebra 2 with a C or better
Topics of trigonometry will include: angle, trig ratios, trig functions, and their applications, solving right triangles, law of sines, low of cosines, radian measure of angle, linear and angular velocity, graphing trig functions, trig identities, and trig equations. Advanced math topics will include: relations, functions, graphing, matrices, vectors, parametric equations, polar complex
numbers, conics, exponential and logarithmic functions, sequences, series, combinatorics, probability, statistics, data analysis, and an intro to calculus.

## 0450-Calculus

1 Credit
Grade 12
Prerequisite: Pre-Calculus with a C or better

Introduction and review of previous mathematics courses, functions and derivatives, integration, continuity and limits, the differential, applications of the derivative and the differential, graphs, the definite integral, logarithmic and exponential functions, techniques of integration and polar coordinate.

## 0420-Algebra 1 TP

1 Credit
Grade 9
Prerequisite: Math 8
This course is for students coming from Math 8. Topics will include patterns of linear functions, proportional reasoning, percents, direct variation, solving linear functions, inequalities, modeling using multiple representations and lines of best fit.

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\text { 0422-Algebra } 2 \mathrm{TP}
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1 Credit
Grade 11
Prerequisite: Geometry TP

This course will conclude the texts of the algebra concepts covered in Algebra 1 TP . Topics include linear equations and inequalities, quadratic functions, properties of exponents, polynomial functions, rational expressions, numbers and operations, algebraic concepts, data analysis, probability and statistics.

## 0425-Consumer Math/Business Math

1 Credit
Grade 12

This course will focus on the basic necessity of understanding the role of the consumer in the economy. Consumer decisions, transportation, marketing for food and clothing, family housing, taxation, consumer credit, estimating income and planning expenditures, banking, protection through insurance, investment as well as a review of the fundamental operations of the number system will be covered in this course.

0899/0902-0903- Keystone Prep
1 Credit
Grades 9, 10, 11

This course will provide selected students with an intensive course of study to prepare for Keystone Exams above and beyond their required courses. Students will focus on the essential concepts that are on the state mandated Keystone Exams in Algebra 1, Literature and Biology based upon predetermined criteria.

1 Credit

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\frac{0137-\text { SAT Prep }}{\text { Year }}
$$

Grade 11

This course will provide interested students with a course of study designed to help prepare them for the SAT exam generally taken during the Spring of their Junior year. Students will focus on the essential concepts that are typically found on this standardized test as well as test-taking strategies to help students feel more confident in their test taking ability.

Prerequisite: Membership of the ensemble in a previous year. Otherwise an individual seeking to join the ensemble must communicate with the director at least 1 semester prior to joining the ensemble.
The High School Band is a performance-based ensemble that is designed for growth of musical technique and performance in grades 9-12. The ensemble provides many performance opportunities which must be adhered to as an ensemble member. These performances include: marching band (football games, parades, etc.), Christmas Concert, and Spring Concert.

Private instrumental music lessons are assigned to give students a chance to demonstrate and develop ability on their musical instrument. These lessons stress the development of their overall musical technique, tone quality, pitch intonation, pose and posture, articulation pronunciation, rhythm, breathing, phrasing interpretation, and sight reading. Instrumental lessons are made available to all students in grades $9,10,11$, and 12 and are a graded part of the curriculum. Students will be part of a weekly rotating schedule for their lesson.

0345-High School Chorale
1 Credit
Grades 9, 10, 11, 12
The High School Chorale is a non-auditioned ensemble that is open to all students in grades 9 through 12. The Chorale is a performance-based class that is designed to provide growth in the areas of performance and vocal technique. Students will have the opportunity to study repertoire that covers a wide spectrum of styles, time periods and cultures. Since performance is considered to be a major part of each student's grade, all students are required to participate in all performances. There are two major performances per year: the annual Christmas and Spring choral concerts.
Group vocal lessons are offered throughout the day as an extension of the regular choral rehearsal. These lessons are designed to give students a chance to further study their music in addition to the large group rehearsal. This allows more time for individual instruction. Lessons will be assigned on a rotating schedule during class. All members of the High School Chorale must attend at least ONE lesson per marking period. The other lessons can be used toward earning extra credit points. Lessons will stress the development of overall vocal technique including tone quality, pitch and intonation, proper posture, articulation, breathing, diction, rhythm, sight-reading, phrasing, interpretation, and choral blending techniques.

## Vocal Lessons

NC
Grades 9, 10, 11, 12
Group vocal lessons are offered throughout the day as an extension of the regular choral rehearsal. These lessons are designed to give students a chance to further study their music away from the large group rehearsal. This allows more time for individual instruction. Lessons will be assigned on a rotating schedule during class. All members of the High School Chorale must attend at least TWO lessons per marking period. The other lessons can be used toward earning extra credit points. Lessons will stress the development of overall vocal technique including tone quality, pitch and intonation, proper posture, articulation, breathing, diction, rhythm, sightreading, phrasing, interpretation, and choral blending techniques.

1 Credit
Prerequisite: Audition by band director during the previous scheduling year.
Study of literature and group size will be based on the types of engagements for which the Jazz Band will be asked to perform. Thus, the musical literature studied in this course will be varied and balanced according to performance demands. This course is open to students through audition only. All students will be able to demonstrate competency on his/her instrument in a small jazz ensemble setting.

## 0351-Tribe

Grades 9, 10, 11, 12
1 Credit
Prerequisite: Audition by choral director. Must be a member of the High School Chorale
This course is an extension of the High School Chorale for students who wish to further their interests in choral music and singing. Tribe is an auditioned ensemble and members will be placed in the ensemble based on their audition results. Students will have the opportunity to study more intense repertoire that covers a wide spectrum of styles, time periods and cultures. Since performance is considered to be a major part of each student's grade, students are required to participate in all performances. There are two major performances per year: the annual Christmas and Spring choral concerts. There will also be additional community performances scheduled throughout the school year.

## 0349-Music Theory \& Appreciation

1 Credit
Grades 10, 11, 12
Pre-Requisite: Student must be a current member of the High School Band or Chorale
This dual course is offered for students who have a serious interest in music and want to improve their comprehension of music theory and its background. Music Theory will cover the study of the basic elements of music including notation, harmony, scales, intervals, beginning composition, score analysis, basic conducting and other special topics. Aural skills such as sightreading and ear training will also be explored. Music Appreciation will cover the history of music from Antiquity and pre-ancient times through current music and modern composition. Important musical works, composers and historical figures, musical inventions and innovations and cultural and historical background will be studied. Musical analysis of different styles of music ranging from songs to major symphonies will also be an integral part of the course.

## PHYSICAL EDUCATION

## . 5 Credit <br> 0009-0012-Physical Education

Physical education is designed to provide each student with an opportunity to develop basic skills and an understanding of a variety of sports activities. Through physical education, desirable character and social traits are developed as well as defined responsibilities toward the physical development of the individual. Objectives such as increasing strength and endurance, better coordination of motor skills, improved health practices and an understanding of personal adjustment in our society are emphasized with the individual. Of major importance is developing skills in a sequence from Grades 7 thru 12 in relationship to the individual growth of the student.

The following activities are offered in the senior high physical education classes: kickball, angleball, cardio training, backyard games unit, flag football, soccer, tennis, stickball, Presidential \& National Physical Fitness Test (fall and spring), volleyball, basketball, speedball, weight
training, wrestling, field hockey, aerobic training, softball and backyard games. The activities are offered in units with the students being able to select activities they wish to participate in. In addition, all activities are offered as coeducational. Act 211 (drug, alcohol and tobacco) will be addressed in Grades 9-12. (Juniors and Seniors may choose to fulfill the Physical education requirement by successful completion of a varsity sport and/or fitness training program coached by a certified P.E. teacher in that concurrent year and an approved course replacement, i.e.: ACM course or senior challenge time.)

## SCIENCES

*Science Curriculum re-alignment will result in multiple grades having the same course.

> 0510-Biology

Grade 10
1 Credit
The goals of this course are to give students a fundamental understanding of the major concepts of biology and to help student appreciate the importance of biology in their everyday lives. Topics for discussion and laboratory work include cells, genetics, evolution, and ecology. In addition, focus will be placed on current events so that students are well informed and able to think critically about new developments in the world of science. This class will also prepare students who intend to pursue additional classes and/or a career in any science field.

0520-Chemistry TP
1 Credit
Prerequisite: Algebra or Algebra 1 TP
This course is designed for students in a vocational program who likely will not pursue further education at a four year college. The class will focus on the chemistry behind various processes in our everyday lives. Laboratory investigations will be conducted with an emphasis on data analysis and communication of the results. Topics discussed in the course include the properties and structure of matter, the periodic table, components of the atom, and chemical bonding.

## 0525-Chemistry

1 Credit
Grade 11
Prerequisite: Algebra
This course is designed for the college-bound student. Topics include structure and properties of matter, energy sources and transfers of heat, chemical equations, stoichiometry, periodicity and the nature of gases. It is laboratory based with emphasis on the natural of process of science. Experiments are conducted weekly and a formal lab report is required for each one.

> 0540-Physics

1 Credit
Grade 12
Prerequisite: Pre-Calculus
This course is designed for the serious science student. There will be a rigorous treatment of vectors, mechanics, optics and electricity. One independent physics research project is required. A working knowledge of trigonometry is a must. The students will expand on their formal labwriting techniques. This course will ease the transition to a college-lab setting.

1 Credit
Grades 11, 12
Prerequisite: B or better in Biology

This is an advanced course designed for students who plan to enter careers in health and health related areas. The course focuses on the structure and function of each system of the human body. Specific emphasis will be placed on the mechanisms of human disease. Vocabulary and laboratory work, including dissection, are essential parts of this course intended to prepare students for college level science courses.

0843-Health Care Technology 1
1 Credit
Grade 12

This is a required course for students enrolled in the Health/Environmental Cluster. The program will consist of medical terminology, basic health care skills, aseptic technique and infection control, first aide skills, electrocardiography, and concepts common to all health care professions. It will be taught within the high school setting during the senior year.

0844-Health Care Technology 2
1 Credit
Grade 12

This course deals with medical terminology and related body structure and function. (If desired, the student may earn three college credits for medical terminology). General health care skills will be included as well as the opportunity to work with information focused on the student's career interests.

## 0813-Advanced Biology

1 Credit
Grade 12
Prerequisite: B or better in Biology

This course reinforces the fundamental concepts of biology through laboratory investigation. A chemistry background and interest in science is recommended. Students will practice laboratory procedures and design their own experiments. Topics covered include: biotechnology, embryology, evolution, comparative anatomy, cell respiration, genetics, microscopy, photosynthesis, population ecology, and protein synthesis.

## 0820-Advanced Chemistry

1 Credit
Grades 11, 12
Prerequisite: B or better in Chemistry

The Advanced Chemistry course is a lab based course designed to prepare students that will be entering into a science major in college. Chemical principles, as well as applicable topics to society and our environment, are stressed. Emphasis is placed upon chemical calculations, mathematical derivations, and quantitative experimentation employing modern instrumentation and techniques.

## 0534/0535-Environmental Science

1 Credit

* Grades 9/11

This course will focus on population ecology, environmental health issues, and water quality standards. Students will evaluate the availability of natural resources, help with maintaining the greenhouse, perform quadrant studies and investigate local water systems. Additional projects through laboratory investigation include leaf/bug collections, macro-invertebrate studies, and assessment of biological diversity.

This course will provide selected students with an intensive course of study to prepare for Keystone Exams above and beyond their required courses. Students will focus on the essential concepts that are on the state mandated Keystone Exams in Algebra 1, Literature and Biology based upon predetermined criteria.

## SOCIAL STUDIES

## 0215-American Cultures 1

1 Credit
Grade 9
It will help the students analyze and understand persisting human dilemmas related to public issues, the motivation of our government's approach to foreign policy, the relationship between government and the economic system, how the United States began to become a world power, how American life styles have been subjected to many and varied influences, and the participation of people of varied race, ethnicity, creeds, backgrounds, and sexes in American life.

0220-American Cultures 2
1 Credit
Grade 10
It will help the student analyze and understand persisting human dilemmas related to public issues, the motivation of our government's approach to foreign policy, the relationship between government and the economic system, how the United States was thrust into world leadership, how American life styles have been subjected to many and varied influences, the race prejudices and the participation of minorities in American life.

## 0225-World Cultures

1 Credit
This course will provide a framework for a geographical, social, economic, and political analysis of various world regions. Students will begin their study with the Renaissance and follow the development of various cultures into the Age of Revolution and then look at the World in Conflict and then end their study by looking at various major events that have taken place in our Contemporary World. The goal of this course is to foster a more tolerant attitude towards others.

## 0230-Problems of Democracy

## . 5 Credit

Semester
Grade 12
This course is designed to promote citizenship. Student rights and responsibilities as member of our society are examined. Topics will cover the three branches of government, political parties, elections, the Bill of Rights, and the U.S. Constitution. Special emphasis will be placed on the Presidency and Civil and Constitutional Rights. Some referenced to state and local government will also be a part of this course.

$$
1 \text { Credit } \quad \frac{\text { Course } 0227 \text { - Comparative Religions }}{\text { Year }}
$$

The Comparative Religion course offers an overview of various religions, followed by discussions, questions and answer sessions. Subsequent class sessions will include research, readings, videos and additional discovery to give students a better understanding of the practices of the major religions of the world and how they compare to other religions.
Primary focus will include Hinduism, Buddhism, Judaism, Christianity and Islam. Other religious viewpoints may be discussed as student interest is generated.

## TECHNOLOGY EDUCATION

0714-Intro to Pre-Engineering
. 5 Credit

This introductory course offers students a unique learning experience in the world of technical design, innovation, and invention. Students will be exposed to current society's foremost technological practices in a hands-on and STEM (science, technology, engineering, and mathematics) oriented learning environment. Course content will involve modern technologies in the systemic fields of manufacturing, construction, power/energy transmission, transportation, and communications. Specific instruction will include occupational ethics, problem solving, research and development, green energy, mechanics, fundamental electricity/electronics. Key concepts will be utilized in a culminating activity in robotics.

## 0715-Drafting/Intro to Computer Aided Drafting

1 Credit
Grades 10, 11, 12

This course includes both board drafting and CAD. The board drafting portion consists of developing measurement skills, sketching, multiview projection of mechanical parts, drawing parts involving welding symbols, scaling of drawings and some basic architectural drafting. The remainder of the course introduces basic skills in AutoCAD. Our CAD drawings will include basic mechanical drawings in 2D and basic one-dimensional layout drawings. Students will also be receiving an introduction to design/engineering.

0720-Computer Aided Drafting - Mechanical \& Manufacturing
1 Credit
Grades $10,11,12$
Prerequisite or Corequisite: Drafting/Intro to CAD

In this course concentration will be on 2D mechanical drawings. These drawings will include machine parts, sections, auxiliary views, dimensioning and the drawing of threaded objects. AutoCAD and Inventor software will be utilized throughout the course. Students will also gain experience in the development/production of various products.

0725-Computer Aided Drafting - Architectural
1 Credit
Grades 10, 11, 12
Prerequisite: Drafting/Intro to CAD
The main purpose of this course is for the student to learn the basics of how typical houses are designed and built, and how to draw them on CAD. AutoCAD software will mainly be used. The main assignment for the year is to design a house including all the drawings associated with the design of a house. These drawings will include floor plans, basement plan, cross section of a typical wall used in the house, stairway details, roof details, elevations, kitchen details, electrical plan, plumbing plan and HVAC plan. Introduction to the course will include experience in outdoor surveying and 3D architectural drawings on a software program called Revit.

0730-Computer Aided Drafting 3D
1 Credit
Grade 10, 11, 12
Prerequisite: CAD - Mechanical or CAD - Architectural

In this course we will spend most of our time developing skills in either Mechanical CAD, Architectural CAD or both. If a student wants to have a career in the manufacturing industry, he or she would spend most of his or her time doing mechanical drawings on Inventor software. If he or she is more interested in the building industry he or she would spend more time doing architectural drawings on Revit software. Meeting the needs of the individual student will be a major factor by adapting the curriculum as necessary.

# VOCATIONAL PROGRAMS @ BEDFORD COUNTY TECHNICAL CENTER 

## 0893-0895-Biotechnology

3 Credits
Grades 10, 11, 12
Biotechnology is an experiential learning-based program that combines traditional plant and/or animal breeding as well as genetic engineering techniques to develop, modify, or improve living organisms. Instruction will include: principles of scientific research; microbiology; genetic transfer; genetically modified organisms; and Biotechnology in plant science, animal science, medicine, and ecology. Other topics covered will include: bioethics; careers; and consumer concerns.

## 0890-0892-Agricultural Science

3 Credits
Grades 10, 11, 12
Agriscience is the application of scientific principles and new technologies to agriculture. Area of study will include: aquaculture; crop science; food science; large animal science; small animal science; natural resources; poultry science; agriculture engineering; equine science; horticulture; veterinary science; and FFA and leadership.

## 0745-0755-Auto-Diesel

3 Credits
Grades 10, 11, 12
Through theory and actual shop experience, this course gives students the training to troubleshoot, repair and analyze malfunctioning gasoline and diesel engines. Training includes work in the mechanical area of the automotive and trucking such as: clutches, transmissions, differentials, steering, suspension, front-end alignments, braking, carburetion, fuel, electrical, fuel injection, and computer controlled electric systems.

Career Opportunities:
General auto mechanic or technician in a dealership, independent garage, fleet operation, service station, self-employment, repair shop assembler, and parts counter salesperson

0760-0770-Building Construction
3 Credits
Grades 10, 11, 12
Basic classroom and practical experiences to be taught as a general industrial program concerned with the erection and installation of buildings, and other structures using assorted materials such as metal, wood, stone, brick, glass, concrete, or composition substances. Instruction is provided in the basic skills of carpentry, masonry, plumbing, heating, electrical, painting and decorating, and a variety of activities associated with building construction. These include, but are not limited to, cost estimating, cutting, fitting, fastening, and finishing using various tools, blueprint reading and following technical specifications, and knowledge concerning the physical properties of materials.

Career Opportunities:
Apprentice carpenters, masons, electricians, plumbers, employment in plants or factories where building units, components or building materials are made or sold, self-employment, and industrial maintenance.

This three-year course, consisting of 1250 required hours, is offered to both male and female students. The first year students are introduced to the basic skills such as shampooing, scalp treatments, manicuring, hair styling, cold waving, and hair cutting. Safety, sterilization, and sanitation are stressed as important parts of each job.

Second year students are required to place more emphasis on progress toward perfection of basic skills, including on-the-job training that is expected in beauty salons. Removal of superfluous hair, thermal waving and curling, chemical hair relaxing, skin care and makeup are added to the second year curriculum.
During the third year, students have an intensive review of all skills and theory plus coloring, hair lightening electricity, chemistry, shop management, and the State Board of Cosmetology laws. Students are taught the importance of expectations to obtain a job. When students have completed this three-year course, they are qualified to take the state board examination required for a state license in cosmetology.
Career Opportunities:
Cosmetology operator, teacher, manicurist, and manager
0875-0885-Institutional Foods (Culinary Arts)
3 Credits
Grades 10, 11, 12
The purpose of the program is to prepare workers for the restaurant and hospitality industry. Graduates will be prepared to enter the workforce in a variety of areas. This course will be integrated for advanced standing for an associate degree from Allegany College.
The program will include: Food safety and preparation, Presentation and service, Dining room service and set-up, Kitchen management, Dining room management, Computer cash register and inventory, Entrepreneurial skills and management techniques.
Career Opportunities:
Waiter/waitress, chef (with further education), cook, short order cook, host/hostess, dining room manager, cashier and more

## 0830-0840-Health Assistant

## 3 Credits

Grades 10, 11, 12
Health/Medical Assistant is offered to $10^{\text {th }}, 11^{\text {th }} \& 12^{\text {th }}$ grade students. The three-year program will offer a background in basic anatomy, physiology, diagnostic studies, pathophysiology, terminology, and practical skills. Studies in dental assisting, use of computers for medical office procedures, and the possibility of a cooperative work-study program are also included in the Health/Medical Assistant Course.

Career Opportunities:
Nursing assistant, medical assistant, medical office/dental office assistant. The course also prepares students for advanced studies in the health professions.

## 0775-0785-Welding

## 3 Credits

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\text { Grades } 10,11,12
$$

The welding program provides classroom and shop experience with all types of welding: Electric, Arc, Spot, TIG, Automatic, Semi-automatic, and Oxyacetylene. Instruction emphasizes properties of metals, blueprint reading, electrical principals, welding symbols, mechanical drawing, and CAD-CAM techniques.

Career Opportunities:
Welder of all types of material, welding fitter, grinder, machine operator, assembler, installer, drafters and CAD operators

