

The overarching goal of the Saucon Valley High School curriculum is to provide educational opportunities for all students to challenge themselves as they prepare to enter the future workforce. While different career aspirations will result in different curricular pathways during the high school years, Saucon Valley High School remains steadfast in its commitment to educate a future workforce capable of successfully competing in the global economy of the 21<sup>st</sup> century. Thus, throughout the Saucon Valley High School Program of Studies, three possible curricula are offered for consideration: Applied Academic, College Preparatory, and Honors. Each student’s enrollment in any of these curricula will be based upon the appropriateness of the coursework to his/her future career goals, whether those goals be attending a 2-4 year college, trade/technical school, entering military service, or seeking gainful employment in a vocational setting. The Program of Studies contains a complete listing of skills development areas offered by the Bethlehem Area Vocational-Technical School as well as those courses for which Saucon Valley High School has an articulation agreement with Northampton Community College.

Saucon Valley High School is proud to offer such a wide array of coursework to address the diversity of interest in its student body. Likewise, each Saucon Valley High School student should be proud of his/her chosen career path, should recognize the importance of all curricular choices, and should appreciate how the wisdom of choice can serve the attainment of ultimate career goals.

### GRADUATION REQUIREMENTS

The Saucon Valley High School graduation requirements are listed below.

	<b>CLASS OF 2010</b>	<b>CLASS OF 2011</b>	<b>CLASS OF 2012**</b>	<b>CLASS OF 2013**</b>
<b>English</b>	4.0 credits	4.0 credits	4.0 credits	4.0 credits
<b>Social Studies</b>	4.0 credits	4.0 credits	4.0 credits	4.0 credits
<b>Mathematics**</b>	4.0 credits	4.0 credits	4.0 credits	4.0 credits
<b>Science</b>	3.0 credits	3.0 credits	4.0 credits	4.0 credits
<b>Fine or Practical Arts &amp; Humanities*</b>	3.0 credits	3.0 credits	3.0 credits	3.0 credits
<b>Health &amp; PE</b>	2.0 credits	2.0 credits	2.0 credits	2.0 credits
<b>Computer Literacy or Programming</b>	1.0 credit	1.0 credit	1.0 credit	1.0 credit
<b>Writing Course</b>	1.0 credit	1.0 credit	1.0 credit	1.0 credit
<b>Additional Approved Courses</b>	<u>5.0 credits</u>	<u>5.0 credits</u>	<u>5.0 credits</u>	<u>5.0 credits</u>
<b>TOTAL CREDITS</b>	27.0	27.0	28.0	28.0

\* All electives in English, Social Studies, Business, Fine Arts, Visual Arts, Technology Education, Family and Consumer Science and Foreign Language  
Students interested in challenging a course may contact their school counselor.

\*\*The **Classes of 2012 and 2013** are required to take and pass four (4) science credits which must include Physics First, Chemistry, Environmental/Earth Space Science and Biology.

## COURSE AVAILABILITY STATEMENT

This booklet describes all courses offered at Saucon Valley Senior High School. The school reserves the right to cancel or postpone courses because of insufficient enrollment, lack of physical facilities, or unavailability of teaching personnel. Program outlines are provided for both college-preparatory students and technology-preparatory students. Students who wish to cross-over curriculum lines should speak with their counselor before developing any individual program.

It is imperative that students thoughtfully consider their course selections at the time of course registration so that their original selections are the courses that they will be committed to in the next school year. We must have accurate counts in course sections prior to the start of the year because it is the number of students signing up for each course during the registration process that will determine how many sections of the course are placed into the master schedule. The number of course sections directly determines the assignment of each teacher at the high school for the coming school year to the master schedule.

There will be fewer options available to the student if changes are requested once the master schedule is set. Not all change requests can or will be honored due to lack of course availability, student/class ratios, teacher assignments, or if the request is not being made for a sound educational reason.

However, if circumstances change after the time of course selection by the student we ask that you contact your building counselor to discuss the change prior to July 1<sup>st</sup> to request a change. The school counselor will discuss the availability of classes and decisions will be made in the best interest of the student.

Once the school year begins, the expectation is that students will honor their schedules. Only changes that are educationally based will be considered. The Schedule Change Committee will evaluate requests and decide the appropriateness of the change. If approved, students may withdraw from a 1.0 credit course and add a different 1.0 credit course during the first eight days of the course. After the eighth day, students must stay in the course and receive the grade earned. Students who have an F average at the end of the first half of a course may drop it with the following conditions: the student's transcript will reflect a final average of "F" for the course; the student must schedule one of the 0.5 credit courses available in that same block; and the change must have the approval of the Schedule Change Committee. Students may withdraw from a 0.5 credit course with approval of the Schedule Change Committee during the first five days of the course. A 0.5 credit course may not be dropped after the fifth meeting of the course.

Placement into the appropriate level of a course is very important. Our faculty has found that students who meet the published prerequisites are most likely to be successful in the course. Students and classmates are expected to be challenged yet not frustrated. If a student does not meet a prerequisite yet desires to register for a course, the student and parent are asked to explain in a letter to the school counselor, department chair, and principal the desire to have the prerequisite waived. Decisions in the best interest of students will be made.

The Saucon Valley School District will excuse students from specific instructional units or lessons when this instruction conflicts with religious beliefs and/or moral principles of the parent(s) or guardian(s), and/or of the pupil. The district will require written requests for excusals.

Curriculum materials and courses of study are available to all parent(s) or guardian(s) during normal school hours and/or teachers/parent conferences. Such curriculum materials, where practical, shall be made available by the school district for home instruction used by the parent(s) or guardians(s) of any student excused from a district program of instruction.

Physical Education is required of all pupils unless they are excused by a physician's certificate satisfactorily showing justifiable cause.

All students will be scheduled with a full schedule during both semesters of the school year.

## SUMMER LEARNING ACADEMY

Students who fail an English, Social Studies, Science, or Mathematics course should make up the credit during Summer Learning Academy. This is particularly important for students who attend Bethlehem Area Vocational-Technical School, as there is not sufficient room to repeat courses in a vocational-technical schedule. A student must have earned a 55% to be eligible for Summer Learning Academy. Students are expected to pass the common end of course final exam at the end of the summer school experience. **NOTE:** *A fee is charged for each course taken during the Summer Learning Academy session.*

## ENGLISH DEPARTMENT

In accordance with the recommendations of the College Entrance Examination Board, the Honors/AP curriculum track in the English department of Saucon Valley High School is intended for truly exceptional students. Honors students are required to fulfill a summer reading requirement each year. At the end of every school year, students will be apprised of the details of this assignment. **Students must keep at least an 87% average to progress in the Honors program.** Students not in the honors track who seek to gain admission into the program must have a minimum 95% average in their college preparatory English course and score a minimum of 83% on an entrance exam to be administered at the English department's discretion.

*Note:*

- *Students in the College-Prep or Applied Academic classes may not proceed to the next level of English without successful completion of their present level.*
- *Students may not advance from Applied Academic English to College Preparatory English without the approval of their former teacher.*
- *Students in 12<sup>th</sup> grade must successfully complete a showcase portfolio and submit it to their 12<sup>th</sup> grade English teacher in order to graduate from Saucon Valley High School.*

\*\*\*\*\*

### STATEMENT OF REQUIREMENTS:

Four credits of English (one from each grade level designation) are required for graduation. In addition, students are required to take a writing course: Theme Writing or Basic Composition. Honors Analytical Writing is the prerequisite for AP English 12; students must have an 87% or better in Honors English 11 to enroll in Honors Analytical Writing.

### 200S FOUNDATIONS OF ENGLISH 9

Credit – 1.0

This course is for students with an individualized plan of studies. Emphasis will be placed on vocabulary building, spelling, grammar, and punctuation. Students will study the many aspects of verbal communication: short stories, newspapers, drama, and non-fiction.

*PREREQUISITE: Approval of School Counselor*

### 208 APPLIED ACADEMIC ENGLISH 9

Credit – 1.0

Applied Academic English 9 prepares students to achieve in subsequent courses as well as post secondary education. Applied Academic English 9 is designed to teach the language and communication skills needed to achieve academic and communication competency. Whether students plan to enter the work force immediately after high school or enter into post-secondary education, they will learn cognitive, analytical, motivational, and organizational skills necessary to achieve this proficiency.

### 212 COLLEGE PREPARATORY ENGLISH 9

Credit - 1.0

This course is designed for college-bound students; therefore, the areas to be developed are analytical skills, writing/research skills, grammar/mechanics/usage, and vocabulary. In addition, students will read and explore several serious literary works, including novels, short stories, and poems written by acclaimed writers.

### 216 HONORS ENGLISH 9

Credit - 1.0

Middle school and high school teachers will recommend which students should take this course, based on student achievement in English classes and on a battery of tests. The course, designed for those who have shown exceptional ability in the language arts, begins preparing students for the AP English Test. It emphasizes mastery of the structure of the English language, vocabulary development, expository writing, and the **close** reading of literary works by acclaimed writers.

*Note: Students must see their English teacher for a prerequisite reading assignment to be completed before the course begins.*

***PREREQUISITE: Minimum 87% average in Honors English 8 and 95% average for all other 8<sup>th</sup> grade students.***

## ENGLISH DEPARTMENT (continued)

### 201S FOUNDATIONS OF ENGLISH 10

Credit - 1.0

For students with an individualized plan of studies, this course will continue to emphasize the skills learned in Foundations of English 9 by working on their individual reading levels, building everyday vocabulary, spelling, grammar and punctuation. Reading short stories, newspapers, dramas, non-fiction and a novel will help build verbal communication.

*PREREQUISITE: Approval of School Counselor.*

### 209 APPLIED ACADEMIC ENGLISH 10

Credit - 1.0

Applied Academic English 10 prepares students to achieve in subsequent courses as well as post secondary education. Applied Academic English 10 is designed to teach the language and communication skills needed to achieve academic and communication competency. Whether students plan to enter the work force immediately after high school or enter into post-secondary education, they will learn cognitive, analytical, motivational, and organizational skills necessary to achieve this proficiency.

### 213 COLLEGE PREPARATORY ENGLISH 10

Credit - 1.0

The course is designed to give students the literary tools necessary to examine short stories, poetry, drama, and novels thematically across cultures. Emphasis is also placed on the development of writing skills as a response to the literature examined in class. In addition, students will research various topics pertaining to the works studied and then develop project presentations. Within the study of reading and writing, students will also study vocabulary and grammar skills to support the reading and writing. Students will work with the writing process with special emphasis on expository and persuasive writing. Peer reviews and teacher-student conferences will help students refine their work and their communication skills. In addition, students are introduced to the SAT writing component.

### 217 HONORS ENGLISH 10

Credit - 1.0

High School policy, based on student achievement in English classes, will determine which students are eligible for this course. The course, designed for those who have shown exceptional ability in the language arts, continues to prepare students for the Advanced Placement Test. Students will explore approximately six prominent literary works, frequently write in response to the works, further develop vocabulary and grammar and usage concepts, and complete a formal research project. In addition, SAT preparation, including the SAT writing component, will be addressed.

*Note:* Students **must** see their English teacher for a prerequisite reading assignment to be completed before the course begins.

*PREREQUISITE: Minimum 87% average in Honors English 9*

### 202S FOUNDATIONS OF ENGLISH 11

Credit – 1.0

Building on the skills learned in previous Foundations classes, students with individualized education plans will focus on improving their reading levels, practical vocabulary, grammar and punctuation. Sentence and essay writing will be emphasized, as well as a variety of reading experiences will continue to build their verbal communication skills: short stories, newspapers, magazine articles, drama, non-fiction and novels.

*PREREQUISITE: Approval of School Counselor*

### 210 APPLIED ACADEMIC ENGLISH 11

Credit – 1.0

Applied Academic English 11 will develop skills related to literature, language, and composition. The level of skill development in this course is aimed at preparing students to continue through the Applied Academic level, ultimately choosing entry into the workplace, a post-secondary college, or the armed forces upon graduation. While students explore major literary themes in a variety of genres, they will practice academic and technical writing, incorporating vocabulary units and grammar skills.

## ENGLISH DEPARTMENT (continued)

### **214 COLLEGE PREPARATORY ENGLISH 11**

Credit – 1.0

This course, designed for students who will continue their educations after graduating from high school, offers a chronological study of American literature with emphasis on its reflection of American history and literary philosophies. In addition to several major works, students read assorted short stories, essays, and poems. The class works to refine writing skills, develop vocabulary, and reinforce selected elements of grammar and mechanics of the English language.

### **218 HONORS ENGLISH 11**

Credit - 1.0

This course continues preparing exceptional students in English for the AP English Test. The in-depth reading of great American literary works, the writing of compositions based on the literary interpretations and criticisms of that literature, the study and usage of grammar, and vocabulary are emphasized strongly throughout this course. Students will write their college entrance essay in this course.

Note: Students must see their English teacher for their summer reading assignment in the June preceding this course. The summer assignment can include up to four novels and at least one composition.

*Prerequisite: Minimum 87% average in Honors English 10*

### **203S FOUNDATIONS OF ENGLISH 12**

Credit – 1.0

For students with an individualized plan of studies, this course will further refine the skills learned in previous Foundations classes by focusing on improving their reading levels, practical vocabulary, grammar and punctuation. A variety of reading and writing experiences will continue to build their verbal communication skills: short stories, newspapers, magazine articles, drama, non-fiction and novels.

*PREREQUISITE: Approval of School Counselor*

### **211 APPLIED ACADEMIC ENGLISH 12**

Credit – 1.0

Applied Academic English 12 will refine skills related to literature, language, and composition. The level of skill development in this course is aimed at preparing students to enter the workplace or a post-secondary school. In conjunction with the literary units, students will practice research and writing skills with an emphasis on the argumentative format, incorporating vocabulary units with grammar skills.

### **215 COLLEGE PREPARATORY ENGLISH 12**

Credit - 1.0

This course is designed for students who are already enrolled in the college preparatory track and have successfully mastered prior college preparatory concepts and who will continue their education after high school. The course focuses on the study of British literature and the application of its themes. In addition, CP English 12 includes vocabulary development, grammar skill development, and especially, writing skill development, concentrating on argumentative, primary and secondary research.

### **219 ADVANCED PLACEMENT ENGLISH 12**

Credit – 1.0

This course is designed to prepare students to take the AP English Literature and Composition Test, which can lead to exemption from freshman English in college. The course stresses the close reading of sophisticated British literature tracing the development of the tradition from *Beowulf* to the modern poets and authors. In addition, the course stresses analytic writing as a response to literature in numerous short responses (timed writings) and a few longer, more research-based critical essays. Throughout the course AP question (both Multiple Choice and Essay) are consistently used to practice and assess students' progress. Students must complete a summer reading and writing project. This course of study was approved as a certified AP course by the College Board.

*PREREQUISITE: Minimum 87% average in Honors English 11 and Honors Analytical Writing*

## **ENGLISH DEPARTMENT (continued)**

### **220 BASIC COMPOSITION**

Credit – 1.0

Basic Composition is intended to introduce 9<sup>th</sup> and 10<sup>th</sup> grade students to the writing skills necessary to succeed throughout high school and post-secondary education. Using the PA five-domain scoring guide, students will be led through writing as a process within a workshop setting. Concepts to be addressed include the following: thesis statement, topic sentence development, paragraph structure, and multi-paragraph essay construction in different modes of writing (informational and persuasive). Conventions will be addressed throughout the course as students learn to revise and edit their own, as well as their peers' works.

### **221 THEME WRITING**

Credit – 1.0

Theme writing is a skill-development course for college-bound juniors and seniors who wish to practice and improve their writing ability, using the PA five-domain scoring guide. The course approaches writing as a process – prewriting, drafting, proofreading, and revising. Both professional and student models are used as examples to study the sentence combining, idea development, and technique evaluation. Individual conferences, peer reviews, reading/writing workshops, and group study methods will be employed by the instructor to improve each student's organization, mechanics, and usage in the application of writing patterns.

### **222 HONORS ANALYTICAL WRITING**

Credit – 1.0

This course is designed for students to begin building the writing skills necessary for success on the AP Literature and Composition test in their senior year. This course is offered in the spring to juniors who have successfully completed Honors English 11 and fulfills the writing requirement for graduation. Furthermore, it is understood that these students will enroll in AP English 12 in the fall of their senior year. Honors Analytical Writing focuses on composition as a response to literature. Students will practice using college-level, analytical writing skills to develop strong expository and persuasive compositions as a response to major works of literature in the Western tradition. Students will have the opportunity to practice both timed essays (free writes and quick writes) and longer, more extensive responses using multi-level, college essay questions. AP rubrics, models, and “target papers” will be used to guide the development of these academic writing skills. Students will also complete a formal literature-based critical paper. Because of the rigorous and challenging nature of the reading and writing, this course is intended only for those students who plan to take AP English 12. All students taking Honors English must take this as their writing requirement.

***PREREQUISITE: Minimum of 87% in Honors English 11.***

### **223 EXPLORATIONS IN EXCELLENCE**

Credit - 1.0

Explorations in Excellence is a course aimed at providing enrichment experiences for gifted, talented, and high-performing students. The course will focus on the development of inquiry skills through a problem-based learning model. The interests and learning styles of the individual student will drive the specifics of the problems to be investigated. Skills addressed will include, but are not limited to, writing skills, research skills, presentation skills, and technology skills. Individual students will select a real-world problem in their areas of interests and become the actual investigators using appropriate inquiry methods. Since the projects are individualized, the success of this type of activity is dependent upon the interest and task commitment of the students.

### **224 CRITICAL READING**

Credit – 0.5

This course is intended for the student who needs improvement in literal and inferential comprehension. (PA Standards 1.2 and 1.3). This course is appropriate for the student who experiences difficulty in evaluating and interpreting texts. Study skills are also a focus of the course. The course may be taken more than once if the student does not reach a level of Mastery at the end of the quarter.

***PREREQUISITE: Recommendation of Academic Services Coordinator***

## ENGLISH DEPARTMENT (continued)

### 225 INTENSIVE READING

Credit – 1.0

This course is to provide the foundation for a smooth transition to ninth grade coursework. The course provides remediation for students with below grade-level reading skills as addressed in the PA Standards 1.1, 1.2, and 1.3. Emphasis is on vocabulary, literal comprehension, and an introduction to inferential comprehension. Students who do not reach a level of Mastery at the end of the semester may be recommended to enroll in Critical Reading to further improve their skills.

*PREREQUISITE: Recommendation of Academic Services Coordinator*

### 226 INTENSIVE WRITING

Credit – 0.5 per quarter taken

This course primarily addresses existing writing challenges (PA Standards 1.4 and 1.5) through individualized instruction. The focus of the course is to strengthen different aspects of writing that students find challenging. Students will find this course helpful to meet proficiency writing standards and perform up to par in subsequent courses. Intensive writing is not mandatory for all students, but is recommended for those who struggle with written expression and essay structure. It may be recommended that a student repeat the course, for additional credit, if he/she doesn't reach a level of Mastery at the end of the quarter.

*PREREQUISITE: Recommendation of Academic Services Coordinator*

### 227 CREATIVE WRITING

Credit - 0.5

Creative Writing is designed to offer student writers an opportunity to expand their practice in the areas of poetry, fictional and nonfiction prose, and playwriting in a reader-response environment. Using the PA five-domain analytic scoring guide, students will be led through writing as a process. Within a workshop setting, students will write in a variety of genres and attempt to create original works in each genre examined. A culminating portfolio will be used to showcase best work and assess progress.

**Creative Writing is an elective that is taken in addition to the writing requirement and the regular English course.**

### 229 PUBLIC SPEAKING

Credit – 0.5

This course is designed for students to acquire the skills needed to present effective speeches. Students will learn preparation and relaxation techniques, the difference between public speaking and conversation, as well as tips for developing confidence and refining listening skills. Further, speech preparation strategies such as gathering and supporting ideas, organizing the framework, and selecting visual aids will help students with their content and delivery. Various examples will be provided for students to model their speeches.

### 230 PUBLICATIONS AND TECHNOLOGY I

Credit – 1.0

### 231 PUBLICATIONS AND TECHNOLOGY II

Fall semester only

This semester elective is offered for students who desire an in-depth learning experience in the publication field. Although the course uses yearbook production as a setting, skills taught also benefit those interested in school newspaper or career publication. By creating page layouts online and using a wealth of tools provided by a national publishing company, students learn the power of technology in written media. Students study elements of design, page production, text writing, photography, and marketing. The class is set up as a small business, enabling students to develop, manufacture, and market a product, ever mindful of their roles in the successful outcome of the venture. Levels I and II run concurrently utilizing Level II students as editors and mentors who can oversee the Level I, less experienced students.

*PREREQUISITE: Juniors and seniors with a B or better in English and Computer Applications*

**ENGLISH DEPARTMENT (continued)**

**232 SCIENCE FICTION**

Credit – 0.5

Entering the world of imagination, students read and analyze literary works that reflect future possibility. Beginning with the earliest forms of science fiction, students observe the changes that have occurred in this genre over the past 200 years, as well as, the historical correlations between the works and the events of the time. Above all, students learn about the qualities that distinguish good science fiction from bad. Each student is responsible for doing a research project as well as writing an original short story.

**233 SCRIPT ANALYSIS**

Credit – 0.5

Lights! Camera! Action! No performer gets applause without a lot of study and exploration. This course invites students to meet characters and to breathe life into their scenes by inventing histories and justifying choices. Students will read a variety of scripts, from classic to modern, discuss scenes, and complete MLA formatted five-paragraph analyses. Classroom discussions, guest performers, and film interpretations will complement the research and enhance the presentations. All activities will culminate in a final persuasive speech in which students will defend a character's choices or present an oral interpretation of a monolog. All activities will culminate in a final persuasive speech in which students will defend a character's choices or in an oral interpretation of a monolog.

**236 JOURNALISM**

Credit – 1.0

This course will develop the skills necessary for journalistic writing and culminate in the publication of a school newspaper. Students will not only learn interviewing skills, but also learn how to write news reports, editorials and opinions, sports journalism, and feature stories. This course will allow students to explore another venue for publication: The Panther Press. This semester-long course will be offered in the fall, and students will be encouraged to continue writing during the second semester as an extra-curricular activity.

**Note: This class is an elective and does not fulfill the writing requirement.**

## SOCIAL STUDIES DEPARTMENT

The Social Studies Department of Saucon Valley High School offers a number of diversified courses in addition to courses that are required for graduation at each of the four grade levels. *Four credits* of social studies are required for graduation, which should be the following *required courses* taken in sequence at grade level:

- 9<sup>th</sup> Grade: United States History II (1.0 cr.)
- 10<sup>th</sup> Grade: World Cultures (1.0 cr.)
- 11<sup>th</sup> Grade: 20<sup>th</sup> Century Studies (1.0 cr.)
- 12<sup>th</sup> Grade: American Government and Economics (1.0).

Students who are in need of standards based skills might consider taking the “applied” courses as alternatives to the required College Preparatory (CP) courses.

Besides taking the required social studies courses, students are encouraged to take a selection of elective courses that are offered within the Social Studies Department before they graduate. Consideration for your selection may vary along with the variety of electives offered within the Social Studies Department. The elective courses in the Social Studies Department may not be used as a substitute for the *required courses* for graduation.

### **900 FOUNDATIONS OF US HISTORY II 9**

Credit- 1.0

For students with an individualized education plan, this course provides a survey of the major political, social, and economic issues in American history from the election of Abraham Lincoln in 1860 to the progressive reform movement. Topics of study include a discussion of the Civil War and Reconstruction era, the rise of industrialization, settlement of the West, labor and immigration, and the progressive reform movement. Instructional methods in this course are flexible and varied.

*PREREQUISITE: Approval of School Counselor.*

### **911 UNITED STATES HISTORY II**

Credit – 1.0

United States History II provides a survey of the major political, social, and economic issues in American history from the election of Abraham Lincoln in 1860 through the Great Depression and New Deal. Topics of study include a discussion of the Civil War and Reconstruction era, the rise of industrialization, settlement of the West, labor and immigration, the progressive reform movement, the emergence of America as a global power during World War I, the prosperity of the 1920s and subsequent economic collapse. Equipped with this historical background, students are then able to observe modern issues such as race relations, the economy, current legislation, and the changing role of women in their proper context. Instructional methods in the United States History II course are flexible and varied in order to meet the educational needs of students of all abilities in an intensively scheduled class. *This is a required course for freshmen.*

### **915 HONORS UNITED STATES HISTORY II**

Credit – 1.0

This intensive study of American history is designed for those high achieving students who have demonstrated disciplined work habits and strong writing skills in their 8<sup>th</sup> grade Honors U.S. History I class. The course will emphasize analytical thinking in order to evaluate the political, social, and cultural trends existent in the United States between the Civil War and Great Depression. An introduction to the historical essay will be provided, comprising thesis writing, development through supporting evidence, and primary source analysis. Significant out of class inquiries will be required, including simulation preparation, a substantial MLA research paper, and a summer reading assignment. Honors U.S. History II is intended for the intellectually curious and hard working student who seeks an in-depth examination into the forces that shaped modern America. *This is an alternative to the required course for freshman.*

*PREREQUISITE: Students must have maintained an overall average of an 87% in Honors U.S. History I or earned an overall grade of 95% in U.S. History I and have that teacher’s recommendation.*

## SOCIAL STUDIES DEPARTMENT (continued)

### 901 FOUNDATIONS OF WORLD CULTURES 10

Credit- 1.0

Designed for the student with an individualized plan of study, this course will inform the students about the many cultures that differ from, yet interact with, the more familiar/ western traditions. The central theme will be an exploration of each major cultural area emphasizing the traditions and customs of India, Asian world, the Middle East and North Africa, and European traditions. A non-traditional approach will be taken to teach this course.

*PREREQUISITE: Approval of School Counselor.*

### 908 APPLIED WORLD CULTURES

Credit – 1.0

This course is designed to inform students about the many cultures that differ from, yet interact with, the more familiar Western traditions. The central theme of Applied World Cultures will be the exploration of each major cultural area emphasizing the traditions and customs of India, the Asian world, the Middle East and North Africa, and European traditions. Activities will focus on the development and improvement of reading skills, writing skills, study skills, and drawing conclusions. A MLA research project will be developed. *This is an alternative to the required course for sophomores.*

### 912 CP WORLD CULTURES

Credit – 1.0

CP World Cultures is a course designed to inform the student about the many diverse and unique cultures that differ from, yet interact with, the more familiar Western traditions. Elements of history, geography, political science, and economics will be combined to provide the student with knowledge of the world's major cultural areas. The central theme of World Cultures will be the exploration of each major cultural area emphasizing language, societal structure, the humanities, traditions, and customs of India, the Asian world, the Middle East and North Africa, and Europe. Projects will be developed to show the uniqueness of individuals and events as forces for human progress. Included in the requirements for this course will be a MLA research project that will demonstrate the differences of the various cultures to the world in which we live. *This is a required course for sophomores.*

### 916 HONORS WORLD CULTURES

Credit – 1.0

Honors World Cultures is a reading and writing intensive course for students who have demonstrated disciplined work habits and strong writing skills in their 9<sup>th</sup> grade Honors U.S. History II class or U.S. History II class. This course is designed to inform the student about the many diverse and unique cultures that differ from, yet interact with, the more familiar Western traditions. Elements of history, geography, political science, and economics will be combined to provide students with knowledge of the world's major cultural regions. Analysis of primary source documents will be utilized to examine the peoples and cultures of the world. Students will spend time out of class preparing for simulations, seminars, a substantial MLA research paper, and summer reading assignments. Honors World Cultures is designed for inquisitive and diligent students interested in discovering the forces that have shaped the global society. *This is an alternative to the required class for sophomores.*

*PREREQUISITE: Students must maintain an overall average of an 87% in Honors U.S. History II OR earn an overall grade of 95% in U.S. History II and have a teacher recommendation.*

### 902 FOUNDATIONS OF 20<sup>TH</sup> CENTURY 11

Credit- 1.0

Students with an individualized plan of study will investigate the major themes of the 20<sup>th</sup> century from the rise of fascist dictators to the rise of world terrorism in the last decade. Topics of study include totalitarian regimes, World War II, the Cold War and 1950's, the Civil Rights movement, and the 1960's and Vietnam War. Other topics of study include: the energy crisis of the 1970's, conservatism of the 1980's, the collapse of communism, recent changes in Europe, United States involvement in the Middle East, and the rise of terrorism. A non-traditional approach will be taken to teach this course.

*PREREQUISITE: Approval of School Counselor.*

## **SOCIAL STUDIES DEPARTMENT (continued)**

### **909 APPLIED 20<sup>TH</sup> CENTURY STUDIES**

Credit – 1.0

This course investigates the major themes of the 20<sup>th</sup> century from the rise of fascist dictators to the rise of global terrorism in the 1990s. Topics of study will include European totalitarian regimes, World War II, the Cold War, political and social developments from 1950 – 1990, the fall of European communism, the creation of a new Europe, current political hot spots, and the threat of terrorism. Activities will focus on the development and improvement of reading skills, writing skills, study skills, and drawing conclusions. A MLA research project will be completed. *This is an alternative to the required history course for juniors.*

### **913 CP 20<sup>TH</sup> CENTURY STUDIES**

Credit – 1.0

This course investigates the major themes of the 20<sup>th</sup> century from the rise of fascist dictators to the rise of global terrorism in the 1990s. Topics of study will include European totalitarian regimes, World War II, the Cold War, political and social developments from 1950 – 1990, the fall of European communism, the creation of a new Europe, current political hot spots, and the threat of terrorism. Students will incorporate cooperative learning activities, critical analysis, and primary source material to integrate geographic, social, economic, and cultural issues of the 20<sup>th</sup> century. A MLA research project will be completed. *This is a required course for juniors.*

### **917 HONORS 20<sup>TH</sup> CENTURY STUDIES**

Credit – 1.0

This course will examine domestic and international history from the 1930s to the 1990s, with an emphasis on how political, economic and social developments shaped the conditions, attitudes and interactions of the present global community. Topics to be explored through primary source documents, class discussion, simulation, research and reading assignments will include the impact of World War I on the international system, the rise of European totalitarian regimes in the 1930s, World War II, the Cold War, political and social developments from 1950 – 1990, the fall of European communism, the creation of a new Europe, current political hot spots, and the threat of terrorism. In addition to demonstrating disciplined work habits and strong writing, reading and note-taking skills in their 9<sup>th</sup> and 10<sup>th</sup> grade honors or college-prep history courses, students will need to possess an awareness of current world events to be able to apply to the topics being discussed. The goal of the course is to help students place their experiences, their interests and other history courses in context. Students will have summer reading assignments. *This is an alternative to the required history course for juniors.*

*PREREQUISITE: Students must have maintained an overall average of an 87% in Honors World Cultures or earned an overall grade of 95% in World Cultures and have that teacher's recommendation.*

### **903 FOUNDATIONS OF AMERICAN GOVERNMENT & ECONOMICS 12**

Credit- 1.0

Students with an individualized plan of education will study the basics of American government to develop an understanding of the Constitution, federal and state governments, and political theory and behavior. Economics will provide the student with a foundation of economic concepts, institutions and policies and their impact on our global society.

*PREREQUISITE: Approval of School Counselor*

### **910 APPLIED AMERICAN GOVERNMENT AND ECONOMICS**

Credit – 1.0

Applied American Government and Economics offers a survey course on the basics of American government and economics. It is a semester course which involves equal time devoted to each topic. Through the study of American government students will develop an understanding of the Constitution, federal and state governments, and political theory and behavior. Economics will provide the student with a foundation of economic concepts, institutions and policies and their impact on our global society. *This is an alternative to the required course for seniors.*

**SOCIAL STUDIES DEPARTMENT (continued)**

**914 CP AMERICAN GOVERNMENT AND ECONOMICS**

Credit – 1.0

CP American Government and Economics offers a survey course on the basics of American government and economics. It is a semester course which involves equal time devoted to each topic. Through the study of American government students will develop an understanding of the Constitution, federal and state governments, and political theory and behavior. Economics will provide the student with a foundation of economic concepts, institutions and policies and their impact on our global society. *This is a required course for seniors.*

**918 HONORS AMERICAN GOVERNMENT AND ECONOMICS**

Credit – 1.0

Honors American Government and Economics is a reading and writing intensive course for students who have demonstrated excellent academic work in their 11<sup>th</sup> grade Honors 20<sup>th</sup> Century Studies class or CP 20<sup>th</sup> Century Studies class. This course comprises an in depth analysis of theoretical and practical application of the American-style democracy and capitalist system. Students will not only explore the foundations of our democratic and free market system, but they will analyze the impact of globalization on American political and economic policies. Independent extensive reading and research will allow students to expand their understanding of the challenges that face the global economy in the 21<sup>st</sup> Century... honors American Government and Economics is designed for inquisitive and diligent students. Included in the requirements for this course will be individual and group research projects, including an individual MLA research paper. Students will have summer reading assignments. *This is an alternative to the required class for seniors.*

*PREREQUISITE: Students must have maintained an overall average of an 87% in Honors 20<sup>th</sup> Century studies or earned an overall grade of 95% in 20<sup>th</sup> Century Studies and have that teacher's recommendation.*

**919 ADVANCED PLACEMENT UNITED STATES HISTORY I**

Credit – 1.0

As an elective course, this in-depth study of United States history involves an intensive and critical investigation of historical events and concepts. This will be accomplished by means of independent research, written and oral presentations, and seminars. The course is also intended to provide a transition from a high school to a college approach to thinking and learning. The students will be encouraged to take the Advanced Placement Exam in United States History.

*PREREQUISITE: All candidates for AP United States History I should have completed CP 20<sup>th</sup> Century Studies, write a letter of application, and take the comprehensive entrance examination. Recommended for seniors.*

**920 ADVANCED PLACEMENT UNITED STATES HISTORY II**

Credit – 0.5

AP United States History II is a continuation of AP United States History I. Acceptance to AP United States History I brings a commitment to AP United States History II and all students will be required to complete both and will be scheduled linearly for both.

*PREREQUISITE: Advanced Placement United States History I.*

**921 HISTORY IN FILM**

Credit – 0.5

As an elective course, this class will case study five historical films from a menu that cover various historical topics from different eras and geographic regions. Students will research a movie's topic to gain appropriate background information, view the movie to critique the content, and later reflect with a critical essay the historical value of the film. This course will require formal researching and writing skills and emphasize critical thinking and analysis of the film media. *Recommended for freshmen and sophomores.*

## **SOCIAL STUDIES DEPARTMENT (continued)**

### **922 LAW AND JUSTICE**

Credit – 0.5

This elective course is designed to illustrate the many different aspects of law and justice in America's unique society. The goal of this course is to further the student's knowledge of the organization, elements, and problems of the American legal system. From the Supreme Court to plea bargains, from the FBI to the community police officer, from the Mafia to street gangs, and from civil law to lawsuit abuse, elements of sociology, political science, and history will be combined to study the legal system through case studies, problem solving, and group presentations. Students will develop a research project.

*PREREQUISITE: Successful completion of United States History II.*

### **924 PSYCHOLOGY**

Credit – 0.5

This elective course includes a description of psychology as a social science and an analysis of the use of the scientific method of inquiry. Various instructional methods and participatory activities will be used to develop student understanding of personality, motivation and emotion, learning and memory, abnormal psychology and psychological treatment methods.

*PREREQUISITE: Successful completion of World Cultures. Recommended for juniors and seniors.*

### **925 SOCIOLOGY**

Credit – 0.5

Sociology, as an elective, will examine the issues and problems that transcend societal dynamics everywhere. Focus will be on the realities of life in our age of technology and emphasis will be placed on community life styles and problems. Students will discover the meaning behind group behavior and its impact on individual behavior. Discrimination, poverty, crime, aging, alienation, and human ecology are some of the issues and problems in which real-life studies will be made and research presented. Periodical reviews, community issues, and problem solving will be stressed.

*PREREQUISITE: Successful completion of World Cultures. Recommended for juniors and seniors.*

### **928 MEDIA STUDIES**

Credit – 0.5

Students will explore various information and entertainment media, including TV, film, advertising, the Internet, and the news. Emphasis will be placed on exploring the role that media play today, and have historically played, in our understanding of societal events and issues. Topics may include politics and the media; gender, race, and the media; popular culture and the media; and advertising and consumerism. Emphasis will also be placed on understanding how to use various media as valid information sources.

### **954 WOMEN'S STUDIES**

Credit – 0.5

This elective course is designed to illustrate the challenges and accomplishments of women historically and in the world today. The goal of the course is to examine how conceptions of gender shape the lives of women in the family and in society. By the end of the course each student will be able to explain how women have contributed to society and culture. Elements of sociology, political science, economics, and history will be combined to study women's history through research activities, problem solving, simulations, group presentations, and class discussions. Students will lead a class discussion and develop a research project in lieu of a final exam.

*PREREQUISITE: Successful completion of World Cultures. Recommended for Juniors and Seniors.*

**SOCIAL STUDIES DEPARTMENT (continued)**

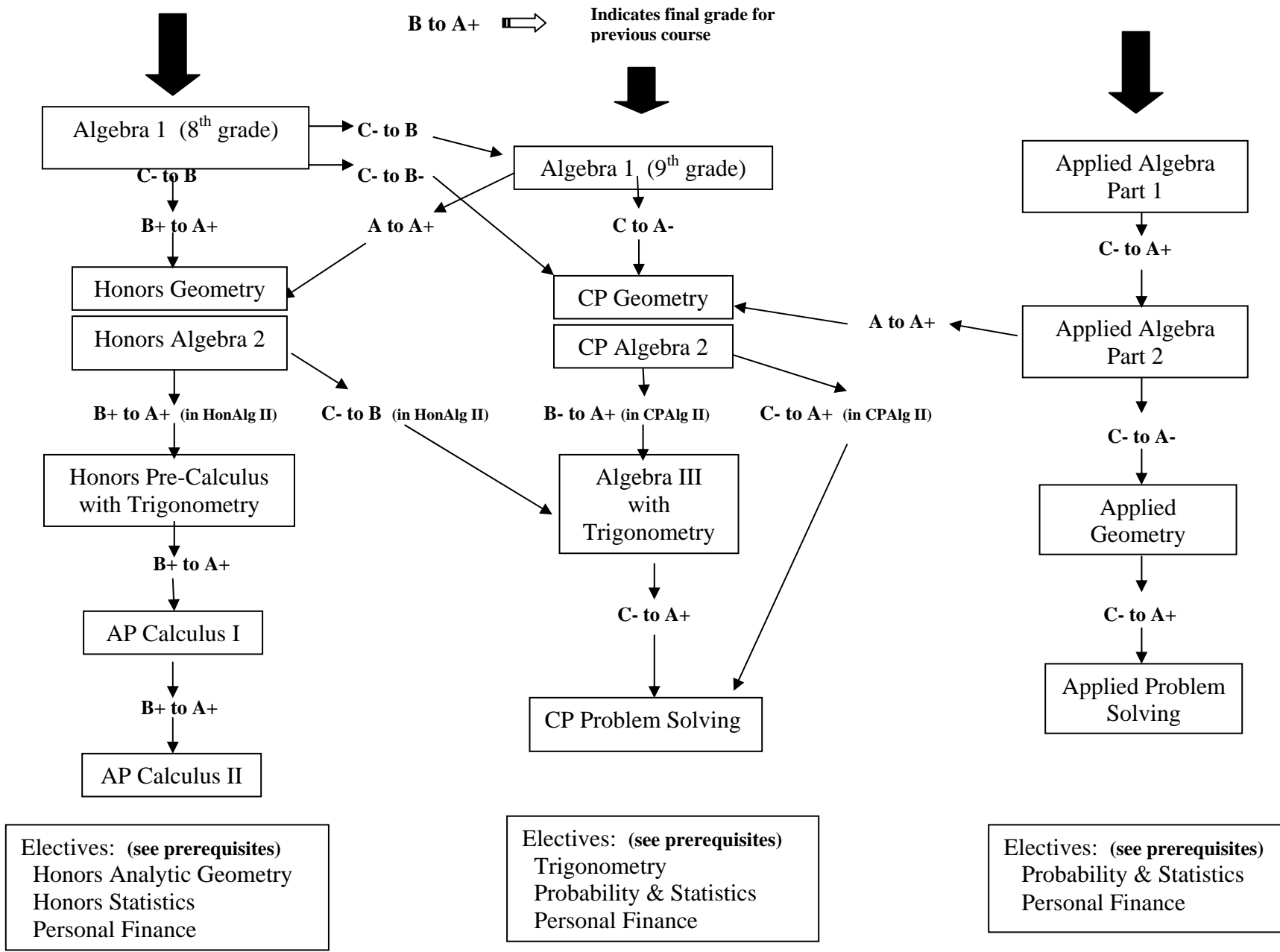
**956 WESTERN CIVILIZATION**

Credit – 0.5

As an elective course, Western Civilization, offers students a wide variety of information concerning the origins and subsequent development of Europe and the “Western world.” Topics include Renaissance, Reformation, absolute governments, revolution and democracy, the scientific and industrial revolutions, and the rise of nationalism in Europe. Western history, philosophy, science, and art will be examined through presentations, seminars, and computer activities. Students will analyze primary sources and complete a research project.

*PREREQUISITE: Successful completion of World Cultures. Recommended for juniors and seniors.*

# Mathematics – Course Sequence



## **MATHEMATICS DEPARTMENT**

The courses offered by the Mathematics Department are designed to develop mathematical competencies along with the ability to think logically. These courses were developed to meet the needs of students as they prepare for a variety of careers. Courses should be selected wisely since mathematics is a progressive and often sequential discipline. The mathematics teachers will be happy to discuss your course selection choices with you. Please ask for help if you are not sure what course(s) would be best for you.

Students who are planning to attend a four-year college should take the sequence of courses: Algebra I, Geometry, and Algebra II at either the Honors level or the CP (College Preparatory) level depending on their mathematical aptitude and skills. Following the successful completion of these courses, the student may select several electives provided they meet the prerequisites.

Students who have experienced difficulty in math and have career goals that may or may not include college may opt to take the sequence of courses: Applied Algebra Part 1, Applied Algebra Part 2, Applied Geometry, and Applied Problem Solving. Following the successful completion of these courses, the student may consider taking Probability and Statistics and/or Personal Finance.

Be sure to note the prerequisites, the recommendations, and the notes following some of the course descriptions to be sure to enroll in the most appropriate course.

\*\*\*\*\*

### **700 FOUNDATIONS OF MATH 9**

Credit – 1.0

Intended only for students with an individualized plan of studies, this course is the introductory course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis and probability, problem solving, and reasoning and proof. Mathematical concepts introduced are applied to real world situations to extend student understanding of the learned mathematical skills and strategies.

*PREREQUISITE: Approval of School Counselor.*

### **701 FOUNDATIONS OF MATH 10**

Credit – 1.0

Intended only for students with an individualized plan of studies, this course is the 2<sup>nd</sup> level course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis and probability, problem solving, and reasoning and proof. Mathematical concepts introduced are applied to real world situations to extend student understanding of the learned mathematical skills and strategies.

*PREREQUISITE: Approval of School Counselor.*

### **702 FOUNDATIONS OF MATH 11**

Credit – 1.0

Intended only for students with an individualized plan of studies, this course is the 3<sup>rd</sup> level course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis and probability, problem solving, and reasoning and proof. Mathematical concepts introduced are applied to real world situations to extend student understanding of the learned mathematical skills and strategies.

*PREREQUISITE: Approval of School Counselor.*

## MATH DEPARTMENT (continued)

### 703 FOUNDATIONS OF MATH 12

Credit – 1.0

Intended only for students with an individualized plan of studies, this is the final course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis and probability, problem solving, and reasoning and proof. Mathematical concepts introduced are applied to real world situations to extend student understanding of the learned mathematical skills and strategies.

*PREREQUISITE: Approval of School Counselor.*

### 708 APPLIED ALGEBRA Part 1

Credit – 1.0

This course is intended for students who have experienced difficulty in their math courses in previous years. Students will learn to think logically as they study statistics, data analysis, linear and nonlinear graphs, equations and inequalities through the investigation of real world problems.

*NOTE: Students who have passed Algebra I are **not** eligible to enroll in this course.*

*Students who have taken Math Fundamentals (725) must successfully complete it prior to enrolling in Applied Algebra Part 1.*

### 709 APPLIED ALGEBRA Part 2

Credit – 1.0

Applied Algebra Part 2 is the next course in sequence for students who have passed Applied Algebra Part 1 and should be taken as soon as possible following the completion of Applied Algebra Part 1. All of the topics and applications from the previous course will be reinforced and many will be studied in greater detail. The topics covered in this course will include linear equations, direct variation, systems of equations, quadratic equations, and polynomials.

*PREREQUISITE: Grade of C- or better in Applied Algebra Part 1.*

*NOTE: Students who passed Algebra I with a C or better are **not** eligible to enroll in this course.*

*RECOMMENDATION: Students who earned a C- in Algebra I should enroll in this course instead of CP Algebra 2.*

### 710 APPLIED GEOMETRY

Credit – 1.0

This course is intended for students who have completed Applied Algebra Part 1 and 2. Students will learn about points and lines, parallelism, congruency, polygons, special right triangles, circles, and the concept of a proof. Problem solving strategies will be introduced and taught often using a numerical approach rather than algebraic methods. When appropriate, concepts are presented using hands-on activities.

*PREREQUISITE: Grade of C- or better in Applied Algebra Part 2.*

*RECOMMENDATION: Students who earn a C- in Algebra I should enroll in Applied Geometry after completing Applied Algebra Part 2.*

### 711 APPLIED PROBLEM-SOLVING

Credit 1.0

This course applies the mathematical concepts learned in previous coursework to real-world problem-solving applications. Students refine their use of problem-solving methods and their ability to explain the rationale for their problem-solving procedures. An introduction to probability and statistics provides a further method of applying algebra and problem-solving methods to real-world situations.

*PREREQUISITE: Grade of C- or better in Applied Algebra Part 2 **AND** a grade of C- or better in Applied Geometry.*

## MATH DEPARTMENT (continued)

### 712 CP ALGEBRA I

Credit – 1.0

This course is intended for students who are planning to attend college after high school. Students will learn to think logically as they study number systems and properties, signed numbers, variables and expressions, open sentences, solving linear equations/inequalities with one variable, absolute value, exponents, scientific notation, how to construct graphs using a number of line and the coordinate plane. Students will also apply critical thinking skills as they learn how to solve a variety of application problems.

**NOTE:** *Students who have passed Applied Algebra Part 1 and/or 2 are **not** eligible to take this course.*

### 713 CP ALGEBRA II

Credit – 1.0

This course reinforces and extends the ideas presented in Algebra I. The areas of study include relations and functions, exponents and radicals, systems of linear equations and inequalities, rational expressions, radical and quadratic equations. Critical thinking skills are extended through the use of a variety of applications problems.

**PREREQUISITE:** *Grade of C or better in Algebra I.*

**RECOMMENDATION:** *Students who earned a C- in Algebra I at the High School should enroll in Applied Algebra Part 2.*

*Students who earned a grade of C to A- in Algebra I at the High School should enroll in CP Algebra II.*

*Students who earned a grade of A or better in Algebra I at the High School should enroll in Honors Algebra II.*

*Students who earned a B+ or better in Algebra I at the Middle School should enroll in Honors Algebra II*

### 714 ALGEBRA III W/ TRIGONOMETRY

Credit – 1.0

This course reinforces and extends the ideas presented in CP Algebra II. Additional areas of study include a study of polynomial and algebraic functions, exponential and logarithmic expressions and equations, conic sections, complex numbers, graphing techniques, with an introduction into triangle trigonometry. Enrolling in this course disqualifies you from enrolling in Honors Pre-Calculus.

**PREREQUISITE:** *Grade of B- or better in CP Algebra II AND CP Geometry or a grade of C- or better in Honors Algebra II.*

**RECOMMENDATION:** *Students who earned a grade of B or better in Honors Algebra II should enroll in Honors Pre-Calculus and Trigonometry.*

### 715 CP GEOMETRY

Credit – 1.0

This course is intended for students who have completed Algebra 1. It uses a formal approach to the structure of geometry as it explores the concepts of proofs and problem solving. Problem solving strategies will frequently use algebraic rather than numerical methods. Students will be encouraged to explore the relationships among geometry, algebra, and probability as they learn about points and lines, parallelism, similarity, congruency, polygons, special right triangles, and circles.

**PREREQUISITE:** *Grade of C or better in Algebra I.*

**RECOMMENDATION:** *Students who earn a C- in Algebra 1 should enroll in Applied Geometry.*

### 716 CP MATH PROBLEM-SOLVING

Credit – 1.0

This course is designed for College Preparatory students who have completed Algebra I, CP Algebra II, and CP Geometry. This course integrates the ideas of problem solving, functions, statistics, and trigonometry with the concepts the students have studied in previous courses. Some of the topics covered are graphing data, determining the model of a function, transforming graphs, trigonometric functions, logarithms, matrices, probability, and quadratic relationships.

**PREREQUISITE:** *Grade of C or better in Algebra I, CP Algebra II, AND CP Geometry.*

**RECOMMENDATION:** *This course is **NOT** intended for students in the honors math sequence. This course **IS** recommended for Juniors to better prepare themselves for the PSSA's and SAT's.*

## MATH DEPARTMENT (continued)

### 717 HONORS ALGEBRA II

Credit – 1.0

This course reinforces and extends the ideas presented in Algebra I and develops detailed approaches to problem solving situations and mathematical structure. The areas of study include relations and functions, exponents and radicals, systems of linear equations and inequalities, rational expressions, radical and quadratic equations. Critical thinking skills are extended through the use of a variety of applications problems, matrices, complex numbers, higher degree polynomials and rational exponents are presented.

**PREREQUISITE:** *Grade of B+ or better in Algebra I at the Middle School or a grade of A or better in Algebra I at the High School.*

**RECOMMENDATION:** *Students who register for this course should have strong mathematical ability and have the desire to continue on to Pre-Calculus and Calculus. It is recommended that students take Honors Geometry prior to taking Honors Algebra II.*

### 718 HONORS ANALYTIC GEOMETRY

Credit - 0.5

This course is designed for students with a sound background in algebra, geometry, and trigonometry. The areas of study include a review of plane analytic geometry, introduction to vectors in the plane, thorough analysis of conic sections, transformations, polar coordinate systems and parametric equations, and an optional solid analytic geometry unit time permitting. A scientific calculator will be needed for this course. Explorations with graphing calculators and computer software will also be an integral part of the course.

**PREREQUISITE:** *Grade of B+ or better in Pre-Calculus with Trigonometry.*

### 719 HONORS GEOMETRY

Credit – 1.0

The Honors Geometry course is intended for the student who has the mathematical ability to assimilate and apply new material at a faster pace than the average college preparatory student. Students will apply deductive and inductive reasoning to the development of proofs and the solving of problems. Basic geometric concepts such as points and lines, parallelism, similarity, congruency, polygons, right triangles, basic trigonometric concepts, coordinate geometry, an introduction to solid geometry, and circles will be studied in depth and Applied to problem-solving situations.

**PREREQUISITE:** *Grade of B+ or better in Algebra I at the Middle School or A or better in Algebra I at the High School.*

**RECOMMENDATION:** *It is recommended that students take Honors Geometry prior to taking Honors Algebra II.*

### 720 HONORS PRE-CALCULUS WITH TRIGONOMETRY

Credit – 1.0

This course is designed to prepare students for the study of calculus. This course serves any student looking for a mature investigation of algebra and trigonometry. This course reinforces the ideas presented in Honors Algebra II and encourages the student to apply and generalize previously learned concepts. This one-semester course covers the topics of linear relations and functions, systems of equations and inequalities, a study of the nature of graphs, polynomial and rational functions, trigonometric functions, graphs and inverses of trigonometric functions, trigonometric identities and equations, exponential and logarithmic functions, and (optional if time permits) parametric equations, and polar curves. Graphing calculator use is required in this course. A Texas Instrument TI-83 or TI-83 Plus graphing calculator may be signed out with the text or the student may purchase one.

**PREREQUISITE:** *Grade of B+ or better in Honors Algebra II.*

## MATH DEPARTMENT (continued)

### 721 HONORS STATISTICS

Credit – 1.0

This course will cover the two branches of statistics: Descriptive and Inferential. In the first half of the course Descriptive topics covered will include Data Collection and Classification, Frequency Distributions, Measures of Central Tendency, Measures of Variation, Probability, Probability Distributions, Normal Distributions and The Standard Normal Distribution. The second half of the course will focus on the Inferential branch. Students will be generalizing from samples to populations, Hypothesis Testing, determining relationships among variables, and making predictions, through the use of Confidence Intervals, T-tests, Z-tests, Correlation and Regression and Chi-square tests. This course is written for those students who will be pursuing a career in science, mathematics, psychology or engineering. The TI-83 Plus graphing calculator will be utilized a great deal in this course.

**PREREQUISITE:** Grade of **B+** or better in Honors Algebra II.

### 722 ADVANCED PLACEMENT CALCULUS I

Credit – 1.0

This course gives the high school student an opportunity to experience the expectations and requirements of a college level mathematics course. Areas of study include limits, differentiation of polynomial, rational, algebraic and trigonometric functions, and an introduction to integration. Applications use algebra, geometry, trigonometry, and some principles of physics and economics. A scientific calculator is needed for this course. *Students enrolled in this course will be eligible to take the AP Calculus (AB) exam.*

**PREREQUISITE:** Grade of **B+** or better in Honors Pre-Calculus with Trigonometry

### 723 ADVANCED PLACEMENT CALCULUS II

Credit – 1.0

This course reinforces and extends the topics presented in AP Calculus I. Additional areas of study include integration, methods of integrating, infinite series, hyperbolic trigonometric functions, differentiation and integration of inverse trigonometric functions, indeterminate expressions, improper integrals, and Taylor polynomials. Applications include area, volume, arc length of curves, growth and decay situations, and some principles of physics. *Students enrolled in this course will be eligible to take the AP Calculus (AB or BC) exam.*

**PREREQUISITE:** Grade of **B+** or better in AP Calculus I.

### 724 INTENSIVE MATHEMATICS

Credit – 0.5

This course is designed to assist students in grades 9, 10, 11, and 12 with the mastery of basic skills in mathematics. Students recommended for this course are demonstrating academic achievement below grade level standards. The course is diagnostic and prescriptive in nature so that individualized remediation is planned for each student. Students will take this course in addition to their Mathematics requirement for the year. Students enrolled in this course will also target the skills required for successful completion of the PSSA assessment. Grades issued in the course will be Mastered (M), Progressing (P), or Not Progressing (NP).

**PREREQUISITE:** Approved by the Coordinator of Academic Services

**NOTE:** This course does **NOT** satisfy one of the four mathematics requirements for graduation.

Enrollment in this course is determined by the Academic Services Coordinators

## MATH DEPARTMENT (continued)

### 725 MATH FUNDAMENTALS

Credit – 1.0

This course supports the needs of all 9<sup>th</sup> grade students not demonstrating proficiency on the grade 8 PSSA in math. The focus of the course is to strengthen students' fundamental skills in math with an emphasis on pre-algebra skills before students enroll in Applied Algebra Part I. In order to earn credit for this course students must earn a passing grade on an end of course final exam. Students are identified for enrollment based on grade 8 math PSSA scores, 4-Sight benchmark data, and grade in the 8<sup>th</sup> grade math course.

***NOTE:** This course does **NOT** satisfy one of the four mathematics requirements for graduation. Successful completion of this course is required to enroll in Applied Algebra Part I.*

### 726 PERSONAL FINANCE

Credit – 0.5

Personal Finance is a financial planning course designed to alert, inform, and educate high school students in financial planning. It is essential in our fast-moving economically-based society to have some knowledge of the fundamentals of financial planning. Concepts covered include: Basics on Financial Planning, Savings Accounts, Credit Cards, Cost of Credit and Credit Hazards, Risk Management and Insurance, Investments and Interest. A calculator will be needed for this course. .

***PREREQUISITE:** Grade of C- or better in Algebra I or a grade of C- or better in Applied Algebra Part 2.*

***RECOMMENDATION:** This course is most appropriate for Juniors and Seniors. This course is **NOT** recommended for freshman and sophomores.*

### 727 PROBABILITY AND STATISTICS

Credit – 0.5

This course is designed for students who will be continuing their education after high school. The course will focus on the concepts of descriptive statistics. These concepts include Data Collection and Classification, Frequency Distributions, Measures of Central Tendency, Measures of Variation, Probability, Probability Distributions, Normal Distributions and The Standard Normal Distribution. Technology will be incorporated into each unit through the use of the TI-83 graphing calculator. Case Studies will also be examined within each unit to pull together the concepts and apply them to real life situations.

***PREREQUISITE:** Grade of C- or better in Algebra I or a grade of B- or better in Applied Algebra Part 2.*

### 728 TRIGONOMETRY

Credit – 0.5

This course provides an introduction to the fundamentals of trigonometry using circular and triangular approaches. Areas of study include the definitions of trigonometric functions, identities, and graphing trigonometric functions. Problem solving techniques include the use of ratio and proportion along with the laws of sines and cosines. A scientific calculator will be needed for this course. Enrolling in this course disqualifies you from enrolling in Honors Pre-Calculus with trigonometry.

***PREREQUISITE:** Grades of C or better in CP Geometry AND B- or better in CP Algebra II. Grades of C- or better in Honors Geometry AND C- or better in Honors Algebra II.*

## SCIENCE DEPARTMENT

The science department's courses are designed to develop conceptual understandings of scientific laws, theories, and principles in order for students to be knowledgeable about the natural world. There are four required science courses needed for graduation. The courses included in the department fall into one of the three basic scientific disciplines: Physics, Chemistry, and Biology. The sequence of required courses begins with Physics First. The progression continues with the study of chemistry. Finally, biology and environmental science are compulsory. The required courses are meant to be completed before the spring semester of their junior year. Upon completion of the required courses, students will find a multitude of diverse and challenging courses to prepare them for further education beyond high school. The upper level courses selected could potentially prepare students for careers in healthcare, engineering, ecology and chemistry. Please note that many of the upper level courses have course prerequisites.

### **828 PHYSICS FIRST**

Credit – 1.0

Is a hands-on, activity-based course that uses the most important concepts of Physics to give students a firm grasp on the nature of science. In this course, students will use the scientific method daily as they learn about scientific measurement, motion and forces, work and energy, electricity and magnetism, light and waves. Students will need a calculator and should have successfully completed 8<sup>th</sup> grade science prior to taking this course.

*This course is required for all 9<sup>th</sup> graders.*

### **829 HONORS PHYSICS FIRST**

Credit – 1.0

Is a hands-on, activity-based course that uses the most important concepts of Physics to give students a firm grasp on the nature of science. In this course, students will use the scientific method daily as they learn about scientific measurement, motion and forces, work and energy, electricity and magnetism, light and waves. Honors students will deepen their understanding via research projects and more rigorous mathematical treatment of course concepts. Students will need a scientific calculator and should have successfully completed 8<sup>th</sup> grade science and Algebra 1 prior to taking this course.

*PREREQUISITE: All students will have to have successfully completed Algebra I in 8<sup>th</sup> grade. In addition students in Honors 8<sup>th</sup> Science must earn a minimum of an 87% final grade and all other 8<sup>th</sup> grade science students must have a minimum 95% final grade.*

### **809 CONCEPTUAL CHEMISTRY**

Credit – 1.0

This introductory course will expose students to the fundamentals of chemistry. Concepts covered include atomic theory, states and properties of matter, chemical reactions, and gas laws. This chemistry course focuses more on the development of hands-on laboratory skills and less with mathematical theory.

*PREREQUISITE: A student must successfully complete the Physics First course.*

### **812 LAB CHEMISTRY**

Credit – 1.0

This college-preparatory level course will introduce interested students to the fundamentals of chemistry. The topics studied include atomic and structural theory, equations and chemical calculations, states of matter, chemical reactions, nomenclature, and acids, bases, and salts. Emphasis is placed on the development of correct laboratory procedures as the student progresses through this study of chemistry. Students will need a calculator.

*PREREQUISITE: Grade of C- or better in Algebra and successful completion of Physics First.*

## **SCIENCE DEPARTMENT (continued)**

### **816 HONORS CHEMISTRY**

Credit – 1.0

Honors Chemistry is an in-depth approach to the study of basic chemistry. Key concepts in chemistry are explored by fully integrating reading, technology and inquiry based labs and activities that emphasize independent research and analysis. This is a challenging course designed for students who anticipate a science-based career, desire an accelerated, comprehensive program and intend to take advanced courses in science. The course aligns both with the National Science Education Standards and the Pennsylvania State Standards in Science and Technology.

*PREREQUISITE: A student in the preceding honors science course must earn a minimum of an 87% final grade. All other science students must have earned a 95% final grade in the science course prior to enrolling in this course.*

### **808 APPLIED BIOLOGY**

Credit – 1.0

The applied biology course focuses on the applications of biology principles to everyday life. Dealing with subjects such as ecosystems, populations, homeostasis, inheritance, and behavior, students will learn biological principles and put them into direct daily application. Applied Biology focuses more on practical application and less with abstract theory. This course is designed for the student who intends to pursue two years or less of post secondary education.

### **811 LABORATORY BIOLOGY**

Credit – 1.0

This college preparatory course is a prerequisite for Human Anatomy and A/P Biology. The student will progress through the fundamental concepts of biology to modern concepts in biological theory. Principles of Cell Biology, Genetics, Evolution, Ecology and the Diversity of Organisms will be major topics in the students' investigation of concepts in this course.

*PREREQUISITE: Successful Completion of Physics First*

### **815 HONORS BIOLOGY**

Credit – 1.0

Honors Biology is an in-depth approach to the study of structure and function of living organisms at the molecular and cellular level. Key concepts in biology are explored by fully integrating reading, technology and inquiry based labs and activities that emphasize independent research and analysis. This is a challenging course designed for students who anticipate a science-based career, desire an accelerated, comprehensive program and intend to take advanced courses in science. The course aligns both with the National Science Education Standards and the Pennsylvania State Standards in Science and Technology.

*PREREQUISITE: A student in the preceding honors science course must earn a minimum of an 87% final grade. All other science students must have earned a 95% final grade in the science course prior to enrolling in this course.*

### **814 LAB ENVIRONMENTAL/EARTH SPACE SCIENCE**

Credit – 1.0

This class will be exploring the biotic and abiotic factors that help to create the environment. It will first develop basic themes such as nutrient cycling, water and soil characteristics as well as populations and ecosystems before covering the more complex issues of management of these resources. This course is intended to be taken after Physics First.

## SCIENCE DEPARTMENT (continued)

### **826 HONORS ENVIRONMENTAL/EARTH SPACE**

Credit – 1.0

This course is meant to explore the complex interactions between geologic landforms and life, abiotic factors and their effects on biotic factors, nutrient cycles in the environment, interactions between living things, integrated pest management, and the use and management of our natural resources.

*PREREQUISITE: A student in the preceding honors science course must earn a minimum of an 87% final grade. All other science students must have earned a 95% final grade in the science course prior to enrolling in this course.*

### **813 LAB PHYSICS**

Credit - 1.0

This course is designed to introduce interested students to the fundamental principles of physics. Emphasis will be placed on classical mechanics, kinetic theory, and heat, waves, and sound, optics, electricity and magnetism and astronomical concepts. Students should have their own calculators which have trigonometric functions and logarithmic functions. *Prerequisite: Grade of C- or better in Algebra II; grade of C- or better in Honors Chemistry, Lab Chemistry and Lab Biology.*

### **819 HONORS PHYSICS**

Credit – 1.0

This course is an accelerated college preparatory course designed to introduce interested students to the fundamental principles of physics. The ability to work independently and use inquiry based activities to learn new material is required. An aptitude in the use of mathematics to solve problems algebraically and graphically is a necessity. Emphasis will be placed on classical mechanics, electricity and magnetism, waves, light, and selected topics in modern physics. Students must have their own calculators which have trigonometric and logarithmic functions; a graphing calculator is preferred.

*PREREQUISITE: Grade of A- or better in Algebra II; as well as, a grade of B+ or better in Honors Chemistry or an A- or better in Lab Chemistry.*

### **817 HONORS ADVANCED CHEMISTRY**

Credit – 1.0

The Advanced Chemistry course is designed for those students interested in challenging themselves beyond Lab Chemistry. Such advanced topics in chemistry as Organic Chemistry, Biochemistry, Physical Chemistry, Environmental Chemistry, and Stoichiometry will be explored while emphasis is placed on research techniques and effective laboratory skills. Students will need a calculator. A formal research paper is required.

*PREREQUISITE: Grade of B+ or better in each of the following: Laboratory Chemistry, Algebra II, and Biology. It is recommended that the students have strong writing skills.*

### **818 HONORS ADVANCED ECOLOGY**

Credit – 1.0

Advanced Ecology will offer an in-depth investigation of the structure and function of aquatic ecosystems. An emphasis will be placed on the collection and analysis of field data through biosurveys and biomonitoring techniques. Field data will serve as a basis for investigating the affects of human activity on aquatic systems and the need for proper management practices in maintaining the health of a watershed.

*PREREQUISITE: Grade of B+ or better in Ecology.*

## SCIENCE DEPARTMENT (continued)

### 820 ADVANCED PLACEMENT BIOLOGY

Credit - 1.0

The Advanced Placement Biology course seeks to meet the objectives of a biology course at the college freshman level. The aim of the course is to achieve the knowledge of the facts, principles, and processes of biology with the understanding that science is a human endeavor with social consequences. The course is organized to conform to the Advanced Placement suggested outline. It includes research papers, experiments, and independent study projects. Students are eligible to take the Advanced Placement Examination in May.

*PREREQUISITE: Grade of B+ or better in Chemistry, Honors Chemistry, Lab Biology or Honors Biology.*

### 821 ASTROPHYSICS

Credit – 0.5

This course is a science elective which introduces physical phenomenon outside of the Earth. Two main themes are presented: Structures in the Universe and Space Exploration. Through Structures of the Universe, students explore the planets and moons of our solar system and galaxies. The segment on stars includes our sun, solar systems, the lifecycle of stars, structures associated with different stages of a star's life, and types of stars. The Space Exploration theme encompasses human achievements, cosmology, and current projects. Cosmology covers the big bang theory and other possible beginnings of the universe, the present state of the universe, and possible ends to the universe.

*PREREQUISITE: Completion of 9<sup>th</sup> grade science course.*

### 822 BIOETHICS

Credit – 0.5

This course will examine several biological and environmental concerns facing society today. By using known facts and relevant research data, students will gain an understanding of current issues and develop the ability to make logical, conscientious decisions concerning those issues.

### 823 ECOLOGY

Credit – 1.0

Ecology will offer an investigation of living organisms and their relationships to one another and to the environment. An emphasis will be placed on field observations and research, exposing the student to the basic principles of ecology through direct contact with a variety of terrestrial and aquatic ecosystems and the life forms found within them.

*PREREQUISITE: Completion of Lab Biology or Applied Biology.*

### 824 HUMAN ANATOMY AND PHYSIOLOGY

Credit – 1.0

This course provides a basic understanding of the structure and function of the human body. It is appropriate both for college prep students and for applied students preparing for careers in the health professions. Emphasis is placed upon homeostasis, energy use in organisms, physiology of cell processes and medical applications of anatomy and physiology. Laboratories include biochemistry, cellular processes, dissection, and physiology of various systems. Students will complete several projects, including a formal research paper.

*PREREQUISITE: Grade of C or better in Lab Biology or grade of B or better in Applied Biology.*

### 825 INTRO TO MICROBIOLOGY

Credit – 1.0

Introduction to Microbiology will focus on the study of viruses and bacteria. Basic structure and physiology will be discussed including an in depth look at the major biochemical pathways of energy metabolism. The role of microbes in human disease will also be studied both in terms of mechanisms disease and epidemiology. Laboratory work will stress sterile technique, culturing methods, staining methods, and identification of unknown bacteria

*PREREQUISITE: Grade of B or better in Applied Biology; grade of C or better Laboratory Biology.*

## PHYSICAL EDUCATION DEPARTMENT

<b><u>600</u></b>	<b><u>HEALTH/PHYSICAL EDUCATION 9</u></b>	Credit - .50
<b><u>601</u></b>	<b><u>HEALTH/PHYSICAL EDUCATION 10</u></b>	Credit - .50
<b><u>602</u></b>	<b><u>HEALTH/PHYSICAL EDUCATION 11</u></b>	Credit - .50
<b><u>603</u></b>	<b><u>HEALTH/PHYSICAL EDUCATION 12</u></b>	Credit - .50

The Health and Physical education program is designed to have the students understand the interaction between mental, physical, emotional, and social health. A complete knowledge of total wellness will be emphasized in a 4-year curriculum.

The Physical Education curriculum emphasizes the continued development of fundamental sport skills in both individual and team sports. In addition, major emphasis will be placed on developing lifetime sport skills and activities. Every year, the students will be instructed in aerobic conditioning activities, swimming, and weight training programs.

All students will receive Health Education during the scheduled Physical Education class time. Health classes will incorporate decision making skills based on facts for the relevant health issues that confront the youth of today. Instructional units include fitness, nutrition, substance abuse, human sexuality, violence, abusive relationships, first-aid and CPR, longevity, and wellness. The units of Health and Physical Education will correlate through cognitive knowledge and active participation.

### **604** **ADAPTIVE PHYSICAL EDUCATION** Credit appropriate to grade level

Students who cannot participate in the required physical education program for medical reasons will be assigned to participate in Adaptive Physical Education. Each student will participate in a modified program of physical activity within their regularly scheduled physical education class. Swimming and modified water activities are included as part of the Adaptive Physical Education Program.

### **605** **FUNDAMENTALS OF HUMAN PERFORMANCE** Credit - 1.0

The course Fundamentals of Human Performance bridges the gap between high-level research in the physical activity science and its application to programs and practice. Students will develop and apply programs for all age groups and special populations. Lab work and lectures will prepare students for college study or jobs in the fitness, exercise physiology and biomechanics field. Students will develop competency in the following areas: the fundamentals of fitness, exercise physiology, biomechanics, kinesiology, development of safe fitness programs, injury prevention and rehabilitation.

*PREREQUISITE: Human Anatomy (passing grade), 9-11 Health, and 9-11 Physical Education.*

## **BUSINESS DEPARTMENT**

The Business Department offers a wide variety of courses which provide valuable life skills in an ever changing global marketplace. Each student is required to complete 2 courses for graduation. In addition to the required courses it is highly recommended that students increase their knowledge and skills in electives offered in Accounting, Technology, and General Business.

The graduating classes of 2010 through 2012 are required to complete Computer Skills (.5 credits) and Computer Applications (.5 credits) for graduation requirements. Career Exploration is highly recommended.

The graduating class of 2013 and after will be required to complete Microsoft Applications (.5 credits) and Career Explorations (.5 credits) for graduation requirements.

### **101 MONEY MANAGEMENT**

Credit - 0.5

This course combines basic economic and business knowledge and skills with useful consumer information. Students will be exposed to many aspects of economic decisions as well as the local, national, and global economies. There is a unit on Management and Leadership. Finally, students will dissect the benefits and dangers of buying on credit (including how to avoid getting into trouble with credit cards); they will learn how to open a checking account and savings account, write checks, balance a checkbook using a bank reconciliation and the basics of the banking system. Resource speakers will provide information on career requirements and skills needed for employment.

### **102 ACCOUNTING I**

Credit - 1.0

Accounting I will enable students to acquire an understanding of basic accounting principles and procedures for a sole proprietorship and partnership. Simulated office experiences will be provided to help the student understand the accounting cycle using special journals. Students will be introduced to processing accounting data on the computer and will be made aware of various career paths related to accounting. Students will complete an accounting cycle simulation during the final weeks of the course. This simulation will serve as the course final exam. Students must complete this simulation and pass the accompanying test in order to receive credit for this course.

This course is NOT recommended for 9<sup>th</sup> grade students.

### **103 ACCOUNTING II**

Credit - 1.0

Accounting II will refine/expand the skills and knowledge students learned in Accounting I. Both manual and computerized procedures are presented for a partnership and corporation. Simulated office experiences are provided through practice sets and the computer.

*PREREQUISITE: Accounting I*

### **104 COMPUTER APPLICATIONS – Required course**

Credit - 0.5

This course will teach students how to use the computer as a tool to solve problems. With a primary focus on spreadsheet and database software, practical problems will be used to illustrate personal and business computer applications. PowerPoint will be used by students to create presentations. Students will use a windows-integrated package that is widely used by businesses. College- and business-bound students will benefit from the skills learned in this course.

*PREREQUISITE: Computer Skills*

## **BUSINESS DEPARTMENT (continued)**

### **105 ADVANCED COMPUTER APPLICATIONS**

Credit - 0.5

This course will expand and challenge students' existing knowledge of the computer. The primary focus will be on advanced problem solving with the computer using Excel, Access, and PowerPoint, a presentation software package. In addition to learning how to integrate word processing, database, spreadsheet, and presentation software packages, students will prepare a PowerPoint presentation using material they are currently studying in other classes.

*PREREQUISITE: Computer Applications or Microsoft Applications*

### **106 WEB PAGE DESIGN**

Credit – 0.5

The purpose of this course is to teach basic web page design skills using XHTML and Frontpage. Students will learn how to create effective, informative personal and business web pages while investigating the use of the Internet in business.

*PREREQUISITE: Computer Skills or Microsoft Applications*

### **107 ADVANCED WEB PAGE DESIGN**

Credit – 0.5

Advanced Web Page Design will expand the skills students' learned in Web Page Design. Students will learn advanced web page design using HTML, DHTML, and JavaScript. Students will apply the knowledge and skill acquired in this course to create web pages for the district web site and possibly local business/community members.

*PREREQUISITE: Grade of B in Web Page Design.*

### **108 BUSINESS COMMUNICATIONS**

Credit - 0.5

This course will teach students the practical skills necessary for effective on-the-job communication. Activities focused on resume and letter writing, interview techniques, listening skills, and organizational skills will prepare students to enter the job market and communicate effectively with customers, co-workers, clients, patients, and others. These activities will be supplemented by such topics as time management, stress management, and making successful presentations. In addition to becoming proficient communicators, students will gain confidence in speaking and an awareness of their own communication strengths and needs. Not recommended for 9<sup>th</sup> grade students.

*PREREQUISITE: Computer Skills or Microsoft Applications*

### **109 BUSINESS LAW**

Credit - 0.5

As consumers, all students can benefit from taking this course which is designed to make them informed consumers. Their rights and responsibilities will be explored by examining governmental regulation of business and applications of the Uniform Commercial Code. Students will acquire the ability to solve problems by applying legal theories and concepts to actual case problems and court decisions. Not recommended for 9<sup>th</sup> grade students.

### **110 CAREER EXPLORATION – Required course**

Credit – 0.5

Career planning is a life-long process. To master rapidly changing employment conditions and achieve a satisfying career, students must make the connection between what they do in the classroom and what they will do when they graduate. Career Exploration is a course that will help students meet this challenge of the 21<sup>st</sup> century by providing them with areas of focus along with flexibility and variety of ideas in their career-decision making process. Students will partner with local businesses and professionals to become aware of the demands of the workplace and how to implement effective career enhancing strategy.

## **BUSINESS DEPARTMENT (continued)**

### **112 DESKTOP PUBLISHING**

Credit - 0.5

This course will teach students the design concepts necessary to produce professional documents required in a variety of settings. Using the latest features of Adobe InDesign, students will learn how to work with text and graphics to create professional business documents. They will learn how to create various professional documents for their own business.

*PREREQUISITE: Computer Skills or Microsoft Applications*

### **115 SPORTS/ENTERTAINMENT MARKETING**

Credit – 0.5

This course will take you on a step-by-step journey through the exciting work of sports and entertainment marketing. You will learn about the key functions of marketing and how those functions are applied to the sports and entertainment industry. Guest speakers, case studies, and on-line activities will broaden the classroom learning experience. Not recommended for 9<sup>th</sup> grade students.

### **116 MICROSOFT APPLICATIONS**

Credit – 0.5

This course will teach students how to use the computer as a tool to solve problems. With a focus on Microsoft Office (Word, Excel, Access, PowerPoint), practical problems will be used to illustrate personal and business computer applications. **Required course starting with Class of 2013.**

### **117 ENTREPRENEURSHIP**

Credit – 0.5

This course will introduce students to the basic principles of business, including entrepreneurship and business ethics. Students will examine the major steps involved in starting a new business, including the marketing, financing, budgeting, managing, and legal aspects. Students will develop a business plan and learn what it takes to carry out the entrepreneurial process, while investigating real-life examples.

## FINE ARTS DEPARTMENT

### 400Y BAND

Credit – 1.0

### 400S BAND

Credit – 0.5

The band is a laboratory in which the students have an opportunity to develop the technical skills needed for competent ensemble performance. They will explore the structure, design, and meaning of music by studying a wide variety of literature from the Baroque, Classical, Romantic, and Modern periods in music history. Contemporary American music, including rock and jazz, is utilized for study and performance. In addition to the full band experience, a Jazz Ensemble is offered as a performing group meeting after school twice each week. The music department's computer lab will be integrated into the program to increase music proficiency through computer-assisted instruction. *Note: Starting with the 2007-08 school year, the traditional grading scale (A-F) will be used for this course.*

*PREREQUISITE: Students must be formerly enrolled in the Middle School Band program or pass an audition with the band director.*

### 401Y CHORUS

Credit – 1.0

### 401S CHORUS

Credit – 0.5

This performing organization is the perpetuation of choral techniques learned, refined and developed. Three and four-part literature is studied, prepared and highlighted at the annual school concerts and community events. Ensembles from within this group include the Concert Choir, Women's Chorus, Men's Chorus and the SVHS Challenge. The music department's computer lab will be integrated into the program to increase music proficiency through computer-assisted instruction. *Note: Starting with the 2007-08 school year, the traditional grading scale (A-F) will be used for this course.*

### 402 IMPROVISATION COURSE

Credit – 0.5

This course is designed to accomplish the following goals: Improve the student's ability to effectively express a melodic idea; develop his repertory of jazz rhythms; and improve his musical hearing aptitude through the identification and repetition of given melodies. The course also includes the study of existing musical forms commonly used in jazz and popular music. This course is highly recommended for all Jazz Ensemble musicians.

*PREREQUISITE: Percussionists must read and play mallet music. All musicians must read music at a grade 2 level.*

### 406 INSTRUMENTAL MUSIC

Credit – 0.5

This course is designed for those students who want to improve their skills in instrumental music. Also included are those students who want to switch instruments or double on another instrument. Band instruments, guitar and bass guitar will be taught. Texts include Rubank Intermediate and Advanced methods, and Voxman Duets. Students will learn fundamentals of rhythm, and scales from Practica Musica.

*PREREQUISITE: Students must be enrolled in concert or marching band or have instructor's approval.*

### 411 MUSIC SKILLS

Credit – 0.5

This course is designed to increase proficiency in music performance through graduated drill work involving: identifying and locating pitches in both bass and treble clef, understanding time signatures, note durations and learning to count, key signatures and scales, intervals and chords, and musical dynamics and terminology. Primary focus will be on relating one's individual development to both ensemble and solo performance. The music computer lab will be used to enhance instruction and provide feedback and assessment in tracking progress.

## FINE ARTS DEPARTMENT (continued)

### 412 MUSIC THEORY

Credit - 0.5

This course is for students interested in pursuing a greater understanding of music fundamentals, harmonic, melodic and rhythmic principals as based on the common practices of composers from the 18<sup>th</sup> to 20<sup>th</sup> centuries. Four-part writing will be an extension of concepts learned in class. The music lab will serve as a palette for exploration and provide students with quick and immediate feedback in developing and refining sound musical principles.

### 413 PIANO CLASS

Credit – 0.5

Learn to play the piano – no previous keyboard experience is necessary, although anyone with keyboard background is also urged to enroll. The two components of this class, performance and theory, will equip students with a solid keyboard technique and improve their musicianship as well. Keyboard lab facilities provide daily hands-on use of electronic keyboards for private and group practice. Upper levels of Piano Class are designed to increase proficiency at the keyboard through the continued use of progressive song books as well as the further study of chord voicings. Students create harmonizations to popular songs and develop the ability to read lead sheets as they progress through the more detailed techniques of keyboard performance including chromaticism, syncopation, finger dexterity and ornamentation. Various types of keyboard repertoires are explored as students continue to develop their own style for the piano or electronic keyboard.

*PREREQUISITE: Students must possess either an electronic or acoustic keyboard instrument.*

### 417 TODAY'S MUSIC

Credit – 0.5

Today's Music is a course designed to increase one's understanding of today's commercial, rock, and jazz music through its relationship to current trends in music technology. The course progresses from an introduction to electronic music media to music composition in the music lab. Students are encouraged to create their own compositions and multi-media projects within each level of study. Units of study include:

- 1) An overview of the role of the computer and synthesizer, and the MIDI protocol in the music composition process
- 2) MIDI sequencing software and digital recording on the Macintosh computer demonstrated step by step to illustrate the simplicity in the recording process
- 3) Techniques in synthesizer programming
- 4) The function and use of editor/librarian programs for expanding the palette of sounds used in student compositions
- 5) The function and use of Apple's iLife suite of multi-media software in the creation of original student compositions

*PREREQUISITE for Level I: Prior successful completion of any one of the following classes: Music Skills(323), Piano Class (325), Chorus (300), Music Theory (352); or **by permission of instructor.***

### 425 VOICE CLASS

Credit - 0.5

This class is designed to help build confidence in students with aspirations from simply becoming a better musician and singer in chorus and community to those striving to improve their performance as soloists and leads in the chorus and musical. Concepts include developing tone, sight-singing, and the learning and performing of repertoire from art songs to popular music. Students must possess either an electronic or acoustic keyboard instrument and have basic keyboard skills including the ability to read and play simple melodies on the piano.

## VISUAL ARTS DEPARTMENT

The Visual Arts department offers a variety of courses designed to meet the needs and interests of the students at Saucon Valley High School. Each course is available to students at Level 1 (first enrollment in that course), Level 2 (second enrollment in that course), and Level 3 (independent study). Level 2 students may choose to (1) pursue higher level course work, which proceeds from the skills and information mastered in Level 1, or they may (2) choose to work both at a higher level and contribute to the Level 1 students in a peer-monitoring role. Level 3 (independent studies) may also be available to the advanced student, based upon enrollment in a specific course and mutual agreement of student and instructor.

Fees are based upon the cost of materials which become the exclusive property of students in a particular course, or experiences that are offered to students in a particular course as distinct from the general student population. Although each art student is provided with basic materials, some specific materials are necessary for each course, and are covered by these fees.

### **1100 DRAWING** Credit - 1.0

The student will be instructed in a variety of drawing techniques and drawing media (pencil, pen and ink, charcoal, pastel, scratchboard, etc.). Drawing techniques will explore line, value, proportion, texture, depth and perspective, as well as such subjects as portraiture, figure drawing, and various historical and contemporary styles. Student fee: \$20.00.

*PREREQUISITE: Exploring Visual Art*

### **1101 DRAWING (Level 2)** Credit – 1.0

This is a continuation of Drawing 1.

### **1102 DRAWING (Level 3)** Credit – 1.0

Individual focus for the advanced student in drawing.

### **1103 EXPLORING VISUAL ARTS** Credit – 1.0

This course is offered as an introduction to a broad variety of artistic methods and media, and serves as an excellent introductory arts course on the high school level. Students will have experience in basic drawing, painting, and crafts. This course is a prerequisite for Drawing I.

*NOTE:* Student fee for materials - \$20.00.

### **1104 CREATING VISUAL ARTS (Level 2)** Credit – 1.0

This course is a continuation of Basic Art. It provides an upper level approach to a broad variety of artistic media and methods: design, painting, clay, silver, textiles, etc. Student fee - \$20.00.

### **1105 EXPANDING VISUAL ARTS (Level 3)** Credit – 1.0

The highest level of the Basic series continues in creating with a variety of media and methods: silver, printmaking, design, etc. Student fee - \$20.00

## VISUAL ARTS DEPARTMENT (continued)

### 1106 PAINTING

Credit – 1.0

Students will be instructed in the proper use and techniques of painting in the following media: tempera, acrylics, oil, and mixed media. Students will experiment with various techniques and styles, and will be introduced to various subject matter (landscape, still life, portrait, figure, etc.) in historical and contemporary artworks. Student fee for materials - \$20.00

### 1107 PAINTING (Level 2)

Credit – 1.0

This is a continuation of Painting 1. Emphasis will be placed on the development of skills and personal style.

### 1108 PAINTING (Level 3)

Credit - 1.0

Individual focus for the advanced student in painting.

### 1109 STUDIO ART

Credit - 1.0

Students will be instructed in the proper use and techniques associated with the materials relevant to a variety of fine 3-D arts and crafts. Those crafts may include ceramics, sculpture, mosaics, textiles, and multi-media. The teacher will demonstrate technique, and assist the students in the design and exploration of the various media. Emphasis will be placed upon the fine-arts applications of these forms, with historical and contemporary examples and resources. *Note:* Student fee for materials - \$20.00.

### 1110 STUDIO ART 2

Credit – 1.0

This is a continuation of Studio Art.

### 1111 STUDIO ART 3

Credit – 1.0

Individual focus for the advanced student in studio art. Admission only as approved by the instructor after consideration of portfolio and statement of focus/intent.

### 1112 ART APPRECIATION HONORS

Credit – 1.0

This challenging course is designed to introduce students to art history and to help them develop an aesthetic framework from which to intelligently evaluate various visual art forms. The course involves reading, research, and hands-on experiences designed to enhance the learning experience, as well as field trips to museums and galleries. Students should be ready to read, write, and discuss the work they encounter. This is an excellent course for college-bound students. 11<sup>th</sup> and 12<sup>th</sup> grades only.

## WORLD LANGUAGE DEPARTMENT

### **500 FRENCH I**

Credit – 1.0

French I is an introduction to the language and culture of the French speaking world. The fundamentals of grammar are introduced at this level. Listening, speaking, reading and writing skills are introduced. A total immersion approach is taken so that an authentic accent and greater comprehension of the spoken language may be attained. Tapes and other audio-visual materials are used throughout the course.

### **501 FRENCH II**

Credit – 1.0

French II is a continuation of the first year program. Listening, speaking, reading and writing skills are further developed. The cultural emphasis is on the geography of France. The total immersion approach is continued. Tapes, DVDs, and other audio-visual materials are used throughout the course.

*PREREQUISITE: A grade of C or better in French I or teacher approval.*

### **502 FRENCH III**

Credit – 1.0

French III refines and further develops the 4 skills of listening, speaking, reading and writing. The cultural focus is on French speaking African countries. The total immersion approach is continued. The use of tapes, DVDs, and other audio-visual materials is continued.

*PREREQUISITE: A grade of C or better in French II or teacher approval.*

### **503 FRENCH IV**

Credit – 1.0

In French IV reinforcement and refining of the skills from the previous levels occurs. The cultural focus is on topics in dictations and French artists. A visit to an art museum to see some of the works studied will take place, if possible. French literature is studied. Tapes, DVDs, magazines and other audio-visual materials are used throughout the course.

*PREREQUISITE: A grade of B- or better in French III or teacher approval.*

### **504 FRENCH V HONORS**

Credit – 1.0

French V Honors is an honors course designed to review and expand upon the skills acquired from previous levels with special reinforcement in reading and writing. The class will build on previous knowledge and expose students to new grammatical concepts. Students will become more fluent and increase comprehension of the target language through various listening/speaking skills and total immersion. Students will be given opportunities to communicate in a variety of scenarios for interactive exchanges that aim to reinforce, refine, and broaden communicative competence. Students will enhance their understanding of and appreciation for the many cultures that comprise the French Speaking World. The Little Prince and other literature pieces will be read, translated and analyzed. The use of authentic CD's, DVD's, books, magazines, newspapers, and other materials will be used throughout the class.

*PREREQUISITE: A grade of B+ or better in French IV or teacher approval.*

### **505 GERMAN I**

Credit – 1.0

German I is an introduction to the language and culture of the German speaking world. The fundamentals of grammar are introduced at this level. Listening, speaking, reading and writing skills are introduced. The cultural emphasis is on an introduction to the geography of the German speaking countries. A total immersion approach is taken so that an authentic accent and greater comprehension of the spoken language may be attained. Audio-visual materials are used throughout the course.

## WORLD LANGUAGE DEPARTMENT (continued)

### 506 GERMAN II

Credit – 1.0

German II is a continuation of the first year program. Listening, speaking, reading and writing skills are further developed. The cultural emphasis is on the geography as well as the regions of Germany. The total immersion approach is continued. CDs, DVDs, and other audio-visual materials are used throughout the course.

*PREREQUISITE: A grade of C or better in German I or teacher approval.*

### 507 GERMAN III

Credit – 1.0

In German III the cultural focus is on the remaining German speaking countries (Switzerland, Austria, and Liechtenstein). This level refines and further develops the four skills of listening, speaking, reading and writing. The focus on German grammar is intensified throughout this level. The total immersion approach is continued. The use of CDs, DVDs, and other audio-visual materials is continued.

*PREREQUISITE: A grade of C or better in German II or teacher approval*

### 508 GERMAN IV

Credit – 1.0

German IV is designed to complete the *Komm Mit!* textbook series and then to reinforce and expand skills acquired in the first three years of German instruction. Special attention is given at this level to perfecting the listening and speaking skills. The study of German art is emphasized.

*PREREQUISITE: A grade of B- or better in German III or teacher approval.*

### 509 GERMAN V HONORS

Credit – 1.0

German V is an honors course designed to continue the reinforcement of skills acquired previously with special attention to reading and writing. The German classic DER RING DES NIBELUNGEN is read and the students' project is to pick five or more of their favorite chapters and rewrite and illustrate them so that German I and German II students can understand them. The use of CDs, DVDs, magazines, newspapers and other audio-visual materials is continued.

*PREREQUISITE: A grade of B+ or better in German IV.*

### 511 SPANISH I

Credit – 1.0

Spanish I is an introduction to the language and culture of the Spanish speaking world. The fundamentals of grammar are introduced at this level. The 4 skills of reading writing listening and speaking are introduced. A total immersion approach is taken so that an authentic accent and greater comprehension of the spoken language may be attained.

### 512 SPANISH II

Credit – 1.0

Spanish II is a continuation of the first year program. Listening, speaking, reading and writing skills are further developed. The cultural emphasis is on the geography of Spain with the result being a mini-research project on a Spanish city. The total immersion approach is continued.

*PREREQUISITE: A grade of C or better in Spanish I or teacher approval.*

### 513 SPANISH III

Credit – 1.0

Spanish III refines and further develops the four skills of listening, speaking, reading and writing. The Total Immersion approach with emphasis on proficiency is continued. The cultural emphasis is on Latin America with the result being 2 projects – a travel brochure and a research project on a Latin American country.

*PREREQUISITE: A grade of C or better in Spanish II or teacher approval.*

**WORLD LANGUAGE DEPARTMENT (continued)**

**514 SPANISH IV**

Credit – 1.0

Spanish IV is designed to continue with the textbook and then to reinforce and expand the skills acquired in the first three years of Spanish instruction. Special attention is given to perfecting proficiency in the language. The study of Art is emphasized with a trip to the art museum if possible.

*PREREQUISITE: A grade of **B-** or better in Spanish III.*

**515 SPANISH V HONORS**

Credit – 1.0

Spanish V is designed to continue reinforcement of skills acquired in previous levels of Spanish with special attention given to reading and writing. An adapted version of the Spanish class Don Quixote is read and the student project is to summarize and illustrate the book for the enjoyment of a beginning level Spanish student.

*PREREQUISITE: A grade of **B+** or better in Spanish IV or teacher approval.*

## TECHNOLOGY EDUCATION DEPARTMENT

### **1000 BASIC TECHNICAL DRAWING**

Credit – 0.5

This course will introduce students to the fundamental drafting techniques necessary for effective communication in engineering and other technological professions. Students will produce orthographic (multi-view) drawings using both traditional drafting instruments and computer-aided drafting (CAD) technology.

### **1001 ARCHITECTURAL DRAWING**

Credit – 1.0

This course will introduce students to residential design and construction by teaching them how the functional, environmental, and structural aspects of design relate to space enclosures. Students will design and produce architectural renderings essential to the construction of a single family residence using both traditional design stations and AutoCad software.

*PREREQUISITE: Basic Technical Drawing*

### **1002 MATERIAL PROCESSING**

Credit – 0.5

Designed as an entry-level course for manufacturing and construction, students will gain an understanding of the safe use of tools and techniques. Emphasis will be placed on design and planning for projects that benefit themselves and their community. In addition, students will research and write about a current product or process used in the fields of manufacturing and construction and its impact on society in the future.

### **1003 MANUFACTURING SYSTEMS**

Credit – 0.5

In this course, the student will gain knowledge of different types of manufacturing that industry uses today. Students will work in a group setting to manufacture and market a product they design. Emphasis will be placed on flow process, production, quality control, financing, packaging and marketing.

*PREREQUISITE: Material Processing*

### **1004 HOME IMPROVEMENT**

Credit – 0.5

In this course, the student will learn fundamental basics of home improvement will gain necessary knowledge to repair minor flaws. Students will work in a group setting to manipulate separate modules pertaining to sample electrical, plumbing, window and door allocations. Topics covered will also include flooring, framing, roofing, and interior finish.

### **1005 GRAPHIC COMMUNICATIONS**

Credit – 0.5

This course teaches students the basic concepts and elements of design, preparation, and production required to print graphic messages successfully. Students will complete projects using a variety of techniques learned in the areas of commercial bindery, digital imaging and typography, photo-offset printing, and silk printing.

### **1006 TECHNICAL DRAWING**

Credit – 1.0

A continuation of Basic Technical Drawing, this course will present students with advanced drafting problems and introduce them to several basic engineering design and drawing concepts.

*PREREQUISITE: Basic Technical Drawing*

## FAMILY AND CONSUMER SCIENCE DEPARTMENT

### **300 ADULT LIVING**

Credit – 0.5

This course provides an in-depth study for the individual interested in learning more about the physical and emotional aspects of adult living. Emphasis is placed on: values, personality and character development, dating decision-making skills, drugs, smoking and alcohol, love, engagement, marriage, male/female roles, and family planning. This course is only open to grades 10, 11, and 12.

### **301 CLOTHES FOR YOU**

Credit - 0.5

This course is designed for a person with limited sewing experience who wants to learn simple clothing construction techniques. Emphasis is placed on: wardrobe planning and fashion, basic textiles, construction terminology, basic construction techniques, seam and hem finishes, and completion of a basic garment. Students will be required to provide their own materials.

### **302 CRAFTS**

Credit – 0.5

This course is designed for the student who enjoys personal expression through crafts. A variety of in-class projects will be explored such as crochet, machine sewing, embroidery, applique, quilting, stenciling, counted cross-stitch, and Christmas crafts. No previous experience is required.

*NOTE: A materials fee will be collected for in-class projects.*

### **303 CREATIVE LIVING**

Credit – 1.0

Creative Living provides a general overview of the five basic areas of Family & Consumer Science: Child Development and Family Living, Foods and Nutrition, Clothing and Textiles, Housing and Interior Design, and Consumer Education. Activities in this course include child care experiences, food preparation labs, craft and clothing construction and projects in interior decorating. For those students who wish to choose the Tech Prep option in Family and Consumer Science, this class is a prerequisite to the specialty classes. Emphasis will be placed on careers related to Child Development, Foods and Nutrition, and Interior Design. This class is open to all students in grades 9 and 10 and is designed specifically for those grade levels. *NOTE: A materials fee will be collected for in-class projects.*

### **304 FOODS I**

Credit – 0.5

This course is designed for the student who wishes to pursue a career in Foods and Nutrition or who has an interest in home food preparation. Units of study include the basic skills necessary to read and understand a recipe; safety and sanitation; beverages; fruits and vegetables; salads and dressings; baking principles for grain cookery, soups and egg cookery. Activities include lab work as well as classroom instruction.

### **305 FOODS II**

Credit – 0.5

Foods II is designed to build upon the principles learned in Foods I. Courses of study include: Career exploration, kitchen equipment, menu planning, entertaining, gourmet foods, cake decorating, garnishing, cheeses, meat preparation, spices and herbs, and ethnic foods. It is recommended that those students who plan to pursue a career in Foods and Nutrition or have an interest in home food preparation elect to take both Foods I and II.

*PREREQUISITE: A grade of C- or better in Foods I or teacher approval.*

**FAMILY AND CONSUMER SCIENCE DEPARTMENT (continued)**

**306 HEALTHY CHOICES**

Credit – 0.5

This course is designed for the student who has a genuine interest in making healthy food choices. Units of study include an in-depth study of nutrition focusing on basic nutrients, deficiency diseases, smart shopping, sports nutrition, healthy snacks, vegetarian cooking, weight loss and menu planning. Emphasis will be placed on low fat, low cholesterol food preparation. Activities include guest speakers, lab work, and “hands-on” experiences. Healthy Choices is recommended for grades 10, 11, and 12.

**307 INTERIOR DESIGN**

Credit – 0.5

This course is designed for the student who expresses an interest in planning home interiors. The course content includes: elements and principles of design, materials (wood, ceramics, glass, metal, plastics, fabrics), major elements (windows, ceilings, floors, walls, and furniture arrangement), and furniture periods. Activities include in-class projects based on course content as well as a field trip which is topic related. *Recommended for grades 10, 11 and 12.*

**308 YOUNG CHILD I: “THE EARLY YEARS”**

Credit – 1.0

This course explores child development in depth from prenatal to age 3 with an emphasis on parenting skills. Units of student include prenatal care and fetal development, labor and delivery, birth defects, and physical, emotional, social, and intellectual development of the child. Activities include “hands-on” participation with children in this age group. This class is highly recommended for those students who wish to prepare for a career in child day care, early childhood education, or parenting. This is a required course for all students in the Early Childhood Tech Prep Program and should be taken as a prerequisite to Young Child II. Young Child is open to all students in grades 10, 11, and 12.

**309 YOUNG CHILD II: “THE SCHOOL YEARS”**

Credit – 1.0

This course explores child development from ages 3 to 8. Students will have the opportunity to plan activities and participate in a day care, preschool, and elementary environment. Emphasis will be placed on physical, emotional, intellectual, and social development of the preschool and school age child. This course is highly recommended for students who wish to prepare for a career in child day care, early childhood education, or parenting and is recommended for students who wish to pursue a career in Elementary Education. This is a required course for all students in the Early Childhood Tech Prep Program. Young Child II is recommended for students in grades 11 and 12.

*PREREQUISITE: Young Child I or teacher approval.*

**310 YOUNG SINGLES**

Credit – 0.5

This course is designed for students wishing to explore the responsibilities of single living. Topics of study include: apartment hunting and basic furnishings, simple food preparation, clothing care and selection, money management, job selection, and social skills. Recommended for grades 11 and 12.

**NOTE:**

**THESE COURSES WILL BE OFFERED IN ALTERNATE YEARS**

**2009-10**

Young Singles  
Interior Design

**2010-11**

Adult Living  
Crafts

**THESE COURSES WILL BE OFFERED EVERY YEAR:**

Creative Living  
Foods I  
Foods II  
Young Child I

Young Child II  
Healthy Choices  
Clothes for You

## **SPECIAL PROGRAMS**

### **1300Q EDUCATIONAL INTERNSHIP**

Credit - .5 Quarter/1 Quarter only

*Seniors* with exemplary attendance records who have expressed a sincere interest in pursuing a career in education must request consideration to participate in this program from their guidance counselor. The course is designed to expose students to the many facets of teaching and child development. The educational internship assigns students to a teacher-mentor at the elementary or middle school level with whom they work daily.

### **1305Q INDEPENDENT STUDY (All curricula)**

Credit - .5 Quarter/1.0 Semester

Through Independent Study, students may expand their knowledge of a particular subject of personal interest beyond the scope of the regular curriculum. Student's self-directed inquiry, investigation, and/or production will enable them to support or refute whatever hypotheses they have developed with the help and advisement of a faculty mentor. Students wishing to undertake Independent Study should first contact their school counselor at least one quarter before the proposed project would take place. The Independent Study cannot replace a course in our regular curriculum. It must be beyond the scope and sequence of our regular academic program. It's the student's responsibility to engage a faculty member as their sponsor. Proposal must include 1) credit value, 2) method of assessment, 3) timeline/milestone, and 4) department chairperson review. The school counselor will provide the student with the details of the criteria, the guidelines and timetables that must be included in that Independent Study proposal. All proposals must be approved in advance by the building principal.

### **1306 MENTORSHIP – Seniors only**

Credit - .5/1 Quarter only

Through the MENTORSHIP program, students will have the opportunity to work side by side with a professional to help the student to assess their desire to enter a given career field. This experience enables a student to get a first hand look at the day-to-day routine of a career. *This program is NOT intended as a work release program or an extension of an after school job.* This is an opportunity to shadow someone in the field to determine if the student would like to continue a career in that field. The program is intended to be used as part of the career decision-making process. Students must seek and develop their own mentorship program, which **MUST** be approved in advance by their school counselor. Mentorships may not be done in a family business or with a family member. Since students will be representing Saucon Valley High School in the world of work, student applicants must demonstrate evidence of a responsible attendance record and be able to demonstrate an ability to work independently to meet the academic requirements in an environment with less structure than a school classroom. These factors will be considered in the application process. Mentorships must comply with Pennsylvania Labor Laws. Students will be required to submit weekly written papers, demonstrating what they have learned and experienced during the past week. A student's grade will be based on these weekly reports and the evaluation of the mentor. The student may serve in a volunteer capacity or may be paid at the discretion of the mentor. Students are responsible for their own transportation.

### **SCHOOL TO WORK PROGRAM – Seniors only**

Credit 1.0

Designed for the student with an individualized plan of study, the School to Work Program provides an alternative to the traditional learning structure of Saucon Valley High School by integrating work-site experiences with curricular skill-building areas. Students approved for the program are enrolled in high school coursework part of the day and work in a career field of interest the other part of the day. Students will be taught both career and life skills that will enhance their employability. Success in the program requires consistent attendance and the ability to meet and set individual goals. The teachers will continually work to provide the personalized help and stability that students need to achieve that success. *PREREQUISITE: Approval of School Counselor.*

## **CONCURRENT COLLEGE ENROLLMENT**

Academically successful students who would like to take a course at an institution of higher education such as Moravian College, Lehigh University, or Northampton Community College may make arrangements to do so through a counselor. College courses will be approved if they are not also offered at Saucon Valley Senior High School and if students are able to provide for their own special transportation needs. Although college and university course credits are not applied to high school graduation requirements, they may be held in escrow to be applied to the student's higher education program.

## **BETHLEHEM AREA VOCATIONAL TECHNICAL SCHOOL**

### **1404Y AM VO-TECH**

### **1405Y PM VO-TECH**

To enhance curricular choices for all students, Saucon Valley High School proudly partners with Bethlehem Area Vocational Technical School (BAVTS) to offer hands-on experience and application based specialized skills in a variety of career clusters. Students in grades 10, 11 and 12 have the option of choosing to attend BAVTS part time (generally two blocks a day for four credits). First year students attend AM and second and third year students attend PM.

## **BETHLEHEM AREA VOCATIONAL-TECHNICAL SCHOOL COURSE DESCRIPTIONS**

### **CONSTRUCTION CLUSTER**

#### **Building Trades (CARPENTRY)**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

The Building Trades program involves several different construction disciplines including, but not limited to carpentry, electrical, and masonry and is geared toward the student who is considering a career in the construction trades. The first year students will be in a hands-on learning environment by working on their skills on a full scale house project in the shop. The students are instructed in all construction fields and will be trained in demonstrating proper work ethic for the building trades industry. The second and third year students will be working on off-site projects in the community. Currently they are working at Illick's Mill and at a Northampton Community College project. At the end of the program, student's mastery of skills will be tested through NOCTI.

#### **CABINETMAKING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

This course is geared toward the student who aspires to become a master craftsman in the woodworking trades. Students learn the basic skills for cutting, assembling and finishing a cabinetry project. Through a series of projects, including the design and installation of the kitchen for the House Project, students learn to read blueprints and operate various hand and power tools, such as a radial arm saw, jointer, thickness planner, belt sander, and router. They also learn basic carpentry, such as wall and floor layout, and the application of different wall and floor coverings. Students work with various types of construction material (i.e. wood, laminates) and practice appropriate finishing techniques. Students that have attended this program have gone on to post-secondary education at Pennsylvania School of Technology an affiliate of Penn State.

#### **CARPENTRY**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

This course is designed for the student who is interested in a career in the carpentry trades. Students will learn fundamental skills using a variety of wood sizes and numerous tools of the trade. They will create projects ranging from simple, to complete layout and construction of a residential property. The ability to read complex blueprints and measuring to within a tolerance of + or - 1/16th of an inch is required. In this course, the students will use handsaws, power saws, hammers, vises, screwdrivers, pliers, routers, drill presses, and a variety of unmentioned hand and power tools applicable to the trade. At the end of the program, a student's job readiness and mastery of skills will be measured based on testing and standards of NOCTI. Students that have attended this program have gone on to post-secondary education at Kutztown University, Lincoln Tech, Triangle Tech and Northampton Community College.

## **ELECTRICAL CONSTRUCTION**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

This course is designed for the student who is interested in a career in the electrical trades. Students in this course will learn to assemble, install, and test wiring, fixtures and devices used in commercial, industrial, and residential installations. In addition, they learn to keep all types of electrical equipment in working order. They will learn to read blueprints and schematics for motor control and P.L.C.'s. Upon completion, they will be required to take the NOCTI test for electrical occupations. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of the National Electrical Contractors Association. Students that have attended this program have gone on to post-secondary education at Pennsylvania School of Technology an affiliate of Penn State.

## **HEATING/VENTILATION AND AIR CONDITIONING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students entering the HVAC program learn core skills which would enable them to enter various occupations. These core skills include safety, use of tools, blueprint reading, piping and tubing applications, sheet metal and electrical. A theoretical background in thermodynamics will allow a student to advance into the installation and service fields. Students receive theory and practical training in EPA Section 608 and flexible gas pipe training, leading to national certifications. Continuing education will permit advancement into design and application aspects of the Heating, Ventilation, Air Conditioning/Refrigeration Industry. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of the National Occupational Competency Testing Institute. Students that have attended this program have gone on to post-secondary education at Northampton Community College and Lehigh Carbon Community College.

## **MASONRY**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students should learn the fundamental skills of a mason. The students should create a series of projects that progress from jobs as simple as a brick pyramid to as complex as a residential fireplace. They should learn how to use the basic hand tools of the trade, which include scaffolding, masonry rules, mortar mixers, and other basic tools. They should learn to read blueprints. Students should use the masonry shop to make themselves the best they can be as a mason and as a person. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of NOCTI. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

## **PLUMBING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students will learn to assemble, install, alter, and repair pipe systems which carry water, steam, or other materials for sanitation, industrial, and other uses. They will also install plumbing fixtures, appliances and hydrolic systems. Reading blueprints and using pipefitting formulas are two other skills the student will learn. Students will use acetylene torches and a variety of hand and power tools. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of NOCTI. Students that have attended this program have gone on to post-secondary education at Utica and Northampton Community College.

## CREATIVE COMMUNICATIONS AND MULTIMEDIA

### COMMERCIAL ART

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students will learn how to apply their artistic talents to today's market, beyond pencil and pen, to the computer and using the internet. Working with the latest graphics software and technology, students create brochures, posters, magazine covers & layouts, signs, logos and more. The course covers the principles of graphic design, graphics, typography, basic illustration, use of color, page layout, advertising, digital photography, and portfolio development. A student's mastery of skills will be measured by testing using the standards of NOCTI. Upon graduation, students will be prepared to enter the workforce in an entry-level position. This program is an excellent opportunity for students planning to pursue post secondary education in graphics, or a design related field. Students that have attended this program have gone on to post-secondary education at Kutztown University, Fashion Institute of Technology, University of the Arts, Philadelphia Art Institute and Northampton Community College.

### FASHION INDUSTRIES

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students learn basic designing skills, drafting patterns, and industrial methods of clothing construction. They make clothing projects that start out simple and as they acquire more skills, they use their creative minds and progress to more difficult projects. They are trained to use a wide variety of sewing machines and equipment. Also, they will acquire an understanding of the principles of fashion merchandising. The more advanced students have an opportunity to learn computerized pattern design on the Lecture CAD system. The nationally recognized NOCTI testing will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

### GRAPHIC (& Print Technology) COMMUNICATIONS

Grades 10, 11, 12

Available for 3 years

4 Credits per year

The Graphic Communications program produces individuals prepared for entry-level work, as well as post-secondary education. This program presents the tools, material, and processes involved in the mass production of the printing industry. The student will gain knowledge and hands-on skills through instruction in composition and imposition, press operations, and finishing and binding, along with management, customer service, and marketing. A high level of math, measuring, language arts, and communication skills are required. All students may earn Skills Certificates based on their level of completion, and choose to participate in the School-to-Work program during their senior year. The student's job readiness and mastery of occupational skills will be measured based on testing and standards of NOCTI. Students that have attended this program have gone on to post-secondary education at Northampton Community College and Pennsylvania School of Technology an affiliate of Penn State.

### VIDEO & MEDIA ARTS

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Video and multimedia personnel create the exciting images and sounds that we've come to expect from TV programs, CD ROM and the Internet by combining sound, video and computer graphics technology. The instruction that this program offers includes training in concept development and design, audio and video production, computer-imaging and presentation technology. Computer software applications will include computerized editing graphics and animation. The nationally recognized NOCTI testing will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas. Students that have attended this program have gone on to post-secondary education at the University of the Arts and Northampton Community College.

## **WEB DESIGN & ANIMATION**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

A web designer must be able to layout, create, test, troubleshoot, and modify web pages and sites. During the first year, students learn the basics of color, typography, design, and Photoshop and Illustrator. Second and third year students learn in-depth techniques how to create and assemble web sites using Dream Weaver and Fireworks and create animation for web sites and other media outlets using Flash and Lightwave 3D. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

## **CULINARY ARTS AND HOSPITALITY**

### **BAKING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students will learn how ingredients are weighed and measured for large batches of dough and batter. They will learn how to operate large mixing machines and how to properly blend ingredients. Students participate in the production of many different varieties of bread, rolls, donuts, sweet rolls, Danish pastry, cookies, and many other pastry varieties. Cake decorating skills are taught starting with layer cakes and sheet cakes and advancing to large multi-tiered wedding cakes. Students also learn the advantages and disadvantages of different production options such as the use of prepared bakery mixes and frozen pre-formed products. The nationally recognized NOCTI and ACF will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

### **CULINARY ARTS – Culinary Design**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students will learn fundamental core competencies in safety, sanitation, measurements, equipment, hand tools, basic food preparation and customer service for a formal, sit down dining atmosphere. They will set career goals and develop employability skills as they experience hands on skills through the operation of a commercial kitchen, bakery, and restaurant facility. The nationally recognized Student Occupational Competency Achievement Test will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance job readiness in multiple areas as well the National Restaurant Association Serve Safe certification. Students that have attended this program have gone on to post-secondary education at the Culinary Institute of America and Northampton Community College.

### **INSTITUTIONAL FOODS – Culinary Events**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students will learn fundamental core competencies in safety, sanitation, measurements, equipment, hand tools, basic food preparation and customer service for banquet, institutional facilities and special event catering. They will set career goals and develop employability skills as they experience hands on skills through the operation of a commercial and institutional kitchen, bakery, and within various locales of the hospitality industry. The nationally recognized Student Occupational Competency Achievement Test will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance job readiness in multiple areas as well the National Restaurant Association Serve Safe certification. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

## HEALTH & MEDICAL SCIENCES

### ALLIED HEALTH

Grades 10, 11, 12

Available for 2 years

4 Credits per year

This course is for students planning post secondary training/education in a health career. It provides students with an introduction into health careers, anatomy/physiology, medical terminology, communication skills, nutrition, first aid and other basic health care principles. The nationally recognized Student Occupational Competency Achievement test will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas.

### HEALTH CAREERS

Grades 10, 11, 12

Available for 3 years

4 Credits per year

This course is for students planning post secondary education in a health career. It provides students with an introduction into health careers, anatomy/physiology, medical terminology, communication skills, nutrition, first aid and other basic health care principles. The second year includes the nurse aide or allied health program. Scheduling appointments, filing techniques, obtaining EKG strips, heights, weights, vital signs and other medical office and unit clerk skills will be taught in the in the 3rd year. Students will be certified in CPR/AED and first aid/safety. The nationally recognized Student Occupational Competency Achievement Test will measure a student's mastery of occupational skills at the end of the program. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas. Students that have attended this program have gone on to post-secondary education at Pitt and Northampton Community College.

### NURSE AIDE

Grades 10, 11, 12

Available for 2 years

4 Credits per year

Students learn basic anatomy, medical terminology, asepsis, nutrition, and basic nursing procedures. In order to be successful in attaining this knowledge and these skills the student should be strong in science and math, have good recall and be technically oriented. This course will help students expand their interpersonal and communication skills. It will draw upon their caring attitude to make them the kind of care giver we all want on our health care team. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of the Pennsylvania Department of Education. Successful completion of both written and technical skill tests adds the students name to the PA State Registry of Nurse Aides.

## MECHANICAL TECHNOLOGIES

### AUTO COLLISION REPAIR

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Repairing the body and frame of a vehicle is the focus of training in the Auto Collision Repair program. All phases of repair are encompassed including the use of frame straightening equipment and the latest in repair and refinishing techniques. Hands on training on customer-owned vehicles plus classroom theory are part of the program's instruction. Students will learn how to properly repair damaged vehicles including repairing and replacing panels, working with sophisticated automotive finishes, special alloy steels, and plastics. The Auto Collision Repair lab is well lighted and equipped to industry standards. This gives the student a clean environment for learning and instructs the student in the safe use of hand and power tools, as well as the use of the latest equipment in the collision repair industry. At the end of the program, a student's job readiness and mastery of skills will be measured based on testing and standards of NOCTI.

## **AUTOMOTIVE TECHNICIAN**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

In the Automotive Technician Program students will learn basic shop procedures, safety guidelines, how to use manuals, databases, tools and equipment and precision instruments first and second level students will learn suspension, brakes, engine, electrical and manual drivetrain. Third level students will learn engine performance (electronic fuel and ignition, emission systems), heating and air conditioning, automatic transmission and axle and state safety and emissions inspection laws and procedures. A student's mastery of occupational skills will be measured using the testing and standards of the NATEF. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

## **PRECISION MACHINING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students will learn fundamental skills for machining metal and other materials. They will create a series of projects that progress from simple to complex. They learn to read blueprints and to measure to one thousandth of an inch (.001"). They will use lathes, milling machines, surface grinders, saws, drill presses, and a variety of hand tools. Students may eventually use the machine shop computer lab and setup, operate and program CNC (Computer Numerical Control) machines. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of the National Institute for Metal Working Skills.

## **WELDING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Students are taught fundamental skills for welding carbon steel and other metals. Students progress from basic welds to various configurations and positions. Students progress to more complex joints with simulated certification level testing procedures. Students are taught cutting and various metal removal methods. They will safely use a variety of hand tools, operation of the saw, drill press, hand and pedestal grinders, brake press, and iron worker used in fabrication preparation. They are taught to read and visualize shapes from blueprints. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of the American Welding Society.

## **SERVICE CLUSTER**

### **COSMETOLOGY**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Cosmetology students begin their training using a mannequin and working with classmates providing assigned or requested personal services. The students are engaged in a program of study where each works independently and advances from one skill to another throughout the training period. They learn permanent waving, shampooing and styling, manicuring, haircutting, facials, scalp treatments, and color. After basic techniques are mastered, the students are required to work on clients in the patron service area. At the end of the program, a student's job readiness and mastery of occupational skills will be measured based on testing and standards of the Pennsylvania State Board of Cosmetology Licensing Exam.

### **HORTICULTURE/FLORICULTURE**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

The Floriculture and Greenhouse Management Program is about the world of flowering plants and jobs associated with the Green Industry. Students experience all aspects of the local floriculture industry including the propagation, culture and use of flowering and tropical indoor plants. Floral design and marketing is also covered as arrangements are made for events such as weddings, funerals, and banquets. The students learn greenhouse operations by growing bedding plants and other ornamental crops. A large part of the program is sales and customer service skills, as well as identification of plants important to the Pennsylvania Horticulture Industry. Students that have attended this program have gone on to post-secondary education at Northampton Community College.

## **PROTECTIVE SERVICES**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

An instructional program that prepares individuals to apply technical knowledge and skills required to perform entry-level duties as a police officer, fire fighter, paramedic, and other safety services. The program stresses the techniques, methods, and procedures peculiar to the areas of criminal justice and fire protection, especially in emergency and disaster situations. Physical development and self-confidence skills are emphasized due to the nature of the specific occupations. In addition to the application of mathematics, communication, science, and physics, students receive training in social and psychological skills, map reading, vehicle and equipment operations, the judicial system, pre-hospital emergency medical care, appropriate emergency assessment, treatment, and communication. A student's mastery of skills will be measured by the testing and standards of the National Occupational Competency Testing Institute. Students that have attended this program have gone on to post-secondary education at Weidner and Northampton Community College.

## **TECHNOLOGY CLUSTER**

### **COMPUTER AIDED DRAFTING - Kitchen & Bath Design**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

This program provides a cross section of drafting, basic design principles and technical knowledge. Students will study architectural and computer-aided drafting as well as kitchen and bath design. They will explore color, light and texture. They will learn to work with clients to create designs and prepare estimates and presentations for clients. The program provides the fundamental skills needed to start a career in the industry, or transfer to a program in Kitchen and Bath Design or Interior Design at a two year community college, or a four year baccalaureate degree program. Students that have attended this program have gone on to post-secondary education at Penn State and Northampton Community College.

**This program provides the opportunity to earn college credits while in high school through an agreement with the local Community College.**

### **ELECTRONIC ENGINEERING & MANUFACTURING**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

This course is designed to give students the theory and hands-on experience to design and complete electronic assemblies using both hand and automated techniques. Students will learn to set up, program, and operate electronics manufacturing equipment in a high-tech educational environment. Students who complete this program will be able to set up and operate a mixed-technology assembly and inspection. Students will have the opportunity to receive certification in both Electronic Technicians Association (ETA) as well as IPC -A-610 Acceptability of Electronic Assemblies certification. Both certificates are recognized nationally and locally by electronic manufacturing companies as well as the Department of Defense. This allows students to be employed as an Electronic Application Specialists in the field. Students that have attended this program have gone on to post-secondary education at Lincoln Tech and Northampton Community College.

## **MANUFACTURING PROCESSES**

Grades 10, 11, 12

Available for 3 years

4 Credits per year

Manufacturing Processes is an occupational training program designed to prepare students for entry-level positions in the manufacturing disciplines of production, industrial maintenance, and logistics. First year students will explore careers in manufacturing through a variety of resources including field trips to several local companies. They will also learn about the many technologies used in today's high-performance manufacturing settings. Mechanical print reading and computer application skills will be covered during the second year of this program. Students who successfully complete the first two years of Manufacturing Processes will be offered the opportunity to specialize in one or more mechanical trades areas, such as Precision Machining, Welding, HVAC, etc., during their third year. Upon completion of the program, students will have the opportunity to earn the Manufacturing Skills Standards Council (MSSC) Certification.

## ACADEMY PROGRAMS

Academy programs are for juniors and/or seniors. Level 1 courses are not required. Students earn 2 credits per year by attending one block per day.

**Note: Students are responsible for their own transportation.**

**1400**

### ACADEMY OF HOSPITALITY MANAGEMENT

Grades 11 and/or 12

One block for 2 Credits or two blocks for 4 Credits

*This program is delivered through the Bethlehem Area Vocational-Technical School with on-sight training at a local hotel.*

This program is geared toward the student who plans on continuing their education or entering a career in the hospitality industry after graduation from high school. This program includes instruction in hospitality industry principles, supplies purchasing, storage and control, hotel and restaurant facilities design and planning and hospitality industry law. Students also are taught personnel management and labor relations, financial management, facilities management, marketing and sales promotion strategies, convention and event management, front desk operations, and other operations. A student's mastery of occupational skills will be measured by the American Hotel and Lodging Association (AHLA).

**1402**

### ACADEMY FOR MEDICAL SCIENCES

Grade 12

2 Credits

*This program is delivered through the Bethlehem Area Vocational-Technical School with on-sight training at a local hospital.*

The Academy course is fast paced and for the college prep/honors student who is capable of managing class work, as well as independent research assignments. The curriculum includes legal responsibility, ethical issues in health care, communication, medical terminology, safety and first aid, and an overview of the industry. This course is designed to provide the student with the necessary information and skills to be considered safe in a clinical environment. The clinical component offers many health care experiences for a multi-focal overview of professional health careers. Students that have attended this program have gone on to post-secondary education at Lehigh, West Chester, Pitt, Bucknell, Cedar Crest, and Moravian.

**1403**

### ACADEMY FOR APPLIED ENGINEERING

Grade 12

2 Credits

This course is structured much like a traditional college level engineering course. Three periods per week are reserved for lecture and discussion, one period per week for student presentations and six periods per week for lab activities. Lab activities consist of individual and group projects designed to reinforce the theory components. These competitions permit the students to participate in actual engineering projects involving design, construction, and testing of a prototype device. Following testing, the team presents a formal audio-visual presentation to an audience of judges and peers from Lafayette College Higher Education. Students that have attended this program have gone on to post-secondary education at Lafayette, Carnegie Mellon, Pennsylvania School of Technology, Penn State, Drexel, University of Delaware and Georgia Tech. Students have potential to earn 3-4 Lafayette College credits.