FREEDOM HIGH SCHOOL
PROGRAM OF STUDY
2013 – 2014
“Children Are Our Highest Priority!”

DEPARTMENTS
BUSINESS
ENGLISH
ESOL
FINE & PRACTICAL ARTS
HEALTH/PHYSICAL EDUCATION
MATHEMATICS
SCIENCE
SOCIAL STUDIES
SPECIAL EDUCATION
WORLD LANGUAGES
Freedom High School
3149 Chester Avenue, Bethlehem, PA 18020
Phone: 610-867-5843  Fax: 610-807-5581
www-fhs.beth.k12.pa.us • Michael Laporta, Principal

School Profile
FREEDOM HIGH SCHOOL

Freedom High School has an enrollment of nearly 2,000 students grades 9 through 12, and is one of two high schools in the Bethlehem Area School District. It is located in the northeastern section of Bethlehem. The school was built in 1967 and an addition of eleven classrooms, fitness room, aerobics room, and a state of the art gymnasium was built and dedicated in 2006. It is a comprehensive four year high school accredited by the Pennsylvania Department of Education and the Middle States Association of Colleges and Secondary Schools. A vocational and technical education is available at the Bethlehem Area Vocational Technical School for grades 9 through 12. The attendance area for Freedom includes a small portion of Northeastern Bethlehem, South Bethlehem, and Bethlehem Township.

COMMUNITY

Bethlehem is a community of approximately 72,000 people. The sixth largest city in Pennsylvania, we are located 90 miles southwest of New York City and 60 miles North of Philadelphia. The campuses of Lehigh University, Moravian College, DeSales University, Penn State University, and Northampton County Area Community College provide an academic dimension to the city. Transportation facilities are readily available to Philadelphia, New York City, and New Jersey communities.

ACTIVITIES & ATHLETICS

All co-curricular activities are an integral part of our school community. Students have the opportunity to participate in over 35 organizations and 22 interscholastic sports at the AAAA/AAA level of competition. Freedom’s athletic teams compete in the Lehigh Valley Interscholastic Conference. Sports include field hockey, cross country, cheerleading, football, golf, rifle, soccer, basketball, swimming, baseball, softball, tennis, track & field, volleyball and wrestling. A sampling of our clubs include Anime, Art, Astronomy, Chess, Debate, Environmental Awareness, French, Gay/Straight Alliance, German, Global Reach, Pen & Ink, Freedom Forum Newspaper, Photography, SADD, Student Council, Theatre Company, Yearbook, Science Olympiad, Scholastic Scrimmage, Band, Twirlers, Orchestra, Choir, and Les Chanteurs.

SPECIAL ACADEMIC PROGRAMS

Many of our students participate in Dual Enrollment programs offered at Northampton Community College. We also participate in University Scholars programs for our top students through Lehigh University, Moravian College, Lafayette College, and DeSales University. Our Business and Technology Department offers seven credit certificate programs in Accounting, Marketing, Information Processing and Finance & Banking. Our Fine and Practical Arts Department offers a certificate program for students who plan to pursue a career in Early Childhood Education. Vocational and technical education is available for all students through Bethlehem Area Vocational Technical School, and their program includes senior honors programs in engineering in cooperation with Lafayette College and a medical academy through Lehigh Valley Health Network.

ADMINISTRATION

MR. MICHAEL LAPORTA
PRINCIPAL

MRS. KIMBERLY HARPER
ASSISTANT PRINCIPAL FOR CURRICULUM & INSTRUCTION

MR. WILLIAM CECCHINI
MRS. HOLLY DENOFA
MR. MICHAEL DiBILIO
ASSISTANT PRINCIPALS

COUNSELORS

MR. MICHAEL HERICK
DEPARTMENT CHAIR

DR. WILLIAM FEIGLEY
MRS. MELANIE HOUSER
MRS. CAROL LEE
MRS. LORETTA LOHENITZ
MR. JEFFREY LONGACRE
MR. CHRISTIAN LYNE
MS. TARA McGOFF

ATHLETICS

MR. FRED HARRIS
ATHLETIC DIRECTOR

NATIONAL MERIT SCHOLARSHIP

2012

2 FINALISTS
2 SCHOLARSHIPS
3 COMMENDED
1 SPECIAL SCHOLARSHIP
### Student Grading Summary

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point</th>
<th>Honors/AP</th>
<th>Percent</th>
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<td>4.3</td>
<td>5.3</td>
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<tr>
<td>A-</td>
<td>3.7</td>
<td>4.7</td>
<td>90-92</td>
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<td>B+</td>
<td>3.3</td>
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<td>87-89</td>
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<td>3.0</td>
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<td>73-76</td>
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<tr>
<td>C-</td>
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<tr>
<td>F</td>
<td>0</td>
<td>0</td>
<td>&lt;70</td>
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### Scheduling, Grading, and Class Rank

Freedom uses a block schedule. Students take four credits of coursework during each of two semesters.

Honors courses and Advanced Placement courses, as noted on the transcript, receive one additional grade point unit (A=5.0, B=4.0, etc.). Academic subjects meet five days per week for periods of 85 minutes for one semester. There are two marking periods each semester.

Final grades are calculated as follows: Each of the two marking periods comprise 40% of the final grade, plus 20% for the final examination. Students receive final letter grade assessments of A, B, C, and F. The standard for passing is 70%.

Class rank is computed at the end of each semester for all students. An official class rank is computed at the end of each school year. All students are ranked together by grade. Community service is exempt from the rank.

### Advanced Placement Courses

- Language & Composition
- Literature & Composition
- Calculus AB & BC
- Statistics
- French
- Spanish
- Biology
- Chemistry
- Environmental Science
- Physics B
- Physics C: Mechanics
- Psychology
- United States History
- World History
- Macroeconomics
- Comparative Govt & Politics
- U.S. Govt & Politics

### Freedom's CEEB Code

390322

### Graduation Requirements

- English ........................................ 4 credits
- Math ........................................... 4 credits
- Social Studies ............................... 4 credits
- Science ....................................... 4 credits
- Health ......................................... 1 credit
- Physical Education .......................... 2 credits
- Computer Technology ........................ 1 credit
- Arts ............................................. 1 credit
- Community Service .......................... ½ credit

Total credits required ..................... 26 credits

### Honors Level Courses

- English 9, 10, 11, 12
- United States History 2
- United States History 3
- Global Studies
- Government/Economics 12
- Geometry
- Algebra 1
- Algebra 2
- Pre-Calculus
- Biology
- Chemistry
- Physics
- Human Anatomy and Physiology

### Last Year's Statistics

#### 2011-2012 SAT Scores

<table>
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<th>Mean Critical Reading Scores:</th>
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<tr>
<td>Male = 489</td>
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<tr>
<td>Female = 479</td>
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<table>
<thead>
<tr>
<th>Mean Math Scores:</th>
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<tbody>
<tr>
<td>Male = 516</td>
</tr>
<tr>
<td>Female = 473</td>
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<table>
<thead>
<tr>
<th>Mean Writing Scores:</th>
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</thead>
<tbody>
<tr>
<td>Male = 473</td>
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<tr>
<td>Female = 486</td>
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#### Class of 2012 Post-High School Placement

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<tr>
<th></th>
<th>47%</th>
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<td>4-Year College</td>
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<tr>
<td>2-Year College/Trade School</td>
<td>41%</td>
</tr>
<tr>
<td>Military</td>
<td>3%</td>
</tr>
<tr>
<td>Work</td>
<td>4%</td>
</tr>
<tr>
<td>Other/Homemaker/Uncertain</td>
<td>5%</td>
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</tbody>
</table>
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BASD Mission Statement

The Bethlehem Area School District, in partnership with the home and community, is committed to providing a safe and supportive environment in which each student will attain the knowledge, skills, and attitudes necessary to become a productive citizen and life-long learner in our technologically demanding and culturally diverse society.

The BASD Mission in Practice

The job of the Bethlehem Area School District is to graduate students who are college and career ready. Our goal is to provide students with an educational experience that best matches their skills and interests while stretching students to become the best they can be. The path to success is as varied as the individual students we serve. The common variable is that all students must rise to the increased rigor of the PA Common Core Curriculum and the new Keystone graduation requirements. By aligning coursework to students' post-secondary goals, students see the relevance in what they are learning and are more likely to achieve at higher levels.

In the 21st Century, high school is about more than just the acquisition of credits. Students should begin planning for their post-secondary success even before they enter high school. As students begin the scheduling process for their ninth-grade year, counselors will work closely with students to chart a path that, if successfully completed, will give students a competitive advantage when applying to the college or career of their choice.

For those students who wish to accelerate their high school experience and graduate from high school with some college credits in hand, the Bethlehem Area School District offers a wide variety of Advanced Placement and concurrent enrollment opportunities (please see pages 5 and 8). Students wishing to participate in a more challenging curriculum but who do not wish to acquire college credits may choose from a number of honors courses in each of the major content areas. Some students may wish to begin their career training while still in high school. The Bethlehem Area Vocational-Technical School (BAVTS), in partnership with the BASD, offers students industry-benchmarked training in high-priority occupations. Ninth-graders desiring to accelerate their career preparation may choose to participate in the FastTrack program, a BAVTS elective offering designed specifically for our ninth-grade students.

Depending upon their college and career goals, students may follow a flexible path that is a combination of those described above. A student wishing to become an engineer may take AP Calculus and AP Physics but opt for honors or college preparatory social studies. A student who desires to become a writer may opt for AP English Language and Literature, journalism and creative writing electives, and honors or college preparatory math and science. A student whose goal is to be an electrician may opt for AP or honors physics and coursework at BAVTS. The college and career goal of the student, along with his or her interests, should drive the student’s schedule.

All of our students, no matter their career path, benefit from community partnerships. The BASD is working with local organizations such as Lehigh University, Northampton Community College, ArtsQuest, PBS, and St. Luke’s Hospital to create real-world learning opportunities for our students related to specific career paths. In addition, students must complete sixty hours of community service in order to graduate. This requirement can be tailored to students’ interests so that they can explore careers of their choice before committing to a college major.

We are partners in each student’s educational experience. Providing each student with a flexible, personalized learning plan will ensure success beyond high school.
GENERAL INFORMATION

FOUR YEAR HIGH SCHOOL GRADUATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Required courses</th>
<th>Credit</th>
<th>Grade When Usually Taken</th>
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<tbody>
<tr>
<td>English</td>
<td>4.0</td>
<td>1.0 Credit each in Grades 9, 10, 11, 12</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4.0</td>
<td>1.0 Credit each in Grades 9, 10, 11, 12</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4.0</td>
<td>1.0 Credit each in Grades 9, 10, 11, 12</td>
</tr>
<tr>
<td>Science</td>
<td>4.0</td>
<td>1.0 Credit each in Grades 9, 10, 11, 12</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2.0</td>
<td>0.5 Credit each in Grades 9, 10, 11, 12</td>
</tr>
<tr>
<td>Health</td>
<td>1.0</td>
<td>0.5 Credit each in Grades 9 and 10</td>
</tr>
<tr>
<td>Computer Technology</td>
<td>0.5</td>
<td>9-12 (Tech Concepts or Introduction to Comp Prog)</td>
</tr>
<tr>
<td>Community Service</td>
<td>0.5</td>
<td>9-12</td>
</tr>
<tr>
<td>Arts*</td>
<td>1.0</td>
<td>9-12</td>
</tr>
<tr>
<td>General Electives</td>
<td>5.0</td>
<td>9-12</td>
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</table>

26.0 Credits are required for graduation.
Students must also demonstrate proficiency in reading and mathematics to graduate.

* Arts courses include elective courses in the English Language Arts department and all courses in the Art, Music, Family and Consumer Science, and Industrial Arts departments.

Students enrolled in the Vocational-Technical or career course path may, if necessary, replace up to one required credit each in Social Studies, Science, and/or Mathematics with a course aligned to their career goals. Eligibility for pursuing such a credit replacement toward graduation will be determined by the principal (or his or her designee) in consultation with the student, parent, guidance counselor, and the BAVTS.

COURSE SELECTION PROCESS

Counselors will begin this process in early December. Completion of this process occurs in late February and also includes the incoming 9th grade class. Placement of students in English, social studies, math, and science is done based on multiple data indicators. Students select from a wide variety of electives offered in this booklet. Sometimes, due to scheduling constraints, specific courses may not be available. A course request verification sheet is sent home when course requests are made. Schedules will be sent to students during the summer.

In this Program of Study, electives and other selected courses are marked with one or more of the Career Pathways symbols identified below. Students are encouraged to choose electives based on their interest in or curiosity about a particular Career Pathway. The guidance department will also help to guide you in your course selection.

- **ARTS, HUMANITIES, & COMMUNICATION**
- **BUSINESS & FINANCE**
- **SCIENCE, TECHNOLOGY, ENGINEERING, & MATH**
- **HEALTH & SOCIAL SERVICES**

Prerequisite Courses – In students’ best interest, teachers, department chairpersons, administrators, and counselors have agreed on certain prerequisites for some course offerings. These prerequisites must be completed before taking the course.

Remember – Schedule planning can take place only when the school can consider the course selections of students to be final and binding. If a student selects a course, he/she is expected to complete it.

Any student who has not successfully completed any core course and has not completed remediation programs will not enter the next level of the course of study.
ENTRY INTO HONORS COURSES

Criteria for Admission

Grade 9:

1. Student willingness to meet the rigors of the course
2. Advanced or proficient standardized test results
3. Teacher recommendation
4. Submission of an on-demand writing sample
5. Satisfactory completion of honors application

Grades 10 – 12:

1. Student willingness to meet the rigors of the course
2. A final grade of 90% or higher
3. Advanced or proficient standardized test results
4. Teacher recommendation
5. Submission of an on-demand writing sample
6. Satisfactory completion of honors application

It is the belief of the BASD that all of our students should have the opportunity to participate in courses with the highest rigor. While all of our high school courses have been designed with rigor in mind, the honors courses go beyond the college preparatory courses insofar as an additional commitment to work is required for successful completion. Therefore, all students and parents should review the above expectations of an honors student. As students and parents examine these expectations, the following should be noted:

1. The criteria for entry into honors courses have been put into place in order to give our students the greatest chance for success in the courses. Students are reminded about the additional work and time that is involved in being in an honors course. They should also remember that, unlike college prep courses, grades in these courses are weighted.

2. Students who, in consultation with their parents and teachers, agree to meet the challenge of an honors course and request entry into honors courses will be scheduled accordingly.

3. Student entry into an honors course will not be denied based on failure to meet a single criterion. Please note: Students applying for Honors Biology may be required to take an entrance test should we require additional data.

4. Students who fail to meet entry criteria will be notified; however, if the parents and student still wish for the student to be scheduled into the course, they may make that request, and scheduling may be adjusted.

5. Students planning to take AP courses in the future are strongly encouraged to enroll in Honors/Pre-AP courses for prerequisite coursework.

6. Grading point equivalents for honors courses are explained on page 6.

Please see additional information for specific courses in each section.
ADVANCED PLACEMENT COURSES

Through AP's college-level courses and exams, students can earn college credit and advanced placement, stand out in the admission process, and learn from some of the most skilled, dedicated, and inspiring teachers. From the moment students enter an AP classroom they notice the difference—in the teacher's approach to the subject, in the attitude of their classmates, in the way their peers start to think. In AP classrooms, the focus is not on memorizing facts and figures. Instead students engage in intense discussions, solve problems collaboratively, and learn to write clearly and persuasively. With a variety of AP courses to choose from, including Environmental Science, Psychology, and Economics, students will be able to explore interests and discover new passions. In AP classes, students study fascinating topics and ideas that just might become the foundation of their future college major or career. AP courses can help acquire the skills and habits needed to be successful in college. Students improve writing skills, sharpen problem-solving abilities, and develop time management skills, discipline, and study habits. Because of the demands of AP courses, the student should choose courses wisely and deliberately based on his/her personal passions and time commitments.

Most four-year colleges in the United States and colleges in more than 60 other countries give students credit, advanced placement, or both on the basis of AP Exam scores. By entering college with AP credits, students will have the time to move into upper level courses, pursue a double-major, or study abroad. Multiple research studies have shown that AP students who earn credit and advanced placement for the corresponding introductory college course:

- Perform well in subsequent courses within the same discipline
- Take more, not fewer, courses in the discipline for which they've received AP credit
- Tend to earn higher GPAs than non-AP students.
- Are more likely to graduate from college in four or five years

Talk to an AP teacher, a counselor, or the AP Coordinator about the course you want to take. It is crucial that the student and parent discuss the course’s workload, prerequisite courses, and any additional preparation students might need. AP courses require planning and preparation by the student through the appropriate course selection and counseling services. Students planning to take AP courses in the future are strongly encouraged to enroll in honors and Pre-AP courses for prerequisite coursework.

AP Courses Offered by the Bethlehem Area School District:

| English Language & Composition | Biology |
| English Literature & Composition | Chemistry |
| US History | Environmental Science |
| World History | Physics B |
| Comparative Government | Physics C- Electricity & Magnetism |
| Macroeconomics | Physics C- Mechanics |
| US Government & Politics | French |
| Psychology | German |
| Calculus AB | Spanish |
| Calculus BC | Ecology |
| Statistics | Geology |
SAMPLE COURSE SEQUENCE

Freedom High School operates on a block schedule.

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Credit</th>
<th>Grade 11</th>
<th>Credit</th>
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<td>1.0</td>
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<tr>
<td>Honors or Biology</td>
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<td>Global Studies</td>
<td>1.0</td>
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<tr>
<td>World Language</td>
<td>1.0</td>
<td>AP or Calculus, Statistics; Honors or</td>
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<tr>
<td>Technology Concepts</td>
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<td>Pre-Calculus, Algebra 3/Trigonometry</td>
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<td>Health 9 and Gym 9/10</td>
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<td>Honors or Physics or AP Science</td>
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<tr>
<td>Honors or English 10</td>
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<td>AP Literature and Composition</td>
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<td>AP US History, Honors or</td>
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<td>or English 12</td>
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<td>U.S. History 3</td>
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<td>AP Macro-Economics, or</td>
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<tr>
<td>Honors or Pre-Calculus,</td>
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<tr>
<td>Algebra 2, or Geometry</td>
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<td>Economics</td>
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<td>Honors or Chemistry</td>
<td>1.0</td>
<td>AP or Calculus, Statistics, or</td>
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<tr>
<td>World Language</td>
<td>1.0</td>
<td>Consumer Math</td>
<td>1.0</td>
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<tr>
<td>Health 10 and Gym 9/10</td>
<td>1.0</td>
<td>AP Science or Science Elective</td>
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<tr>
<td>Electives</td>
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<td>Physical Education 11/12</td>
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<td>Total Credits</td>
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<table>
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<th>Credit</th>
<th>Grade 12</th>
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<td>AP Language and Composition,</td>
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<tr>
<td>Honors, or English 11</td>
<td>1.0</td>
<td>or English 12</td>
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<td>AP World History, Honors, or</td>
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<td>Global Studies</td>
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<td>AP US Government, or Honors or Government/</td>
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<tr>
<td>AP or Calculus, Statistics;</td>
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<td>Economics</td>
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<td>Pre-Calculus, Algebra 3/Trig</td>
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<td>Honors or Physics or AP Science</td>
<td>1.0</td>
<td>Consumer Math</td>
<td>1.0</td>
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<tr>
<td>World Language</td>
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<td>AP Science or Science Elective</td>
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<td>0.5</td>
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GRADING

All courses are graded with the traditional grading system (A, B, C, F). Honors courses receive weighted average grade point value. The following grading equivalents will be utilized to determine the marking period grade for secondary students:

<table>
<thead>
<tr>
<th>Report Card Grade</th>
<th>Grade Points</th>
<th>Honors/AP Grade Points</th>
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<td>2.7</td>
</tr>
<tr>
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Students require a 3.2000 minimum G.P.A. in a quarter to be named for honor roll. Quarterly G.P.A. reflect computation of grades in the quarter only. This average is used for honor roll. An “N” in citizenship or an “F” in any course eliminates a student from consideration for honor roll.

Final cumulative G.P.A. shown on the report card includes all final grades from the beginning of Grade 9 to current final grades.
PROCEDURE FOR DROPPING COURSES

Students carefully select electives with the help of their parents and counselors. Placement in all core subjects is based on a joint decision by parents, teachers, and students with the purpose of increasing student achievement and offering the most rigorous high school program.

The following guidelines exist for all other schedule changes requested after August 1st:

1. A schedule change request form must be completed by the student and parent. Forms are available in the Counseling Office or from the classroom teacher.
2. Schedule changes will be considered for valid educational reasons only. Schedule changes will not be made to accommodate requests for lateral moves within the same subject area or teacher preference.
3. The counselor and assigned teacher will review schedule change requests.
4. Quarter courses (half-semester courses) will not be dropped after the first 5 days of class.
5. Full-semester courses will not be dropped after the first 15 days of class.
6. All students must maintain a full schedule for the entire year.
7. Level changes will not be considered unless the student has a 75% or lower in the course.

Withdrawals from a course will not become part of the student record if the course is dropped within the first 15 days of a semester class and within the first 5 days of a quarter course (half-semester course). A “W” (Withdraw) will be recorded after those days but prior to the end of the first quarter. Either a “WP” (Withdraw Passing) or “WF” (Withdraw Failing) will be recorded if the course is dropped after the first marking period, indicating the student’s progress at the time of withdrawal.

A course change must be based upon academic considerations, and be facilitated by a conference/plan developed by the student, parent, teacher and counselor/grade level administrator to support student success. This plan will require tutoring, completion of all required work to date, and a sincere demonstration of effort and ability by the student prior to dropping a course or level of course for all classes in English, social studies, math, science, and world language.
SPECIAL PROGRAMS

COMMUNITY SERVICE

In order to increase awareness of the needs of the community around us and to ensure that each individual contributes in some way to the success of our society, students must complete sixty (60) hours of community service during their high school experience. The hours may be earned through service at authorized agencies or by completing approved independent projects. The authorized agency, parent/guardian, guidance counselor, and community service coordinator must approve the assignment before the student may begin any hours of service. Booklets containing procedures and more than one hundred (100) approved agencies can be accessed online at http://www.bethsd.org/cs/. Additional copies of this booklet are available in the high school guidance office and library. Students may earn up to thirty (30) hours of community service the summer before beginning their freshman year.

Students earn 0.5 credit for completing the required 60 hours. Students who complete an additional 60 hours of community service may receive an additional 0.5 credit. Students who complete 135 or more hours of community service will receive silver cords to wear at graduation.

Note: Community service is to be completed outside the regular school day

ENROLLMENT IN COLLEGE COURSES

Freedom High School students have the opportunity to complete course work at a post-secondary institution during their high school careers.

The following guidelines apply to students taking college/university courses:

1. The course is pre-approved by the student's Guidance Counselor and Principal. A college course is not intended to replace a required high school course.
2. The college course will satisfy a HS elective credit, although under special circumstances pre-approved specifically by the Principal and Assistant Superintendent, the college course may replace a required HS course.
3. The student assumes the cost/payment for the course. The student should furnish a college transcript or grade report to his/her counselor shortly after completion of the college course.
4. The grade and credit is reported on the high school transcript. Any grades of “D” will be reported as a “P” on the student's transcript.
5. A 3.0 credit college course will count as 1.0 high school credit. The grade is inputted on the transcript as a “998 Course” with the college name and the grade the student earned.
6. The college course grade will NOT count for GPA or Honor Roll calculations.

HONORS SCHOLARS PROGRAM

Our local colleges, Lehigh University, Moravian College, DeSales University, and Lafayette College, offer scholarship programs to qualifying seniors each year. This opportunity is by application and successful candidacy offered by the college. This program allows students to earn college credit while attending high school.
SPECIAL EDUCATION SERVICES AND PROGRAMS

Under Pennsylvania and federal laws, a student who meets the eligibility requirements for special education has the right to participate in the general education curriculum in the regular education classroom in the **Least Restrictive Environment (LRE)**. The program of support and services is described in the student’s **Individualized Education Program (IEP)**. Providing a **Free and Appropriate Public Education (FAPE)** for a student with a disability begins with the consideration of services in the LRE. The organization and delivery of special education services are planned in a flexible and responsive manner to accommodate the student’s special needs of eligibility without removing the student, unnecessarily, from the general education curriculum in the regular education classroom. Supplementary aids and services received by the student are dependent on his/her individual needs. The Bethlehem Area School District promotes inclusive opportunities for all students.

The students shall participate in the general education curriculum in the regular education classroom to the maximum extent appropriate, which may be accommodated, adapted, or modified. The district does provide a full continuum of services and programs. Eligible students may be provided instruction through supplemental curricula. Service/program options may be considered when the program of study needs to be intensified in order to meet the student’s overall needs.

**Transition** planning begins at age 14. The **IEP** team will decide what kinds of courses will prepare the student for life after high school through the **transition** planning process. The **IEP** team, including the student and parent, will plan **transition** activities to prepare the student for post-high school experiences. Discussions during **transition** planning include: college or post-high school planning; employment exploration; and independent living including recreation or leisure activities. The **transition** planning includes consideration of the types of courses the student will take during high school. Early planning encourages a coordinated effort between the present and future goals of the student. Students are encouraged to prepare for a post-high school education, whether it is college or a trade/technical school. Students who are considering college are encouraged to take the PSAT and SAT assessments, with or without accommodations. Some students may elect a vocational curriculum and attend the Bethlehem Area Vocational Technical School (BAVTS), which offers a range of programs.

All students receiving special education services are guaranteed the right for the opportunity to earn a high school diploma. To be awarded a diploma, the eligible student must successfully complete all required courses and credits, as well as meet performance standards on assessments. An **IEP** team may determine that an eligible student will graduate through the **IEP** process.

**CO TAUGHT COURSES**

Co-teaching is a research-based strategy for helping students who are in need of academic intervention and designed to assist students in meeting the increased literacy demands required for career and college readiness. Co-taught classes have two teachers who work with the class: a content area certified teacher, for example in English or mathematics, and a special-education-certified teacher.

The purpose of BASD High School Co-Teaching is to provide quality instruction to academically at-risk students (those not currently showing proficiency) in a high expectations-high supports environment. The program is designed to deliver **standards-based instruction aligned to the PA graduation requirements**, with high levels of support in place to meet those requirements. High levels of support include adaptations such as a concept-oriented focus, alternative methods of instruction and assessment, and more intensive student/teacher contact time.

With the **BASD Roadmap to Educational Excellence** as a guide, students will be supported in their Core Learning while developing personal skills in an engaging setting. Classroom roles and responsibilities are defined; targeted, individualized support is provided to students; curriculum is delivered on grade level with appropriate adaptations; and modifications and the belief that effort produces achievement is pervasive. As aforementioned, there are two teachers in the co-taught classes. Each teacher has a different but equally important role, and they work together with each other and with the students to promote academic growth and success. These teachers have equal responsibility for teaching, and students are held to high expectations and are given high levels of support from both teachers.

Our co-teaching teams have the full support of our administration. Administration will support students by ensuring that there is full access to on-level curriculum and extensive resources to support their needs.
### Core Courses

- **NCAA Division I requires 16 core courses. NCAA Division II currently requires 14 core courses.** Division II will require 16 core courses for students enrolling on or after August 1, 2013. See the charts below.
- **NCAA Division I will require 10 core courses to be completed prior to the seventh semester** (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become “locked in” at the seventh semester and cannot be retaken for grade improvement.
  - *Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement, but would not be able to compete.*

### Test Scores

- **Division I** uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- **Division II** requires a minimum SAT score of 820 or an ACT sum score of 68. The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a sum of the following four sections: English, mathematics, reading and science.
- When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.

### Grade-Point Average

- Be sure to look at your high school's List of NCAA Courses on the NCAA Eligibility Center’s website (www.eligibilitycenter.org). Only courses that appear on your school’s List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- **Division I** students enrolling full time before August 1, 2016, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- **Division I** GPA required to receive athletics aid and practice on or after August 1, 2016, is 2.000 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **Division I** GPA required to be eligible for competition on or after August 1, 2016, is 2.300 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **The Division II** core GPA requirement is a minimum of 2.000.
- Remember, the NCAA GPA is calculated using NCAA core courses only.

### Division I Core Courses

- **16 Core Courses**
  1. years of English.
  2. years of mathematics (Algebra I or higher).
  3. years of natural/physical science (1 year of lab if offered by high school).
  4. year of additional English, mathematics or natural/physical science.
  5. years of social science.
  6. years of additional courses (from any area above, foreign language or comparative religion/philosophy).

### Division II Core Courses

- **14 Core Courses**
  1. years of English.
  2. years of mathematics (Algebra I or higher).
  3. years of natural/physical science (1 year of lab if offered by high school).
  4. years of additional English, mathematics or natural/physical science.
  5. years of social science.
  6. years of additional courses (from any area above, foreign language or comparative religion/philosophy).

### Division II Core Courses (2013 and After)

- **16 Core Courses**
  1. years of English.
  2. years of mathematics (Algebra I or higher).
  3. years of natural/physical science (1 year of lab if offered by high school).
  4. years of additional English, mathematics or natural/physical science.
  5. years of social science.
  6. years of additional courses (from any area above, foreign language or comparative religion/philosophy).
### Sliding Scale A
**Use for Division I prior to August 1, 2016**

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For more information, visit the NCAA Eligibility Center website at [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

### Sliding Scale B
**Use for Division I beginning August 1, 2016**

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Page No. 2
The following Freedom High School courses are accepted by the NCAA as of November 19, 2012:

### English
- ENGLISH 9
- HONORS ENGLISH 9
- ENGLISH 10
- HONORS ENGLISH 10
- ENGLISH 11
- HONORS ENGLISH 11
- AP LANGUAGE AND COMPOSITION
- ENGLISH 12
- AP LITERATURE AND COMPOSITION

### Social Science
- US HISTORY 2
- HONORS US HISTORY 2
- US HISTORY 3
- HONORS US HISTORY 3
- AP US HISTORY
- GLOBAL STUDIES
- HONORS GLOBAL STUDIES
- AMER GOVT/ECON
- HONORS AMER GOVT/ECON
- AP GOVERNMENT AND POLITICS
- AP MACROECONOMICS
- AP PSYCHOLOGY
- AP WORLD HISTORY

### Mathematics
- ALGEBRA 1
- HONORS ALGEBRA 1
- GEOMETRY
- HONORS GEOMETRY
- ALGEBRA 2
- HONORS ALGEBRA 2
- ALGEBRA 3/TRIGONOMETRY
- PRE-CALCULUS
- HONORS PRE-CALCULUS
- CALCULUS
- HONORS CALCULUS
- AP CALCULUS
- STATISTICS
- AP STATISTICS

### Natural/Physical Science
- BIOLOGY
- HONORS BIOLOGY
- CONCEPTUAL CHEMISTRY
- CHEMISTRY
- HONORS CHEMISTRY
- PHYSICS
- HONORS PHYSICS
- AP PHYSICS B
- AP PHYSICS C - MECHANICS
- AP BIOLOGY
- AP CHEMISTRY
- AP ENVIRONMENTAL SCIENCE
- HUMAN ANATOMY & PHYSIOLOGY
- HONORS HUMAN ANATOMY & PHYSIOLOGY
- ASTRONOMY
- BIOTECHNOLOGY
- EARTH/SPACE SCIENCE
- ENVIRONMENTAL SCIENCE
- FORENSIC SCIENCE
- GENETICS
- PHYSICAL GEOLOGY
- ZOOLOGY

### Additional Core Courses
- FRENCH 1
- FRENCH 2
- FRENCH 3
- FRENCH 4
- AP FRENCH
- GERMAN 1
- GERMAN 2
- GERMAN 3
- GERMAN 4
- AP GERMAN
- SPANISH 1
- SPANISH 2
- SPANISH 3
- SPANISH 4
- AP SPANISH
- HERITAGE SPANISH
- ADVANCED HERITAGE SPANISH
- LIT - HERITAGE SPANISH

**IMPORTANT NOTE:**
Computer science courses cannot be used to fulfill core course requirements for student-athletes first entering a collegiate institution on or after August 1, 2005.

All information from the NCAA Eligibility Center website. Please consult the eligibility website and your counselor for more information. NCAA Freshman-Eligibility Standards Quick Reference Sheet from:

The English Department is dedicated to providing students with a comprehensive education in literacy. Courses are designed to help students become astute readers and effective communicators of the written and spoken word. Students read the classics as well as contemporary texts, write analytically and persuasively, learn the standards of written English, and develop critical thinking skills. In addition, the English electives strive to develop students’ creativity and imagination allowing students to discover their own voices.

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<th>Grade 9</th>
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<td>Honors English 9</td>
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**HONORS ENGLISH 9 (100)**

1.0 Credit  
Prerequisites: See Honors Program Requirements page 4

Honors English 9 develops and sharpens the communication skills of writing, speaking, and listening, with special emphasis on the writing process, critical thinking, research skills, and independent scholarship. Particular focus is placed on the development of the essay. The literature study concentrates on the analysis of the following genres: short story, novel, poetry, and drama. Units are arranged thematically so that writing and reading skills are continually built upon and reinforced throughout the course.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. This course is strongly recommended for those students who may consider Advanced Placement courses.

**ENGLISH 9 (101)**

1.0 Credit  

English 9 develops the communication skills of reading, writing, speaking, and listening, with special emphasis on the persuasive essay and literary analysis, critical reading and thinking, research skills, and study skills. Students will analyze literary works from the following genres: short story, novel, poetry, and drama. Units are arranged thematically so that writing and reading skills are continually built upon and reinforced throughout the course.

**HONORS ENGLISH 10 (110)**

1.0 Credit  
Prerequisites: See Honors Program Requirements page 4

Honors English 10 continues to develop independent study skills, with the introduction of critical and analytical writing proficiency. Extensive reading, discussion, honing of grammar skills, and vocabulary enrichment are integral parts of the course. Particular focus is placed on the refinement of essay-writing skills (persuasive and literary analysis), incorporating the rudiments of research-paper writing as well.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. This course is strongly recommended for those students who may consider Advanced Placement courses.

**ENGLISH 10 (111)**

1.0 Credit  

English 10 builds upon the communication skills of reading, writing, speaking, and listening developed in 9th grade. Special emphasis is placed on the persuasive essay and literary analysis, critical reading and thinking, research skills, and study skills. Students will analyze literary works from the following genres: short story, novel, poetry, and drama. Writing and reading skills are continually built upon and reinforced throughout the semester.
AP LANGUAGE AND COMPOSITION (116A)  
1.0 Credit
Prerequisites: Completion of AP application/acceptance into the AP program

AP English is a challenging course designed as a substitute for college freshman English. Students who enroll must be astute and sophisticated readers and writers who genuinely love the beauties and complexities of the written word in English. This course will be open only to those students who are Advanced or Proficient on the PSSA and to the most mature students willing to commit to a rigorous course of study, which will prepare them to be successful on their AP English – Language and Composition test. Through the critical reading and analysis of American literature (with a heavy emphasis on nonfiction), students will become skilled readers of a variety of prose and skilled writers of analytical essays. Although literature is used as a vehicle, the emphasis of this course is on the development of a student’s writing style in order to master the writing of essays with different purposes and audiences. Emphasis will also be placed on the conventions of language necessary to become expert writers.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. Students are strongly encouraged to take the AP College Board exam in May.

HONORS ENGLISH 11 (120)  
1.0 Credit
Prerequisites: See Honors Program Requirements page 4
Honors English 11 is a challenging course designed for an in-depth examination of American literature. Students who enroll must be avid, astute, and sophisticated readers and writers who genuinely love the beauties and complexities of the written and spoken word. Major emphasis is placed on the development of critical thinking and analytical writing skills through intensive class discussions and rigorous writing requirements, focusing on the response to literature and the research paper. The course prepares students for either honors or AP in twelfth grade.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. This course is strongly recommended for those students who may consider Advanced Placement courses.

ENGLISH 11 (121)  
1.0 Credit

English 11 concentrates on the continuation of developing the reading, writing, speaking, and listening skills students need to become successful in college as well as the workplace. The course also encourages careful critical thinking. Students will engage in the analysis of text and in the writing of the academic thesis essay, research essay, literary analysis essay, and the on demand essay (SAT and PSSA readiness). All of these English skills will be reinforced and refined through an exploration of a variety of literary genres and American themes.

AP LITERATURE AND COMPOSITION (130A)  
1.0 Credit
Prerequisites: Completion of AP application/acceptance into the AP program

AP English is a challenging course designed as a substitute for college freshman English. Students who enroll must be astute and sophisticated readers and writers who genuinely love the beauties and complexities of the written word in English and must be Advanced or Proficient on the PSSA. This course will be open only to the most mature students willing to commit to a rigorous course of study, which will prepare them to be successful on their AP English – Literature and Composition test. The classics of the British cannon, from Spenser through Shakespeare, Milton, Swift, to Joyce, are closely read, analyzed in depth, and discussed. Independent reading includes classics of American, continental, and world literature. Writing is heavily emphasized, focusing on the response to literature and research paper.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. Students are strongly encouraged to take the AP College Board exam in May.
ENGLISH 12 (131)
1.0 Credit

This literature survey course concentrates on the refinement of a student’s critical reading, writing, speaking, and listening skills. Course material has been selected with an eye toward the requirements of college freshman English, and there is an emphasis on perfecting analytical writing skills, particularly the response to literature and the research paper. The vocabulary strand stresses SAT vocabulary. Evaluation is based on written and spoken projects that stress a student’s ability to be self-motivated and to work independently.

ENGLISH 12 NON-FICTION (137)
1.0 Credit

This 12th-grade English course is designed for those students planning to enter the fields of business or STEM. Students will read and analyze text for key ideas and details, craft and structure, and integration of knowledge and ideas with a heavy emphasis on modern non-fiction text. Students may read texts by authors such as Thomas Friedman, Malcolm Gladwell, or Jim Collins. In addition, students will refine their writing skills by producing expository, argumentative, and research-based essays. This course satisfies the 12th-grade English requirement.
ENGLISH ELECTIVES

ELECTIVE COURSES: English electives are designed to supplement the required English courses 9-12. They do not satisfy English requirements for graduation. Electives are designed for students who wish to expand their interest in the creative and literary arts either for professional careers or for leisure activities.

CRITICAL LITERACY 1 (104)
1.0 Credit

Critical Literacy 1 is a one-semester course that prepares students to successfully meet the academic demands of high school curricula. This course provides students with multiple opportunities to practice and master reading, writing, and study skills that are applied across content areas. Specifically, the units of study are designed to support student achievement and serve as a bridge to success in the four core content courses (English, math, social studies, and science). Special emphasis is placed on the development of critical reading strategies to aid in comprehension and analysis of increasingly challenging texts. Resources will include support programs such as Read 180 and Study Island. Students will be scheduled into this course based on need and teacher recommendation. Students in this course will also be scheduled into English 9 or English 10.

CRITICAL LITERACY 2 (105)
1.0 Credit

Critical Literacy 2 is a one-semester course that continues to prepare students to successfully meet the academic demands of high school curricula. This course provides students with multiple opportunities to practice and master reading, writing, speaking, and study skills. Special emphasis is placed on the development of critical reading strategies to aid in comprehension and analysis of increasingly challenging texts. Students in this course will also be scheduled into English 9 or English 10.

KEYSTONE ENGLISH (140)
0.5 Credit

This course emphasizes reading comprehension and analysis of fiction and non-fiction across all content areas. Students will practice the skills needed to make sense of complex text. Test-taking strategies necessary for success on the Keystone modules will be emphasized and practiced.

SAT VERBAL PREPARATION (141)
0.5 Credit

The purpose of this course is to help college-bound students read and study more effectively. This course focuses on verbal and on-demand writing SAT preparation. Reading skills, writing skills, study skills, and vocabulary development will be emphasized.

CREATIVE WRITING 1 (142A)
0.5 Credit

Creative Writing is designed to develop and encourage the creative and imaginative aspects of writing. The mechanics of formal writing, though not ignored, are subsumed by an emphasis on both intensive daily writing and a lengthy series of independent creative projects. These include a short story, a creative essay, a play, and various forms of poetry. A final project is mandated in lieu of a final examination. This course is for the student who enjoys writing, as well as discussing and evaluating his/her own work and that of others. (Note that daily oral reading of one’s own work is an essential component of the course.)

CREATIVE WRITING 2 (142B)
0.5 Credit

Creative Writing 2 continues to develop and encourage the creative and imaginative aspects of writing. Emphasis here is on student-generated writing projects, using model stories, poems, essays, and plays chosen by the students themselves. Drafts and final versions of writings will be critiqued by the class as a whole. The final goal is to publish student work both in *Pen and Ink* and in magazines listed in the annual *Writer’s Market*. 
PUBLIC SPEAKING 1 (143A) 0.5 Credit

Public Speaking helps students prepare for various speaking situations. Students are guided toward the creative development of speaking forms: process, persuasive, and informational. Additional skills emphasized include planning, preparing, and presenting a speech; the incorporation of technology; and critical evaluation.

PUBLIC SPEAKING 2 (143B) 0.5 Credit
Prerequisites: Student must have taken Public Speaking 1.

Public Speaking 2 gives the students the opportunity to use and improve the speaking skills learned in Public Speaking 1. Students will continue to write and present speeches within an emphasis on persuasive, manuscript, special-interest, and large-audience speeches. The course will also address the special speaking skills needed to perform a PowerPoint presentation and/or a videotaped speech.

DRAMATICS – INTRODUCTION TO ACTING (144) 1.0 Credit

Do you like the show, “Whose Line Is It, Anyway?” Well, then Introduction to Acting is the class for you! Introduction to Acting is a fun beginning course designed to introduce students to theatre arts. This course emphasizes the techniques and skills needed to perform on stage. Improvisation, fundamentals of acting, overcoming stage fright, monologue and scene performance, and play analysis are some of the units studied. The final project includes writing a fairy tale play and performing it for local elementary and preschool students. Any students interested in joining the FHS Theatre Company or pursuing a career in communications, performance, broadcasting, public relations, or marketing are encouraged to take this course.

ADVANCED DRAMA (145) 1.0 Credit
Prerequisite: Introduction to Acting

This class serves as the perfect complement to Introduction to Acting. We will be visiting everything from Shakespeare to Broadway musicals, and plenty of time will be dedicated to improvisation and performance. Our final project includes designing and managing your own theatre workshop for several local preschool students. We will also be writing, directing, and performing an interactive play for the young students of S.P.A.R.K. This student-directed class will prove to be a fun learning experience. Since this course content changes yearly, this course may be taken more than once for credit.

JOURNALISM (146) 1.0 Credit

This course is designed for students interested in learning the basics of journalism as well as for advanced students who want to expand their skills into the areas of arts and entertainment writing, sports reporting, and editorial writing. Students will also learn how to research and write editorials as well as the fundamentals of photojournalism. This course is differentiated to meet the needs of all level of journalists.

POETRY 1 (157) 0.5 Credit

This course is designed for students who love the music of language, the mystery of metaphors, and the beauty of poems. The course explores a wide variety of modern poets, their work, and an array of traditional poetic forms. It requires the daily writing of poetry and a daily poetry workshop/critique. Students will create an anthology of poems by other authors, along with commentaries on these, and also will create their own original book of poems.
POETRY 2 (157B) 0.5 Credit
This course is designed for students who love the music of language, the mystery of metaphors, and the beauty of poems. The course deepens the exploration of a wide variety of both ancient and more contemporary poets, their work, and a surprisingly diverse set of unusual modern forms. It requires the daily writing of poetry and a daily poetry workshop/critique. Students will create an anthology of poems by other authors, along with commentaries on these, and also will create their own original book of poems.

BROADCAST JOURNALISM (191) 0.5 Credit
Prerequisite: This course is to be taken in conjunction with TV BROADCASTING (See Business)
Students in broadcast journalism learn to report, produce, and deliver the news for radio, TV, and other broadcast media.
SOCIAL STUDIES DEPARTMENT

The high school Social Studies program is designed to provide organized and directed student investigations in the areas of history, civics, geography, and economics. Courses are intended to prepare students for life in a competitive global community by focusing on core learning yet offering many accelerated honors and Advanced Placement courses to stretch the 21st Century learner.

Social Studies Recommended Course Sequence

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<th>Grade 9</th>
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<th>Grade 11</th>
<th>Grade 12</th>
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<tr>
<td>Honors US History 2 or US History 2</td>
<td>AP US History or Honors US History 3 or US History 3</td>
<td>AP World History or AP Comparative Government or Honors Global Studies or Global Studies</td>
<td>AP US Government &amp; Politics or AP Macroeconomics or Honors American Government &amp; Economics or American Government &amp; Economics</td>
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HONORS US HISTORY 2 (202H)
1.0 Credit

Prerequisites: See Honors Program Requirements page 4

This is a course for academically talented and gifted students, which also fulfills the ninth grade social studies requirement. The course is designed for the serious student interested in more intensive study and preparation for advanced college placement in American history. Course content is a survey of the United States history from Jeffersonian Democracy to the beginning of the Progressive Movement taught chronologically. The following activities are emphasized in the program: additional readings, research and document analysis, essay writing and classroom discussions.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. This course is strongly recommended for those students who may consider Advanced Placement courses.

US HISTORY 2 (202)
1.0 Credit

This course fulfills the ninth grade social studies requirements. It is a survey of United States history from Jeffersonian Democracy to the end of the 19th century taught chronologically. There is emphasis on historical content relating to the themes of economic, political and social development in domestic affairs as well as an examination of the nation’s foreign policy. Current problems and social studies skills will also be emphasized.

AP US HISTORY (219A)
1.0 Credit

Prerequisites: Completion of AP application/acceptance into the AP Program

AP U.S History is a challenging course that is meant to be the equivalent of a freshman college course and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open only to the most mature academic students willing to commit to a rigorous course of study, which will prepare them to be successful in their AP U.S. History test. The AP course is similar to the tenth grade Honors American history course. This AP course will review the ninth grade curriculum and move into 20th century America to the present. Emphasis will be placed on critical and evaluative thinking skills, essay writing, interpretation of original documents, and historiography. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study are necessary to succeed.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. Students are strongly encouraged to take the AP College Board exam in May.
HONORS US HISTORY 3 (224H)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4

This course, designed for academically talented and gifted students, fulfills the current tenth grade social studies requirement. The course is designed for the serious student interested in more intensive study and preparation for advanced college placement in American history. Course content includes a survey of the chronological events in American history from the 1920s to the present. Activities emphasize extensive reading, research, document analysis, essay writing and class discussion.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. This course is strongly recommended for those students who may consider Advanced Placement courses.

US HISTORY 3 (224)
1.0 Credit

This course fulfills the current tenth grade social studies requirement. Course content includes a survey of the chronological events in American history from the 1920s to the present. There is emphasis on historical content relating to the themes of economic, political and social development in domestic affairs as well as an examination of the nation’s foreign policy and its involvement in the 20th century conflicts. Reading, document analysis and social studies skills will also be emphasized.

AP COMPARATIVE GOVERNMENT AND POLITICS (233A)
1.0 Credit
Prerequisite: Completion of AP application/acceptance into the AP program

The AP course in Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Six countries form the core of the AP Comparative Government and Politics course. China, Great Britain, Mexico, Nigeria, and Russia are all regularly covered in college-level introductory comparative politics courses.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. Students are strongly encouraged to take the AP College Board exam in May.

AP WORLD HISTORY (223A)
1.0 Credit
Prerequisite: Completion of AP application/acceptance into the AP program

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. Students are strongly encouraged to take the AP College Board exam in May.
HONORS GLOBAL STUDIES (226H)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4

This course, designed for academically talented and gifted students, fulfills the current eleventh grade social studies requirement. The course is designed for the serious student interested in more intensive study and preparation for advanced college placement in American Government or Economics. It will examine how continuity and change has impacted the world today. The course will specifically focus on how the interactions of history, politics, economics, belief systems, and geography have helped to shape the world's history. Students will also examine the role groups and individuals played in the social, political, cultural, and economic development of our world's history.

Note: The grade for this course is weighted. There is a summer reading requirement for this course. This course is strongly recommended for those students who may consider Advanced Placement courses.

GLOBAL STUDIES (226)
1.0 Credit

This required eleventh grade social studies course is designed for the student who is interested in preparing for entrance to college or some additional academic study beyond high school. It will examine how continuity and change has impacted the world today. The course will specifically focus on how the interactions of history, politics, economics, belief systems, and geography have helped to shape the world's history. Students will also examine the role groups and individuals played in the social, political, cultural, and economic development of our world's history.

AP US GOVERNMENT AND POLITICS (230A)
1.0 Credit
Prerequisite: Completion of AP application/acceptance into the AP program

This course fulfills the twelfth grade social studies requirements. The AP US Government and Politics course covers material that is usually taught in one-semester introductory course in the US Government and Politics at the college level. The scope of the program will emphasize the organization and function of the national government. The program will cover such topics as the institutions and policy processes of the Federal government, the parties and interest groups, political beliefs and behaviors, and the content and history of the constitution. Emphasis will be placed on the critical and evaluative thinking skills, essay writing, extended readings, interpretation of documents, and class discussion.

Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

AP MACROECONOMICS (231A)
1.0 Credit
Prerequisite: Completion of AP application/acceptance into AP Program

This course fulfills the twelfth grade social studies requirements. The Advanced Placement course in economics gives high-ability students the opportunity to earn college credit in economics while still in high school. More importantly, the content of an AP Economics course helps students develop critical thinking skills through the understanding, application and analysis of fundamental economic concepts. Through AP Economics, students learn to apply quantitative and mathematical skills to the discipline of economics, test economic propositions empirically, improve their decision-making skills and apply economic logic to a wide variety of real world and hypothetical situations.

The AP Program offers two separate examinations in economics: one in Macroeconomics and one in Microeconomics. Each examination is intended for qualified students who wish to complete studies in secondary-school equivalent to a one-semester college introductory course.

Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.
HONORS AMERICAN GOVERNMENT/ECONOMICS (230H)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4

This course is a comprehensive and government education program dedicated to developing economically and politically literate students. Emphasis is placed upon the application of knowledge to various themes; e.g. Law and Order, Economic Stability, etc., which will be developed throughout the course. The course involves extensive readings, essay writing, analysis of problems and classroom discussion.

Note: The grade for this course is weighted.

AMERICAN GOVERNMENT/ECONOMICS (231)
1.0 Credit

This course is a comprehensive economic and government education program dedicated to developing economically and politically literate students. Emphasis is placed upon the application of knowledge to various themes; e.g. Law and Order, Economic Stability, etc., which will be developed throughout the program. Academic American Government/Economics satisfies the twelfth grade government requirement.
SOCIAL STUDIES ELECTIVES

BATTLES AND REVOLUTIONS THAT CHANGED HISTORY (247)
1.0 Credit

What if Hitler’s Nazi Germany had defeated the Soviet Union in 1941? Or the Spanish Armada conquered England in 1588? Imagine the impact on history had the Persians defeated the Greeks at Salamis in 482 BC. This course examines the most pivotal battles & revolutions in history, how they impacted the course of future events, and how the world would be a drastically altered place had the outcome been different.

CURRENT EVENTS AND ISSUES (238)
1.0 Credit

History courses necessarily focus on events of the past, perhaps briefly touching on present-day events. Current Events and Issues will provide a forum for students to explore, discuss, and debate present-day events as they occur—learning tomorrow’s “history” today. A wide variety of media sources will be utilized, and historical connections to contemporary times will be made.

INTRODUCTION TO CRIMINAL JUSTICE SYSTEM (239)
1.0 Credit

An elective, this course is a comprehensive overview of our criminal justice system. The main objectives of the course are to focus on: law enforcement, the courts and corrections. The emphasis will be placed on interrelationships between the many facets of the system and the evaluation of the varied career potentials. The course is open to juniors and seniors who are seeking a new academic challenge.

HISTORY THROUGH FILM (245)
1.0 Credit

One of the major forms of communication in the past one hundred years has been the form of film. Films have proven a popular venue for conveying the social, political, religious, intellectual, technological and economic changes of a given time period. This course will examine the impact of films on the culture of the 20th and 21st Century. Additionally, the course will integrate literature and historical events to allow students to view significant historical films and evaluate their accuracy, intention and effects on society.

MEDIA AND ITS IMPACT ON HISTORY (248)
1.0 Credit

Students will enjoy a multimedia look at segments of history and society through the news reporting and film making of the time. They will be asked to research and present actual and perceived notions of historical events and people. The emphasis will be on the role of media and its influence on the unfolding events. Possible areas to be covered: The myth of the Cowboy (the Wild West), the myth of the Gangster (the Roaring 20’s and beyond), War reporting and propaganda, the Spy Menace (the Cold War), and Prejudice in the United States.

PREJUDICE AND GENOCIDE (241)
1.0 Credit

Prejudice and hate are, unfortunately, part of history and part of our world today. Genocide, the deliberate attempt to destroy an entire religious or ethnic group, is the extreme manifestation of hate and prejudice. This elective will focus on the most well known genocide, the Holocaust, and lesser-known genocides such as Armenia and Cambodia. Hate and prejudice in today’s world will also be examined. Hate groups, terrorism and racism will be discussed.
AP PSYCHOLOGY (234A)  
1.0 Credit  
Prerequisite: Completion of AP application/acceptance into the AP program  

The purpose of the AP course in Psychology is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice.  

Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.  

PSYCHOLOGY (234)  
0.5 Credit  
An elective, this course surveys the science of psychology; addresses research methods, biological bases of behavior, sensation and perception, states of consciousness, learning, memory, motivation and emotion, language, lifespan development, intelligence, stress and health, social behavior, personality, and abnormal behavior and treatment, and applications of psychology in the world today.  

Note: Students may choose to combine Psychology and Sociology to create a 1.0 credit. Combining the two classes offers students a viewpoint of social psychology as the psychology of the individual behaving in and with reference to social situations.  

SOCIOLOGY (236)  
0.5 Credit  
An elective, this course examines Sociology both as a practicing profession and scientific discipline, with an introduction to research methods, concepts, theories, and findings about the social world. This course provides a broad overview of the field of sociology stressing terms, concepts, and major contemporary theoretical perspectives in the discipline and an emphasis on American society, social change, culture, social structure, and on the sociological imagination. An exploration of the potential relevance of Sociology to the job market is a part of this course.  

Note: Students may choose to combine Psychology and Sociology to create a 1.0 credit. Combining the two classes offers students a viewpoint of social psychology as the psychology of the individual behaving in and with reference to social situations.  

WORLD GEOGRAPHY (240)  
1.0 Credit  
Today’s world is full of conflict and cooperation. The world’s geography influences and is often the force of that conflict and cooperation. The focus of this course is the study of regions, environments, populations, and cultural characteristics. Spatial concepts of geography will be linked to chronological concepts of history to set a framework for studying human interaction. This course will emphasize how people in various cultures influence and are influenced by their physical and ecological environments. Using texts, maps, globes, graphs, almanacs, pictures, diagrams, and charts, students will consider the relationship between people and places while asking and answering geographic questions.
MATHEMATICS DEPARTMENT

The Mathematics program of studies offers a variety of classes aimed at providing a strong mathematical foundation for life after high school. Teachers present content through direct instruction, inductive lessons, investigations, and technology. Students are challenged at all levels, from core learning to many honors and Advanced Placement courses.

<table>
<thead>
<tr>
<th>Math Recommended Course Sequence</th>
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</thead>
<tbody>
<tr>
<td><strong>Grade 9</strong></td>
</tr>
<tr>
<td>Honors Algebra 2 or Algebra 2</td>
</tr>
<tr>
<td>Honors Geometry or Geometry</td>
</tr>
<tr>
<td>Honors Algebra 1 or Algebra 1</td>
</tr>
</tbody>
</table>

*Students may also choose to take two math courses during their sophomore, junior, or senior year to reach calculus.*

HONORS ALGEBRA I (319)

1.0 Credit

Prerequisites: See Honors Program Requirements page 4

This course contains the standard topics of Algebra I such as variables, formulas, the real number system, linear equations and inequalities, the graphs of relations and functions, probability and data analysis. The course also integrates statistics/probability, direct and inverse variation, and systems of equations and inequalities. These topics will be taught and learned in greater depth since there are more challenging problems and a greater emphasis on problem solving than Algebra I.

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

ALGEBRA I (304)

1.0 Credit

Algebra I is the gateway course to higher mathematics. This course is designed to emphasize the development of concepts, skills and techniques for use with variables, formulas, the real number system, linear equations, inequalities, the graphs of relations and functions, probability, and data analysis.
**ALGEBRA 1A (323)**  
1.0 Credit  
Topics in this course include: exploring and communicating mathematics, using measures and equations, representing data, coordinates and functions, and equations for problem solving. Students will take Algebra 1A in the fall and be scheduled for Algebra 1 in the spring.

**HONORS GEOMETRY (300B)**  
1.0 Credit  
Prerequisites: See Honors Program Requirements page 4  
This is an accelerated course in geometry with an emphasis on deductive reasoning. Topics include angles, parallel and perpendicular lines, congruent and similar triangles, circles, coordinate geometry, transformations, right triangle trigonometry, advanced constructions, polyhedra, applications of area and volumes, using algebra skills, using graphical representations of data, and the introduction of other geometries.  

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

**GEOMETRY (317)**  
1.0 Credit  
Topics include angles, parallel and perpendicular lines, congruent and similar triangles, circles, coordinate geometry, transformations, right triangle trigonometry, advanced constructions, polyhedra, applications of area and volumes, and the introduction of other geometries.

**STANDARDS GEOMETRY (325)**  
1.0 Credit  
This course is designed for 10th and 11th grade students. Topics in this course include: ratio and proportion, right triangle trig and the Pythagorean Theorem, solving algebraic equations and formulas, taking surveys, graphing, parallel lines and angles, and standard deviation.

**HONORS ALGEBRA 2 (313)**  
1.0 Credit  
Prerequisites: Honors Geometry  
See Honors Program Requirements page 4  
This is a highly intensive second year algebra course. The course includes: relations, functions and variations; first and second degree equations and inequalities of one and more than one variable; polynomials and factoring; rational and irrational numbers; systems of equations and inequalities; and exponents, imaginary numbers and logarithms. The conic sections, progressions, permutations and combinations, the binomial expansion and statistical procedures are also included.  

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

**ALGEBRA 2 (333)**  
1.0 Credit  
This is a second year algebra course. The course includes: relations, functions and variations; first and second degree equations and inequalities of one and more than one variable; polynomials and factoring; rational and irrational numbers; systems of equations and inequalities; and exponents, imaginary numbers and logarithms. Permutations and combinations and statistical procedures are also included.

**ALGEBRA 2A (332)**  
1.0 Credit  
This is the first part of a full-year Algebra 2 class. The course will include the following topics: relations, functions, and variations; first and second degree equations and inequalities; polynomials and factoring; rational and irrational numbers; and exponents, imaginary numbers, and logarithms. Permutations and combinations, statistics, and probability are also included. Students will take Algebra 2A in the fall and be scheduled for Algebra 2 in the spring.
HONORS PRECALCULUS (330)
1.0 Credit
Prerequisites: Honors Algebra 2
See Honors Program Requirements page 4

This accelerated course incorporates topics from both trigonometry and advanced algebra with a heavy emphasis on modern technology. Topics include the graphing and algebra of functions polynomial, rational, trigonometric, exponential and logarithmic equations, trigonometry of triangles, trigonometric equations and identities, polar coordinates and complex numbers, conic sections, matrix algebra, sequences and series, probability and limits, and an introduction of calculus.

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

PRECALCULUS (335)
1.0 Credit

Topics include the graphing and algebra of functions polynomial, rational, trigonometric, exponential and logarithmic equations, trigonometry of triangles, trigonometric equations and identities, polar coordinates and complex numbers, conic sections, matrix algebra, sequences and series, probability and limits, and an introduction of calculus.

ALGEBRA 3/TRIGONOMETRY (336)
1.0 Credit

This course is designed to help students acquire a solid foundation in advanced algebra skills and concepts, as well as trigonometry, in order to prepare them for pre calculus, calculus, and challenging college mathematics courses. Algebra and trigonometry will be used to model and solve real-world problems.

HONORS DISCRETE MATH (338)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4

Discrete math is a course that will involve many topics that are not often covered in traditional high school math courses. It will offer students a chance to broaden their math horizons with topics such as graph theory, counting techniques and probability, matrices, topology puzzles and games, recursion, cryptography, optimization, election theory, and proofs. Students will work on a variety of real world concepts and engage in the theory behind them.

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

AP CALCULUS (340T)
1.0 Credit
Prerequisites: Honors PreCalculus

Calculus is the mathematics of change and motion and rests upon the fundamental concept of limit. This college level course contains polynomial, trigonometric, exponential and logarithmic functions; limits and continuity; the derivative; application of the derivative; the integral; applications of the integral; and the fundamentals of analytic geometry. Emphasis is on both algebraic and graphical approaches.

Note: The grade for this course is weighted. Each student is encouraged to bring a graphing calculator to class. Students are strongly encouraged to take the AP College Board exam in May.

AP CALCULUS AB EXTENSION (340AB)
0.5 credit
Prerequisites: AP Calculus

This course is a review of Calculus topics and a formal preparation for the AB Advanced Placement Examination in Calculus.

Note: The grade for this course is weighted. Each student is encouraged to bring a graphing calculator to class. Students are strongly encouraged to take the AP College Board exam in May.
AP CALCULUS BC EXTENSION (340BC)

0.5 credit
Prerequisites: AP Calculus

This course serves a dual purpose: the additional Calculus topics of polar coordinates, vector analysis and series as well as the formal preparation for the BC Advanced Placement Examination in Calculus.

Note: The grade for this course is weighted. Each student is encouraged to bring a graphing calculator to class. Students are strongly encouraged to take the AP College Board exam in May.

CALCULUS (341)

1.0 Credit
Prerequisite: Successful completion of PreCalculus

Calculus is the mathematics of change and motion and rests upon the fundamental concept of limit. This course contains polynomial, exponential and logarithmic functions; limits and continuity; the derivative; application of the derivative; the integral; applications of the integral; and the fundamentals of analytic geometry.

Note: The grade for this course is not weighted.

AP STATISTICS (350)

1.0 Credit
Prerequisites: Honors Algebra 2
See Honors Program Requirements page 4

Topics covered will consist of major concepts and tools that are used in collecting, analyzing, and drawing conclusions from data. Topics will include concepts such as exploratory data analysis, fundamentals of designing a study, probability models, and inferential statistics. This course will also illustrate how statistics is used in a variety of fields. Graphing calculators (TI-83 or TI-89) with statistic capabilities will be used. Students who successfully complete the AP exam may receive credit for a one-semester college statistics course.

Note: The grade for this class is weighted. Each student is encouraged to bring a graphing calculator to class. Students are strongly encouraged to take the AP College Board exam in May.

STATISTICS (351)

1.0 Credit

This course strikes a balance between statistical computation, decision-making and the conceptual understanding of statistics so that students can make informed “real world” decisions. Topics will include analysis of single variable and bivariate data, probability, distributions (probability, normal and Poisson), inferential statistics and hypothesis testing.

CONSUMER MATH (353)

1.0 Credit

The main objective of this course is to familiarize the student with personal and business financial success. The student will be introduced to the following types of concepts and procedures: managing money, unit pricing, income/payroll, banking procedures, spending, budgeting, investing, loans, insurance, and real estate. Many practice opportunities will be used to reinforce each lesson.
MATH ELECTIVES

KEYSTONE ALGEBRA 1 (306)
0.5 Credit
This course is designed as a remediation course for students who did not pass the state-mandated Keystone Algebra 1 exam. This will be a 9-week intensive course dedicated to preparing students for the Keystone Algebra 1 exam.

HIGHER GEOMETRY (361)
0.5 Credit
Prerequisite: Geometry
Students will analyze real-life problems through constructions, Geometer’s Sketchpad, and a hands-on project-based curriculum. Students will evaluate and communicate the reasoning used in solving these problems.

SAT MATH PREPARATION (360)
0.5 Credit
Prerequisites: Successful completion of Algebra 1 and Algebra 2/Geometry
SAT Math preparation is general review of mathematics preparing the students to take the SAT. It is a review of arithmetic, geometry, algebra, and statistics. The students will also take a number of sample SATs and then make corrections.
The BASD’s Science Departments’ courses are designed to develop conceptual understandings of scientific laws, theories, and principles in order for students to be knowledgeable about the natural world. The BASD High School Science Departments, through a diversity of course offerings, provide students with the knowledge and skills base needed to meet the PA Academic Standards in the following areas:

- Unifying Themes of Science
- Inquiry and Design
- Biological Sciences
- Physical Science, Chemistry, and Physics
- Science, Technology, and Human Endeavors
- Earth Sciences
- Environment and Ecology

There are four required science courses needed for graduation. Students should complete three of the four required courses by the end of their junior year. To meet the PA Academic Standards, each student should successfully complete one credit of Biology, one credit of Chemistry and either one credit of Physics or an AP Science course. A student who takes an AP science course in lieu of physics during junior year and who chooses not to take a second AP science course senior year must take physics as the fourth science course. 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. Please note that many of the upper level courses have course prerequisites.

The flow chart provides examples of possible science pathways for students depending on their level of expertise and interest.

### Science Recommended Course Sequence

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors Biology or Biology</td>
<td>Honors Chemistry or Chemistry or Conceptual Chemistry</td>
<td>Honors Physics or Physics or Conceptual Physics or AP Biology or AP Chemistry or AP Environmental Science</td>
<td>AP Physics B or C or AP Chemistry or AP Biology or AP Environmental Science or Honors Human Anatomy or Human Anatomy or Other Science Elective</td>
</tr>
</tbody>
</table>

**HONORS BIOLOGY (410)**

1.0 Credit
Prerequisite: See Honors Program Requirements page 4

Honors Biology is a course designed for the college preparatory student who is exceptional, highly motivated, and capable of independent study. Some topics in the laboratory-oriented program are cell biology, biochemistry, microbiology, genetics, botany, zoology, and ecology.

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

**BIOLOGY (411)**

1.0 Credit

Biology is a course designed for the college preparatory student. The topics in this course (cell biology, microbiology, genetics, botany, zoology, ecology, and evolution) are designed to expose students to the biological principles that bind all life on earth together and to acquaint them with laboratory techniques and tools.
HONORS CHEMISTRY (423)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4
Successful completion of Algebra 1

Honors Chemistry is a course designed to give the college-bound, scientifically oriented student knowledge of the broad concepts and models upon which chemistry operates. Among the concepts to be stressed are chemical formulas and reactions, atomic structure, the chemical bond, periodicity, quantum models of the atom, and stoichiometry. Both qualitative and quantitative laboratory work is included.

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

CHEMISTRY (421)
1.0 Credit
Prerequisite: Successful completion of Algebra 1

Chemistry is a course designed to give the college bound student knowledge of the broad concepts and models upon which chemistry operates. Among the topics to be stressed are chemical formulas, reactions, basic atomic structure, electrons, and the periodic table. Qualitative and quantitative laboratory work is included.

CONCEPTUAL CHEMISTRY (423)
1.0 Credit
Prerequisites: Successful Completion of Algebra 1

This course introduces the basic concepts of chemistry and their application in the everyday world. There is a reduced emphasis on the quantitative aspect of science but focuses on qualitative and descriptive chemistry as well as the practical use of chemistry in our daily lives. Students will be expected to relate and use learned concepts in class through lab experiences, projects, tests and common applications.

HONORS PHYSICS (429)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4
Successful completion of Algebra 1 and Geometry

Honors Physics is a rigorous and challenging course that includes topics in classical and modern physics. These topics include kinematics, forces, Newton’s Laws of Motion, work-energy-power, momentum, circular and harmonic motion, fluid mechanics, heat and temperature, kinetic theory, thermodynamics and waves and optics. Students are required to understand the basic principles of physics and apply these principles in problem solving techniques. Some pre-calculus will be introduced, such as vectors, in connection with physical concepts such as acceleration and work.

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

PHYSICS (431)
1.0 Credit
Prerequisites: Successful completion of Algebra 1 and Geometry

Physics is a study of mechanics, heat, electricity, sound and light. This is a course providing an excellent background for a college-bound student aiming at a non-technical major. Sufficient mathematics applications are provided so that students will be prepared for college physics and physical science courses.

CONCEPTUAL PHYSICS (434)
1.0 Credit
Prerequisites: Successful completion of Algebra 1 and Geometry

Physics will be presented at a hands-on, concrete level emphasizing the physical laws without the mathematical rigor but challenging reasoning and critical thinking skills. This physics course covers mechanics, properties or matter, heat, sound, and light.
SCIENCE ELECTIVES

HONORS CHEMISTRY EXTENSION (424)  
0.5 Credit  
Prerequisites: See Honors Program Requirements page 4  
Successful completion of Honors Chemistry  

Honors Chemistry Extension is a 9-week course that builds upon the chemical foundations learned in Honors Chemistry. The honors chemistry extension is designed to prepare the college-bound, scientifically oriented student for the SAT 2 Chemistry Test, AP Biology, AP Chemistry, and/or AP Physics. It is strongly suggested that any student wishing to study a science related field enroll in this course. Advanced chemical concepts such as molecular geometry, gas laws, electrochemistry and redox, equilibrium and solutions, and acid base chemistry will be studied. In-depth problem solving will also be stressed.  

Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

AP BIOLOGY (408)  
1.5 Credits (27 weeks)  
Prerequisites: Completion of AP application/acceptance into AP Program  
Successful completion Biology and Chemistry*.  
*Successful completion of Honors Chemistry is highly recommended.  

Advanced Placement Biology course is designed to be the equivalent of a college introductory biology course usually taken by science majors during their first year. It aims to provide students with the conceptual framework, factual knowledge and analytical skills necessary to deal critically with the rapidly changing science of biology. Students are challenged with new ideas and greater detail in the eight major themes of biology: evolution, energy transfer, continuity and change, relationship of structure and function, regulation, interdependence in nature, science as process, and science, technology and society. These eight themes are integrated throughout the curriculum. Major units include biochemistry, cellular biology, energy, genetics, molecular genetics, evolution, anatomy and physiology, plant and animal diversity, and ecology. Laboratory skills, including dissection, are developed and reinforced through the twelve AP labs. Upon successful completion of AP Biology, students are strongly encouraged to take the Advanced Placement Biology Exam.  

Note: The grade for this course is weighted. This course is a 6 marking period course. Students are strongly encouraged to take the AP College Board exam in May.

AP CHEMISTRY (418)  
1.5 Credit (27 weeks)  
Prerequisite: Completion of AP application/acceptance into AP Program  
Successful completion Biology and Chemistry*.  
*Successful completion of Honors Chemistry is highly recommended.  

This class will provide students with a background in modern chemistry that will be needed for specialized studies, including college-level chemistry courses. The student will also have completed experiments and problems designed to prepare them for taking standardized chemistry tests, such as the Advanced Placement Chemistry Exam and SAT II Chemistry exam. Basic concepts of nomenclature, mole relationships and stoichiometry are reviewed to help provide background for lab experiments performed. In-depth studies include analytical chemistry techniques, solutions, equilibria, thermochemistry, kinetics, electrochemistry, and organic chemistry. It is the expectation that the student will sit for the AP Chemistry test when offered by the College Board.  

Note: The grade for this course is weighted. This course is a 6 marking period course. Students are strongly encouraged to take the AP College Board exam in May.
AP ENVIRONMENTAL SCIENCE (415)

1.5 Credits (27 weeks)
Prerequisites: Completion of AP application/acceptance into AP Program
Successful completion Biology and Chemistry.

The goal of the AP Environmental Science Course is to provide students with the scientific principles, concepts, & methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, solutions for resolving and/or preventing them. This course is designed to be the equivalent of a one-semester, introductory college course in Environmental Science. Students are encouraged to take the AP Environmental Science test offered by College Board in the spring. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science.

Note: The grade for this course is weighted. This course is a 6 marking period course. Students are strongly encouraged to take the AP College Board exam in May.

AP PHYSICS B (435)

Grade 12 1.5 Credit
27 Weeks
Prerequisites: See Honors Program Requirements page 4
Successful completion or concurrent enrollment in PreCalculus

AP Physics is designed for the college preparatory student planning on majoring in science in college. It includes topics in classical and modern physics and follows the Physics AP B curriculum. Students are required to understand the basic principles of physics and apply these principles in problem solving techniques. Some calculus will be introduced in connection with physical concepts such as acceleration and work.

Note: The grade for this course is weighted. This course is a 6 marking period course. Students are strongly encouraged to take the AP College Board exam in May.

AP PHYSICS C: MECHANICS (436)

1.5 Credits (27 weeks)
Prerequisites: Completion of AP application/acceptance into AP Program
Successful completion of Honors Physics
Successful Completion of, or currently taking Calculus

AP Physics C: Mechanics will improve students’ skills by stressing the use of fundamental modeling in classical mechanics, increasing their analytical skills, and using hands-on laboratory investigations. Differential and Integral calculus is used throughout the course. Students will be required to keep a detailed lab book.

Note: The grade for this course is weighted and the course is a 6 marking period course. Students are strongly encouraged to take the AP College Board exam in May.
AP PHYSICS C: ELECTRICITY AND MAGNETISM (428)
1.0 Credit
Prerequisites: Completion of AP application/acceptance into AP Program
Successful Completion of Honors Physics
Successful Completion of, or currently taking Calculus

AP Physics C: Electricity and Magnetism affords students an opportunity to increase their ability to use fundamental models in classical electricity and magnetism to describe and explain nature. The course is calculus-based and equivalent to the pre-engineering introductory Physics course for university students. This course is designed in accordance with the College Board guidelines. The emphasis of this course is the understanding of the fundamental principles of electricity and magnetism using analytical problem solving skills while engaging students through laboratory work. Differential and Integral Calculus is used throughout the course. Students will spend 20% of available instructional time engaged in hands-on laboratory work. Each student will keep a laboratory notebook or save all lab reports in a portfolio.

Note: The grade for this course is weighted and the course is a 6 marking period course. Students are strongly encouraged to take the AP College Board exam in May.

HONORS HUMAN ANATOMY AND PHYSIOLOGY (440)
1.0 Credit
Prerequisites: See Honors Program Requirements page 4
Successful completion of Biology and Chemistry

This course is designed for the college preparatory student who is exceptional and highly motivated. It involves a detailed study of the structure and function of the human body. Each body system will be studied in detail. It is particularly helpful for students who plan further study or careers in health related fields or biological sciences. Instructional methods include discussion, lecture, image processing and other computer applications, and detailed dissection of a cat.

Note: The grade for this course is weighted.

HUMAN ANATOMY AND PHYSIOLOGY (441)
1.0 Credit
Prerequisite: Successful completion of Biology and Chemistry

Human Anatomy and Physiology is a course designed for the college preparatory student interested in a career in the allied health fields, or any student with a strong interest in the study of the major systems of the human body. This course is an intensive survey of the structure and function of each body system. Student success depends upon high motivation and strong work ethic. Instructional methods include background reading, lecture, discussion, computer applications, and dissection.

EARTH AND SPACE SCIENCE (433)
1.0 Credit

This course will provide the student with an overview of astronomy and geology. The students will explore the forces that have shaped the earth, as well as the interactions between the atmosphere and the earth. They will also explore the basic concepts of space science including seasons, phases of the moon, motions of the earth, and constellations. Recent astronomical discoveries will be investigated using the internet and multimedia. The planetarium will be used in this course.

ASTRONOMY 1 (451)
0.5 Credit

Astronomy 1 is a course intended to introduce the student to the night-time sky using the Planetarium and Starry Night software. Topics included in this course include constellations and finding your way around the night-time sky, telescopes, stars, reasons for the seasons, phases of the moon, and misconceptions in astronomy. The planetarium is the classroom and a field trip to another planetarium is not out of the question.
ASTRONOMY 2 (451B)  
0.5 Credit  
Astronomy 2 is a course intended to continue the study of Astronomy using Starry Night Software and the Planetarium. This course is intended to introduce the student to other topics in astronomy that include the solar system and moons and planets, asteroids, Comets and meteors, near earth objects, galaxies and our milky way galaxy, black holes, Creation of the universe, and other advanced topics in astronomy. A trip to the Hayden Planetarium in New York City is part of this course.

GEOLOGY (452)  
0.5 Credit  
Geology is the study of the geologic processes taking place within the earth and on its surface. Specific topics included are minerals, rocks, plate tectonics, glaciation, and local geological history and topography. Field work and local rock collection are required to successfully complete this course.

PRINCIPLES OF TECHNOLOGY (432)  
1.0 Credit  
Principles of Technology is unique because it teaches basic physics concepts in the context of their relationship to four energy systems—medical, fluid, electrical, and thermal. It applies physics principles to technological situations and concentrates more on the use of physics formulas in the workplace than on their derivation and manipulation. Principles of Technology provides the majority of students a practical science course that will give them both the hands-on experience industry demands and the fundamental problem-solving skills they need to adapt to changing environments they will face on the job. Students will learn the underlying mathematical and scientific principles behind technology. Students also learn to work in groups and focus on their problem-solving and mathematical skills in addition to learning physics.

GENETICS (450A)  
0.5 Credit  
Prerequisite: Successful completion of Honors Biology or Biology  
This course will expand upon what is learned about genetics in Honors Biology or Biology. Students will explore the principles of heredity at an advanced level using multiple model organisms. Human inheritance will be explored focusing on human behavior and disorders. Emphasis will be placed on statistical analysis of data in laboratory experiments, as well as reading scientific literature. At least one formal lab report is required. This course can be taken along with the Biotechnology elective for a full semester course.

BIOTECHNOLOGY (450B)  
0.5 Credit  
Prerequisite: Successful completion of Honors Biology or Biology  
This course will focus on answering three questions: How does DNA determine the inheritance of our traits? How can we use technology to manipulate the expression of these traits? How can we use this technology while assessing its ethical impact? Students will be actively engaged in learning various biotech techniques such as DNA extraction, DNA fingerprinting, cloning, microbiology techniques, Polymerase Chain Reaction, and gel electrophoresis. Students will apply the techniques learned to various real life situations involving forensics, genetic disorder determination, cancer detection and environmental problems. At least one formal lab report is required. This course can be taken along with the Genetics elective for a full semester course.
ENVIRONMENTAL SCIENCE (413)

1.0 Credit
Prerequisite: Successful completion of Biology

The goal of the Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental issues both natural and human-made. Special emphasis is placed on the PA State Standards, problem solving, and risk assessment. The students will be exposed to a variety of environmental testing techniques to help understand the strategies involved in solving environmental problems. The students will also be exposed to most common flora and fauna of PA as outlined by the PADEP.

ZOOGOLOGY (456)

0.5 Credit
Prerequisite: Successful completion of Honors Biology or Biology

Because of the advancements in biological sciences, traditional study of the animal kingdom has been all but eliminated from the regular biology curriculum. This elective course explores zoology and issues dealing with ecology, evolution, and biotechnology. The course is designed for college prep students who are self-motivated and interested in broadening their knowledge of the biological sciences. Students will have the opportunity to enhance laboratory and research skills in group and independent explorations.

FORENSIC SCIENCE (458)

0.5 Credit

This course introduces basic concepts of Forensic Science (crime lab analysis and expert witness testimony). Such topics as drug analysis, DNA fingerprinting, blood alcohol analysis, and rape kit examination will be discussed with appropriate labs.

FORENSIC ORGANIC CHEMISTRY (454)

0.5 Credit
Prerequisite: Successful completion of AP, Honors, or Chemistry if grade 11 or 12; or concurrent enrollment in Honors Chemistry if grade 10

Forensic Organic Chemistry includes such topics such as organic structures and simple nomenclature, properties of organic chemicals; investigation of arson and bomb evidence; and analysis of physical evidence such as ink, paint, fibers, and lipstick; and drug and toxicology screens. The course will include case studies and examination of reproduced evidence from actual crimes as well as laboratory analysis of evidence gathered at simulated crime scenes. This course does not take the place of regular chemistry.

NUCLEAR SCIENCE/MEDICINE (457)

0.5 Credit
Prerequisite: Successful completion of AP, Honors, or Chemistry and Biology

Nuclear Science and Medicine is a course that explores the fundamentals of nuclear and particle theory, the biological effects of radiation, and applications of nuclear science to medical testing and treatment. Special topics include: applications of nuclear testing in forensics and archaeology; nuclear bombs (fission, hydrogen, and dirty); nuclear reactors; fundamental particles (such as quarks); and particle accelerators (such as Fermilab or CERN). Field trips to nuclear medicine and reactor facilities are planned.

KEYSTONE BIOLOGY (459)

0.5 Credit

This course will review material necessary for successful completion of the Keystone Exam. All five core units of biology (building blocks of life, proliferation of life, bioenergetics, molecular basis of life, and interdependence of life) will be reviewed and assessed. Students who do not score proficient or advanced on the Keystone Exam would be taking this course.
WORLD LANGUAGES DEPARTMENT

The World Languages Department encourages the completion of at least three years of a language at the high school level in order for the student to be fully college ready. The department further recommends the completion of a fourth and Advanced Placement year for those students who wish to prepare for a career in which knowledge of a second or third language is beneficial. It is the department’s belief that multilingual students can best navigate and respond to the demands of an ever-developing global community. To this end, courses are designed to enable students to communicate effectively in the target language while increasing the students’ appreciation of the cultural perspectives, practices, and products of different cultures.

### World Language Recommended Course Sequence

<table>
<thead>
<tr>
<th>Grade 9</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Level 3</td>
<td>Level 4</td>
<td>AP Language</td>
</tr>
<tr>
<td>Level 1</td>
<td>Level 2 or Level 2 and 3</td>
<td>Level 3 and 4 or Level 4</td>
<td>AP Language</td>
</tr>
<tr>
<td>Heritage Spanish 1</td>
<td>Heritage Spanish 2</td>
<td>Heritage Spanish 3</td>
<td>AP Spanish</td>
</tr>
</tbody>
</table>

Students are advised to review the requirements of their particular Program of Studies before they select their language.

**Special note:** After completing the course work for a given level of foreign language study, each student is required to pass a final exam or proficiency evaluation to ensure exit proficiency criteria have been met before moving to the next level of the foreign language. Level 4 & AP of each language may be scheduled together due to fluctuations in enrollment.

**FRENCH 1 (521)**
1.0 Credit

The student will be taught basic vocabulary and language patterns which will enable the student to use and understand predictable areas of need, for example greeting, the time, the weather, one’s health, and one’s actions. The students will also learn introductory information about France, the French people and their culture. There will be an equal emphasis in this course on listening, speaking, reading, writing, and culture.

**FRENCH 2 (522)**
1.0 Credit

Students will be taught additional vocabulary and language pattern. The students will be able to sustain short conversations on familiar topics such as: one’s daily activities, sports, and leisure time activities. Furthermore, the students will be able to interpret written expressions of immediate need. The culture of France and the French people will be further introduced. There will be an equal emphasis in this course in listening, speaking, reading, writing, and culture.

**FRENCH 3 (523)**
1.0 Credit

Students will be taught additional vocabulary and language patterns. The students will be able to sustain short conversations on familiar topics such as one’s self, the home, the school and other topics which involve the survival needs such as asking directions, getting a hotel room, or ordering a meal. Additional information about France and the French people will be introduced. There will be an equal emphasis in this course in listening, speaking, reading, writing, and culture.

**FRENCH 4 (524)**
1.0 Credit

This course provides the student the opportunities to develop the foreign language skills of reading, writing, listening, and speaking. Students’ oral and written work is emphasized. The student will be able to satisfy most routine travel and survival needs and some limited social demands.
AP FRENCH LANGUAGE (525A)
1.0 Credit
Prerequisite: Successful completion of French 4
Completion of AP application/acceptance into AP Program

AP French is a challenging course that is meant to be the equivalent of a freshman college course, and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open to students who have successfully completed Level 4 French, or who have completed French 3 and have the recommendation of the instructor. This course uses a variety of authentic materials to practice reading, listening, writing, and speaking French at a high level of competency. Students will be encouraged to participate in cultural events such as Le Grand Concours and La Semaine Française. At completion of course students may take either the AP French or CLEP French exams for college credit.

Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

GERMAN 1 (531)
1.0 Credit

Basic vocabulary and language patterns are taught. Varied activities provide students with opportunities for drill and personalized manipulation of the language with logical learning sequence and with a structured progression from the spoken to the written language. Each unit includes some aspect of German culture. Topics include: meeting new friends, school, leisure time activities, travel expressions, planning a party and shopping for a present.

GERMAN 2 (532)
1.0 Credit

Additional vocabulary and language patterns will be learned and added to previously learned material. Topics included will be vacations, healthy eating, foods, housing, jobs, dreams and wishes, after school activities, a class trip, a birthday and a look at the future. Emphasis will be placed on the skills of listening, speaking, reading, writing, and the culture of German-speaking countries.

GERMAN 3 (533)
1.0 Credit

The student will learn additional vocabulary and language patterns with emphasis placed on the skills of listening, speaking, reading, writing, and culture of German-speaking countries. Topics to be included are Germany since reunification, banking, traveling, rock stars, vacations, technology, German cars, World War II, sports, art and literature.

GERMAN 4 (534)
1.0 Credit

Listening, speaking, reading, writing, and culture of German-speaking countries will be continued. Emphasis will be on expressing attitudes, opinions, feelings and emotions. Topics will include current events, media, fashion, and German since reunification.

AP GERMAN LANGUAGE (535A)
1.0 Credit
Prerequisite: Successful completion of German 4
Completion of AP application/acceptance into AP Program

AP German is a challenging course that is meant to be the equivalent of a freshman college course, and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open to students who have successfully completed Level 4 German, or who have completed German 3 and have the recommendation of the instructor. This course uses a variety of authentic materials to practice reading, listening, writing, and speaking German at a high level of competency. At completion of course students may take either the AP German or CLEP German exams for college credit. Students will also be fully prepared to take the SAT Subject Exam in German.

Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.
SPANISH 1 (541)  
1.0 Credit  
The student will learn functional vocabulary and language patterns to perform on a beginner communicative competence level concerning everyday topics such as greetings, likes/dislikes, activities, foods, and the school day. Basic grammatical structures are introduced, and introductory material on Latino culture will be presented. The skills of listening, speaking, reading, and writing will be developed.

SPANISH 2 (542)  
1.0 Credit  
The student will learn additional vocabulary and language patterns to integrate and expand previously learned material. The student will begin to enhance their basic skills and proceed towards a more functional communicative level. Topics include family and celebrations, household chores and activities, clothing and shopping. More complex grammatical structures are explored. The inclusion of culture is an integral part of the course. The skills of listening, speaking, reading, and writing will continue to be developed, with an emphasis on building writing skills in the target language.

SPANISH 3 (543)  
1.0 Credit  
The student will learn additional information vocabulary and language patterns in order to participate in short exchanges; verbal and written expression. The student will begin to initiate and sustain basic communicative tasks on topics such as making purchases and ordering a meal. Additional cultural information will be presented. The skills of listening, speaking, reading, and writing will continue to be developed, with an emphasis on building speaking skills in the target language. Writing skills will focus more on individual expression and creativity.

SPANISH 4 (544)  
1.0 Credit  
Students will learn additional vocabulary and language patterns in order to manipulate the target language to produce comprehensible utterances in the spoken and written word. The student will gain proficiency in the skill areas of listening, speaking, reading, and writing by utilizing situational topics and cultural material.

AP SPANISH LANGUAGE (545A)  
1.0 Credit  
Prerequisite: Completion of AP application/acceptance into AP Program  
AP Spanish is a challenging course that is meant to be the equivalent of a freshman college course, and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open to students who have successfully completed Level 4 Spanish, or who have completed 2-3 years of Heritage Spanish. This course uses a variety of authentic materials to practice reading, listening, writing, and speaking Spanish at a high level of competency. Students will focus on the presentational aspects required for the AP exam, as well as focusing on the mastery of listening, speaking, reading, and writing skills. At completion of course students may elect to take the AP Spanish or CLEP Spanish Exams for college credit. Students will also be fully prepared to take the SAT Subject Exam in Spanish.

Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.
WORLD LANGUAGE ELECTIVES

WORLD LANGUAGES INDEPENDENT STUDY (552)
1.0 Credit   PASS/FAIL
Pre-requisites: Completion of AP French, AP German, AP Spanish or Heritage 3. This course requires the approval of the teacher supervising the independent study and the department chairperson.

World Language Independent Study is for students who wish to continue their language study past the AP French, AP German, AP Spanish, or Heritage 3 level. The course is literature based, focused on reading novels and short stories in the target language. Students will also have the opportunity to maintain and improve their speaking and writing proficiency, as well as prepare for the CLEP and/or AP tests.

HERITAGE SPANISH:
The Heritage Spanish Program has been developed to best serve the needs of our students who are of Hispanic/Latino heritage. Students should have a background in Spanish, but they do not need to be fluent in Spanish. Students will be placed according to their degree of proficiency in the language.

HERITAGE SPANISH 1 (555)
1.0 Credit
Prerequisites: Student must speak and understand spoken Spanish on a basic level and have the recommendation of his/her current Spanish teacher. The student does not need to be completely fluent in Spanish, and when speaking he/she may sometimes mix English and Spanish.

The focus of this course will be to teach heritage speakers to read and write Spanish, while developing and improving their speaking ability. The course will focus on building literacy skills while exploring the rich cultural heritage of the Spanish-speaking world. Students will receive instruction in more formal grammar and will develop proficiency in all the skill areas – listening, speaking, reading, and writing.

HERITAGE SPANISH 2 (556)
1.0 Credit
Prerequisites: Student must meet one of these requirements: (1) completion of Heritage Spanish 1, (2) a grade of at least B- in a previous Spanish class with a teacher recommendation, (3) previous extensive study in a Spanish-speaking country, or (4) a successful interview with the instructor.

The primary focus of this course is to refine further the Spanish skills that many heritage students use in their daily lives. Students will continue to improve their reading skills, writing skills, and grammar usage through project based thematic units, current events, and cultural/literary readings.

HERITAGE SPANISH 3 (557)
1.0 Credit
Prerequisites: Student must meet one of these requirements: (1) completion of Heritage Spanish 2, (2) a grade of at least a B- in a previous Spanish class with a teacher recommendation, (3) previous extensive study in a Spanish-speaking country, or (4) a successful interview with the instructor.

The focus of this course is to offer advanced students a comprehensive grammar review and insight into Hispanic/Latino thought and culture. Students will use the language extensively in their writing, and students will read and discuss current events, excerpts of novels, and selected modern and classical works in order to increase their literacy in Spanish. Students who take Heritage 3 are encouraged to take AP Spanish upon successful completion of the course.
BUSINESS DEPARTMENT

The Business & Technology Department provides a variety of courses that provide students with a strong foundation in business and technology fundamentals. Courses in marketing, accounting, general business, and law will provide students with a basic understanding of business principles and practices. Students have an opportunity to earn a Business & Technology Certificate in Accounting, Marketing, or Computer Technology by taking a sequence of courses as outlined in each of our certificate programs. Students will have the opportunity to earn college credit through the Business Department’s articulation agreements with Northampton Community College.

Business and Technology House Certificate Programs

Students will need to take 6.0 credits in the Business & Technology Department in order to receive a Certificate. Students should follow the sequence of course offerings below in addition to taking any other electives within the Department.

ACCOUNTING TECHNOLOGY/TECHNICIAN AND BOOKKEEPING

<table>
<thead>
<tr>
<th>Accounting Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Technology Concepts or Introduction to Computer Programming</td>
<td>Principles of Accounting (1.0 credit)</td>
<td>Intermediate Accounting (1.0 credit)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Financial Services and Banking Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Technology Concepts or Introduction to Computer Programming</td>
<td>Principles of Accounting (1.0 credit)</td>
<td>Personal Finance (1.0 credit)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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SALES, DISTRIBUTION AND MARKETING OPERATIONS

<table>
<thead>
<tr>
<th>Marketing Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
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</thead>
<tbody>
<tr>
<td>Integrated Technology Concepts or Introduction to Computer Programming</td>
<td>Principles of Marketing (1.0 credit)</td>
<td>Intermediate Marketing (1.0 credit)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Sports Marketing Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Technology Concepts or Introduction to Computer Programming</td>
<td>Business of Sports I (0.5 credit each)</td>
<td>Sports Management I (0.5 credit each)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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MANAGEMENT INFORMATION SYSTEMS

<table>
<thead>
<tr>
<th>Computer Technology - Programming Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Computer Programming</td>
<td>Computer Programming Level 2 (0.5 credit)</td>
<td>Computer Programming Level 3 (0.5 credit)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Computer Technology - Applications Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Technology Concepts</td>
<td>Desktop Publishing (1.0 credit)</td>
<td>Multimedia Technology Digital Imaging (0.5 credit each)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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ADMINISTRATIVE ASSISTANT AND SECRETARIAL SCIENCE

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<tr>
<th>Administrative Assistant Certificate</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
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</thead>
<tbody>
<tr>
<td>Integrated Technology Concepts or Introduction to Computer Programming</td>
<td>Desktop Publishing (1.0 credit)</td>
<td>Principles of Accounting (1.0 credit)</td>
<td>Senior Business Seminar (1.0 credit)</td>
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</tr>
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</table>
BUSINESS

YEARBOOK (601)  
1.0 Credit

This class manages the annual publication of the Freedom High School Spirit yearbook. Students will be responsible for planning all facets of the yearbook from theme to distribution. Desktop Publishing expertise is highly recommended as well as the ability to think outside the box. Skills with digital photography, image editing, and a working knowledge of Adobe Photoshop are preferred. Students looking to enroll in this class should be self-motivated, responsible, able to work as part of a team, and efficient with personal time management. Access to a home personal computer with Internet access is desirable if not absolutely necessary.

SCHOOL STORE--MARKETING IN PRACTICE (613)  
1.0 Credit
Prerequisite: Business course and Teacher recommendation

Acceptance into this course will be granted through an application process. The Business Department as well as the Student Service Centers will review this application and determine which students qualify for admittance into the course. Students must be in good standing academically and with regard to the BASD Code of Conduct. When being enrolled in this class; students will be placed into either Block 1—Coffee Shop, or Block 2—Campus Shop.

This course is for students who are interested in gaining the hands-on skills needed to operate a business, using the Freedom School store and Coffee Shop as the training site. Students will participate in various activities necessary for a successful business. These activities include ordering, purchasing, receiving, stocking, sales, inventory, customer relations, and advertising/promoting; as well as preparing the necessary financial papers that go into the operation of a successful business. Marketing in Practice students will be required to complete a typed, daily journal that will give a brief overview of their daily activities.

PRINCIPLES OF ACCOUNTING (620)  
1.0 Credit

This introductory course is designed to help students develop the basic skills necessary for double-entry accounting as well as obtain a basic understanding of a business's financial operation. The course content includes the accounting cycle for a service business organized as a proprietorship and also for a merchandising business organized as a partnership. Completion of a business simulation reinforces the learning of the entire accounting cycle.

INTERMEDIATE ACCOUNTING (621)  
1.0 Credit

This course is an extension of partnership accounting when the business is organized as a corporation. Areas of study include: uncollectable accounts, plant assets and depreciation, inventory, notes, accrued revenue and expenses, dividends, financial statements, and end-of-fiscal period entries. Business simulations will be used as practical application of learned concepts.

ADVANCED ACCOUNTING (622)  
1.0 Credit

This course provides students with a more in-depth study of corporate accounting as well as an introduction to management and cost accounting. Content area includes: acquiring additional capital and financial analysis and reporting for a corporation, budgetary planning, trend analysis, cash flow analysis, responsibility accounting, and elements of manufacturing costs. Some time is also allocated to accounting for not-for-profit organizations. Business simulations are again used to provide students with "real-life" accounting practices.
PRINCIPLES OF BUSINESS (623)  
1.0 Credit

This course is designed to introduce students to the world of business. This course provides a general background on the societal and economic changes that affect business. Other topics covered include types of ownership, kinds of productions and services, marketing, accounting, as well as management styles and functions. Students are provided with various learning strategies, such as lecture, discussion, research, group projects, and hands-on simulations. These different teaching and learning strategies will help to enhance the student's knowledge of business.

BUSINESS LAW (625)  
1.0 Credit

This course is designed to study the relationship between law and its role in the day-to-day activities of business. In addition to general terminology, the course will strive to develop the student's ability to analyze the law and apply his or her own critical thoughts to specific business situations. The ability to engage in this type of analytical thinking will be developed through the study of common law and statutory law. As a supplement to the text and related lectures, each student will be invited to further their understanding of contracts and the Uniform Commercial Code (UCC) by engaging in classroom lectures outlining cases that relate the material in class to the "real-world". The course will incorporate technology through online mediums to search the web for applicable case law and current events relating to information discussed in class further developing the student's ability to communicate effectively and work successfully as a member of a group. Finally, the course will seek to develop the student's ability to make decisions in business situations with a more in-depth appreciation of the legalities of their actions.

HOUSE OF BUSINESS CO-OP (628)  
1.0 Credit

This course acts as the Capstone for any of the House of Business certificate programs for those students who choose a complete co-op experience instead of Senior Business Seminar. This course allows House of Business certificate candidates to apply their training to the world of work. The program is run by a certified Cooperative Diversified Occupations Coordinator and each student is evaluated by on-the-job site visits and evaluation forms submitted by the employer. In addition, students will keep a journal of their experiences, complete job application materials, complete a research paper pertaining to their field, and give a formal oral presentation to the House of Business staff. A minimum of 15 hours per week on the job is required.

PRINCIPLES OF MARKETING (634)  
1.0 Credit

Principles of Marketing introduces students to the foundations of marketing. The course begins with a look at basic marketing concepts. The specific marketing functions of Promotion, Distribution, Pricing, and Product and Service Management are studied in depth. The course is project-and-presentation oriented, with application projects designed to coincide with each function studied. Students will integrate the elements of the marketing mix to develop a successful marketing strategy. Careers in marketing are examined after each topic.

INTERMEDIATE MARKETING: MARKETING MUSIKFEST (647)  
1.0 Credit

Marketing Musikfest is a special course that brings into partnership the Bethlehem Area School District and ArtsQuest. The course will be a real –life exploration of marketing where students will assist ArtsQuest officials in the identification of a Musikfest performer. Using the local entertainment industry as a context, students will learn about target demographics, talent recruitment and selection, branding, event planning and marketing, and event evaluation. Students will develop and implement a marketing plan related to their assigned Musikfest performer. Students will be encouraged to apply available service learning hours to the course as to have a first hand marketing experience during the August festival.

It is suggested that a student acquire a recommendation from a business teacher for placement in this course.
SENIOR BUSINESS SEMINAR (637)  
1.0 Credit

This course acts as the Capstone for any of the House of Business certificate programs for those students who do not choose to complete a co-op experience. This course is an independent study course allowing students to complete the requirements to earn a House of Business certificate. Students will research their chosen career direction, write a formal research paper, design and complete a hands-on final project, submit a series of job application materials, participate in a minimum of two job shadows, and deliver a formal oral presentation to the House of Business staff, selected business partners, and other designated parties. Students will be given an opportunity to obtain as much hands-on experience as possible to meet their individual needs.

PERSONAL FINANCE (643)  
1.0 Credit

This Personal Finance class provides students with a strong understanding of the financial responsibilities of how to develop a successful financial plan. The keys to financial success as outlined by the Federal Reserve Bank of Philadelphia are covered throughout the curriculum. Topics include budgeting, saving and investing, goals and decision making, credit, banking services, transportation issues, and risk protection. This course will provide students with a strong foundation on how to handle financial situations.

BUSINESS OF SPORTS I (661)  
0.5 Credit

This course will give an overview of the many career opportunities available in the sports industry. Sports marketing is essential to the promotion of sports and the promotion of products through sports. The basics of sports marketing and the importance of public images will be discussed in this class.

BUSINESS OF SPORTS II (662)  
0.5 Credit

This course will provide an overview of the different levels of sports: recreational, amateur, college, and professional and the importance of choosing the best target market. The class will deal with the different marketing techniques used at each level of sports.

SPORTS MANAGEMENT I (664)  
0.5 Credit

This course will give an overview of sports management. Sports management is essential to the success of sports at every level. The basics of sports management and the importance of becoming a well-rounded manager will be discussed in this class.

SPORTS MANAGEMENT II (665)  
0.5 Credit

This course will provide an overview of the different levels of sports: recreational, amateur, college, and professional and the economic importance that management carries. The class will deal with the different management techniques used at each level of sports.
The Cooperative Diversified Occupations Program allows students to gain on-the-job-experience in their chosen field while under the supervision of a certified Co-Op Coordinator. The coordinator visits the student on the job and meets with both the student and the employer to develop and implement the student’s training plan. Students are evaluated by the Co-Op Coordinator from site visits, and also by the employer through evaluations sent to the school. Students get hands-on experience in their career field, earn an income, receive instruction and guidance, and receive school credits. The Co-Op experience is open to all students enrolled in 11th or 12th grade. A minimum of 15 hours per week on the job is required. Good attendance, maturity, counselor approval, administrative approval, and parent approval is necessary to be enrolled in this program.
TECHNOLOGY

INTEGRATED TECHNOLOGY CONCEPTS (602)
1.0 Credit

This course is a hands-on computer-based course designed to provide students with an comprehensive understanding of Microsoft Office as well as the production of different types of business documents and forms. This course combines personal typing, word processing, spreadsheet applications, database applications, graphic processing, desktop publishing and slide show presentations. Students will be able to prepare all types of documents that may be used for personal and business applications.

COMPUTER APPLICATIONS (604)
0.5 Credit

This course is designed to familiarize students with word processing, spreadsheet, database, graphics, and desktop publishing principles. Students will develop an in-depth understanding of how these types of programs operate. Students will learn how to format documents (letters, report, newsletters, worksheet, graphs) using these programs.

INTRODUCTION TO COMPUTER PROGRAMMING (609)
1.0 Credit

The Introduction to Computer Programming course is designed to introduce the concepts of computer programming using a studio of current programming languages. Students will learn how to analyze tasks and design algorithms to solve mathematical and real-world business related problems. Students learn how to code, debug, and execute program files. The first half of the course is taught using Visual Basic.net. Students will learn how to program in C++ and Java throughout the remainder of the course. Students will code programs throughout the course and a final project will be designed at the end of the course.

Note: This course can be taken in place of Technology Concepts to fulfill the technology graduation requirement. Strong math skills and an interest in computer programming are recommended.

LEVEL 2: COMPUTER PROGRAMMING (JAVA, C++, VISUAL BASIC) (608)
0.5 Credit

Students in this course will continue to develop their computer programming skills using the structured design of Java, C++, or Visual Basic. Steps of the programming process from source code to a finished product are emphasized. Coverage of fundamental debugging skills helps students complete working programs and foster an understanding of program flow. Students will be required to design, code, and debug a final project at the end of the course.

Note: Students may take this course up to three times, once in each of the offered languages.

LEVEL 3: ADVANCED COMPUTER PROGRAMMING (672)
0.5 Credit

Prerequisite: Level 2 Computer Programming Language courses

This is an independent study course for students interested in taking their computer programming skills to the next level. Students choose one of the three computer languages offered, and after completing the Level 2 course in that language, may enroll in the advance level course. In this course, students will pick up where they left off at the end of the Level 2 course, and progress independently at their own pace. In the second half of the course, students will propose a project, collect information, create a user interface, develop an algorithm for solving the problem, subdivide the problem, choose data structures, write the code, debug the program, and present their finished work to the class.

Note: Students may take this course up to three times, once in each of the offered languages.
CREATING APPS FOR PHONE, PADS AND OTHER DEVICES (674)  
1.0 credits

This is a semester long introduction to Smartphone Application Development. Students will develop applications that will function on Android based Smart Phones and iPhones using Adobe Flash as the primary development tool. The majority of the course will be devoted to applications that can be created using simple point and click interfaces. The course will also include applications developed by using basic tools from Java and Objective C that will be introduced in the class. The overall focus of the course will be on useful and appropriate application content rather than on the development code behind it.

DESKTOP PUBLISHING (610)  
1.0 Credit

This course is designed for those students who are interested in learning more about the power of desktop publishing. Actual application in design, layout, and publication will be emphasized as well as creativity and problem solving. Students will be working with Microsoft Office as well as software packages. Students will publish the following types of documents: flyers, newsletters, invitations, certificates, brochures, and pamphlets. Students will learn how to work with the digital camera and scanner. Students will create documents for school related projects as well as for local companies and businesses. This course is highly recommended for those students who are interested in working on the yearbook.

WEB PAGE DESIGN (614)  
1.0 Credit

This course is designed to familiarize students with the internet and all of its resources. The students will gain an in-depth understanding of the world-wide-web by exploring resources and web site evaluation. Assigned projects will focus on real life applications of the internet. The web page section of the course is designed for students who wish to focus on web site creation. Students will design their own web pages using HTML and web page software (Macromedia Dreamweaver and Fireworks). There is a strong emphasis on layout and design.

ADVANCED WEB PAGE DESIGN (615)  
1.0 Credit

This course will focus on advanced features of web page design, including, but not limited to, web graphics, animation, movies, and basic java script. Macromedia Flash and Freehand software will be used. Students will update web pages for the Freedom web site as well as out of school organizations. Educational partnerships will be developed so that students will have the opportunity to develop web pages for local businesses.

VIDEO EDITING (640)  
0.5 Credit

This course is designed for students who wish to engage in the creative process of modifying raw video into a finished product. Transitions, special effects, time manipulation and sound (both dialogue and music) will be incorporated into projects. Students will study and interpret movement, light, color and graphics as part of their assignments. Principles of film-editing will be studied and applied to today’s digital technology.

ADVANCED VIDEO EDITING (641)  
0.5 Credit

The Advanced Video Editing course gives students an opportunity to continue to develop their video editing skills. Students will become proficient in interpreting and using video as a means of communication through their assignments. Video for mass marketing, entertainment, archives, home movies, and special events will be studied. Music, narration, and movie themes will be spotlighted as the “art of storytelling” is emphasized during this course. Special video projects that enhance the Freedom community will be developed.
CISCO NETWORKING I (644) 1.0 Credit
The Cisco CCNA Discovery curriculum provides a foundation for networking knowledge, practical experience, opportunities for career exploration, and soft-skills development to help students prepare for entry-level careers in IT and networking. Students who enroll in this course should have good PC skills. The curriculum is broken down into two nine-week segments. The first segment deals with Networking for Home and Small Businesses and the second segment covers Working at a Small-to-Medium Business. This course is recommended for any students interested in pursuing a career in Information technology.

CISCO NETWORKING II (645) 1.0 Credit
This course is a continuation of Cisco Networking I. The course is divided into two segments. The first segment covers routing and switching. The second part of the course focuses on design and support of computer networks.

TECHNOLOGY APPRENTICESHIP (670) 1.0 Credit
Prerequisite: Teacher recommendation only
This course is designed for those students who have a strong interest in gaining hands on experience working with the Technology Integration Specialist in the school. Students will gain practical experience throughout this course by working very closely with administrators, teachers, and staff. Students will work with the school network, learn how to image, and troubleshoot technology issues.

DIGITAL IMAGING (677) 0.5 Credit
The Digital Imaging course is designed for the creative student who wishes to focus on visual impact in image design. This course will present current concepts and trends in image technology using photo enhancing software. Students will produce images and solve visual problems through image manipulation such as lighting, cropping, transparency, black and white, web, and print safe colors, rotating, retouching, and organizing. Different types of images, such as bitmap and vector, will be discussed, as well as the many types of image file formats widely used today. Class projects will focus on digital images to be used in a variety of media: print, web, and computer presentation graphics.

TV BROADCASTING (691) 0.5 Credit
Prerequisite: This course is to be taken in conjunction with BROADCAST JOURNALISM (See Language Arts) Recommendation of the department chairman
This course gives students an introduction to live television production. Students will learn techniques of producing, directing, editing, and anchoring a variety of shows in the studio providing valuable experience in the television industry. Instruction includes: sound, light graphics, and effects; switching, recording, editing; use of a video camera; and the production process.

FLASH I (678) 0.5 Credit
In this project-based course, students will explore Flash’s drawing, animation and audio capabilities and build interactive content that can be shared over the Internet. The course will cover creating graphics with Flash, animation and motion graphics, adding basic interactivity, dynamically changing graphics, creating triggered sound effects, as well as a basic introduction to programming with Flash’s ActionScript. Students will learn how to create unique motion graphics. They will learn about the aesthetics of design, motion and sound. By constructing user interactive projects, students will be challenged to think in a non linear way. Students will learn to use a combination of logical reasoning (basic programming), critical thinking and artistic creativity.
This course encourages highly motivated students through complex applications in Flash, such as animation & tweening, layered timeline animation, and data integration. The course covers the full spectrum of Flash functions, including creating movies, 3D animation, interactive demonstrations, graphics and special text effects. The course furthers student’s application of layers, programming with ActionScript. Upon completion of the course, students will be equipped with the tools to create vector graphics and animations using Flash, integrate media files, and then export Flash files to the web.
FINE AND PRACTICAL ARTS DEPARTMENT

Fine and Practical Arts play an important role in the development of the whole student. Music, Art, Family Consumer Science, and Industrial Arts contribute to personal development, expression, creativity, and basic skills necessary for every student. Electives offered in the Fine and Practical Arts offer a variety of experiences and are an integral part of the educational program.

Fine and Practical Arts electives are designed to aid the student in becoming a well-rounded individual. Curriculum is developed to be of interest to all students, regardless of talent, and encourages active participation in the classroom. The experiences resulting from participation stimulate growth of the student, create an awareness and appreciation for the Arts as a universal enrichment medium, and develop the student physically, intellectually, and emotionally.

PRACTICAL ARTS DEPARTMENT—FAMILY AND CONSUMER SCIENCES

Child Care
Certificate Program

7.0 total credits required for each certificate program: Required credits (in bold) plus elective credits

Students planning to pursue a career in Early Childhood have the opportunity to earn 3 credits for Introduction to Early Childhood and 3 credits for Society and the Child at Northampton Community College. A portfolio is used as the assessment for achievement and is completed as part of the course work in Exploring Childhood Levels 1, 2 and 3, Child Development and Parenting.

CHILD CARE AND SUPPORT SERVICES MANAGEMENT

Early Childhood Certificate

<table>
<thead>
<tr>
<th>Grade 9</th>
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<tr>
<td>Foods and You (1.0 credit)</td>
<td>Parenting (0.5 credit)</td>
<td>Psychology Sociology Child Development (0.5 credit each)</td>
<td>Exploring Childhood – Level 1 Exploring Childhood – Level 2 (1.0 credit)</td>
</tr>
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</table>

Recommended Electives: Exploring Childhood – Level 3, On Your Own, Multicultural Foods, American Cookery

FOODS AND YOU (700)
1.0 Credit

Nutrition is the emphasis of the Foods and You class. Develop your food preparation skills, learn how to select food, plan healthy meals, and work safely and sanitarily in the kitchen. Become familiar with healthy choices as you prepare foods from each food group. Compare foods and ingredients and learn to fit them into a well-balanced diet.

AMERICAN COOKERY (701)
0.5 Credit

Explore how and why particular foods became a part of cuisine in various regions of the United States. Sample menus and dishes—some traditional, some modern day. Your food preparation skills will be expanded as you prepare dishes and menus representative of United States regional cookery.

MULTICULTURAL FOODS (702)
0.5 Credit

This course explores different styles and methods of food preparation from various countries. Social customs, geography, climate, and economic influences which affect food choices will be studied. Your vocabulary of ethnic cooking terms and your food preparation skills will be expanded as you prepare dishes and meals from around the world.
CHILD DEVELOPMENT (704) 0.5 Credit

Child development is a course designed to introduce students to child development and childcare concepts. Human development from age three to school age is included. Course content focuses on understanding the physical, intellectual, emotional, and social development of children. Practical hands-on creations of projects allow students to apply knowledge to skill development.

PARENTING (705) 0.5 Credit

The Parenting course provides students with the opportunity to investigate the rewards and responsibilities of parenting. Students will learn how to nurture and encourage a child through positive interactions. Through projects and classroom activities, students will explore the physical, intellectual, emotional and social development of children from birth through 12 years old. This course is a requirement for the Early Childhood Tech Prep program and is recommended prior to taking Exploring Childhood.

EXPLORING CHILDHOOD (706) 1.0 Credit

If you enjoy working with children or want to pursue a career in Early Childhood Education, this is the course for you. This program provides an opportunity to study the development of children three through five years old. The student will participate in observing, interacting, planning activities and teaching in a lab preschool program. This course is a requirement for the Early Childhood Tech Prep Program. After completing of Exploring Childhood Level 1, a student may choose Level 2 for an additional 1 credit 18 week course.

ON YOUR OWN (707) 1.0 Credit

A “must” course for all students looking forward to the challenges of independent living after high school. Learn good communication skills; create a resume portfolio; find and furnish your own apartment. Learn money management, balance a checkbook, use credit wisely. Other topics include nutrition, consumer economics, and child development. Projects throughout the course give you real-life experiences.

DESIGN IN INTERIORS (710) 0.5 Credit

Planning a career in Interior Design? Renting your first apartment? Design in Interiors teaches home design, floor plan studies, furniture balance, color usage, floor and window treatments and furniture qualities. Learn how to design unique floor and wall surfaces. Create appealing rooms with very little money. Have fun creating a make-over for your own room or creating a “dream” room.

ADVANCED CLOTHING (711) 0.5 Credit

Love sewing? Do you have intermediate or advanced sewing skills? In this course, you will challenge yourself with re-creating an existing garment into something new. For your final project, why not make a formal dress or a jacket? You will improve your sewing knowledge from layout through the construction process in this course. Students must purchase their own materials.

CLOTHING CREATION (713) 0.5 Credit

This course is for someone who never sewed before or someone who is a beginner. Learn about color coordination, natural and synthetic fibers, sewing vocabulary, and how to read a pattern. Learn basic hand-sewing and machine sewing techniques. Create your own garment in an easy, step-by-step process. Students must purchase their own materials.
FINE ARTS DEPARTMENT—ART

ART 1 (718)  
1.0 Credit

This is an introductory course. This course is devoted to teaching the different techniques of drawing and painting through the use of the elements of art: line, shape, value, form, space, color, and texture. Students will be introduced to the principles of design. Art history will be used to develop criticism and aesthetic judgment skills. Students will be responsible for course terminology, class projects, homework assignments, and a sketchbook. Evaluation is based on creativity, craftsmanship and fulfilling objectives of studio work. Art work will be exhibited.

ART 2 (719)  
1.0 Credit

Art 2 is an in-depth study of the principles of design—rhythm, movement, balance, proportion, variety, unity, and emphasis. Students will explore both two-dimensional and three-dimensional media to create a variety of visual experiences. Art history, criticism and aesthetics will be emphasized. Students will be responsible for vocabulary, studio work, homework assignments and a sketchbook. Evaluation is based on creativity, craftsmanship, and fulfilling objectives of class projects. Art work will be exhibited.

ART 3 (720)  
1.0 Credit

This course has been designed for the serious advanced art student. Students will be exposed to contemporary design through problem solving using various mediums and techniques. Students will work towards stimulating creativity in finding their individual style. Careers in the visual arts will be discussed. Students are responsible for studio and homework assignments and a sketchbook. Evaluation is based on creativity, craftsmanship and fulfilling the projects objectives. Art work will be exhibited.

ART 4 (721)  
1.0 Credit

This course is designed for students seeking to enter college-level art programs. Young people wishing to explore their talents and learn about careers in art and students seeking self-development and personal enrichment are encouraged to enroll in this course. Assistance with college entrance requirements and portfolio preparation is provided. Ultimately students will produce a portfolio of 15-20 examples of any type of two- or three-dimensional pieces. Evaluation is based on presentation of portfolio.

Note: Students are expected to secure their own portfolio case; school will not supply.

CERAMICS I (722)  
1.0 Credit

Ceramics is all about creating pieces of art out of clay. Clay will be used to make both creative sculptures and pottery on the wheel. The elements of art will be taught in combination with Art History and Criticism to help students develop their artistic skills. Work will be graded on creativity, effort, craftsmanship, sketchbook work, and meeting the guidelines of the projects. Students will have their artwork exhibited in the art show.

CERAMICS II (723)  
1.0 Credit

In Ceramics II, the skills learned in both sculpture and pottery will be expanded on. Students will incorporate the elements and principles of art into their work, with a focus on developing concepts such as self-expression and the incorporation of mixed media into artwork. Work will be graded on creativity, effort, craftsmanship, sketchbook work, and meeting the guidelines of the projects. Students will have their artwork exhibited in the art show.
PHOTOGRAPHY I (724)
1.0 Credit

This course in black and white photography introduces the student to the basic skills associated with the use of: photograms, pinhole cameras, SLR and simple cameras, film processing, and custom darkroom printing. Works of great photographers and the history of photography are reviewed through group projects. The photograph as a means of artistic expression is stressed. Assignments will encourage the use of the principles of composition using: light, line, texture, form, and space. The students will explore in greater depth additional techniques which may open new doors of creative expression. Use of advanced darkroom techniques such as: local control of print density, contrast filters, vignetting, texture screens, combination printing, use of toners, and mounting presentations will be among the techniques explored. Creativity and craftsmanship will be stressed along with improving composition as the course progresses. Evaluation is based on acquired studio skills and class work.

Note: Any camera that accepts 35mm film is sufficient for this course. An adjustable 35mm camera is encouraged if available. Students are responsible for their own film.

PHOTOGRAPHY II (725)
1.0 Credit

This advanced course offers many options for students to construct a program of study. Long term projects such as photo essays, portraits, studio light, electronic flash are among the areas of study. Portfolio design for students planning a photo major is one of the options. Students are encouraged to work with themes while still having the freedom to explore techniques such as: hand coloring, combination printing, photo montage, and high contrast. Increasing visual perception and improving craftsmanship are stressed more at this level. There are regular critiques of class work after each assignment. In addition, a outdoor nature photography hike, a studio portrait lighting workshop, and a digital photography workshop are highlights of the program. Students enrolled in this course should enjoy photography and be serious about learning more about photo process and techniques, and students looking for a career in the area of photography would benefit form this course. Students should be able to work with less supervision on projects of their own design. Evaluation is based on acquired studio skills, levels of difficulty, and class work. An adjustable 35mm camera is best for this course.

Note: Various projects may require students to contribute to cost of supplies.

PHOTOGRAPHY III (726)
1.0 Credit

This course will apply techniques learned in Photo 1 and 2 and expand uses of color, digital photography, photo restore, Polaroid transfers, studio lighting, internet exploration, and career areas. Photo projects will explore the above areas and ultimately produce an interactive portfolio in addition to finished prints. Use of digital manipulation and design will be a major area of concentration. Research utilizing the Internet’s vast resources will be required to explore and interact with photography and design areas on the WWW. Multimedia applications and interdepartmental projects will be explored. Career applications and skill areas will be identified through the research and interaction with outside companies. This course if for the serious, self-motivated student who has a skill for photography and the desire to explore career avenues in photography’s Digital and color areas. Evaluation is based on acquired skills and related projects.

Note: A 35mm adjustable camera is required for this course. A lab fee may be required for various projects.
FINE ARTS DEPARTMENT—MUSIC

SONGWRITING (741)
1.0 Credit

Melody and lyric writing is a skill than can be learned and this class will show you how. Through proven tools and techniques, you will learn how to write memorable melodies and lyrics and discover the dynamic relationships between melody, harmony, rhythm and rhyme. Students will need to sing and present projects for this class.

MUSIC THEORY I (743)
1.0 Credit

This course explores the fundamental components of Western Classical Music, i.e. rules of writing and performing, scales, modes, intervals, and melodic and harmonic analysis. Music theory develops a deeper understanding of the materials and structures of Classical music through written exercises, analysis, composition, and ear training. Music Theory I is a “MUST” for students planning to enter elementary or secondary music education courses in college.

INTRODUCTION TO PIANO (746)
1.0 Credit

This course is designed for the student who wants to learn to play the piano. Beginning techniques of the piano are presented and performed on a multi-timbral keyboard synthesizer. The class will be taught how to read and play familiar repertoire that is geared toward the student interest. Practicing is done during the class period. It is NOT necessary to have a keyboard at home.

ADVANCED PIANO CLASS (747)
1.0 Credit

The class is designed to read and perform more challenging piano music. The focus will be on developing technique and performing various styles of repertoire including present day music.

M.I.D.I. TECHNOLOGY I (MUSIC INSTRUMENTAL DIGITAL INTERFACE TECHNOLOGY – PART 1) (748)
1.0 Credit

Experience the fusion of music and technology while having fun. A variety of sequencing (recording), notation (printing), computer assisted instruction, CD Rom, and other instrumental software will be utilized to compose individual works using the M.I.D.I. Korg X-5 keyboard in a musical, computerized lab setting. This course explains the basics of M.I.D.I. technology and the necessary knowledge to make critical judgments about selecting music hardware and software. Sound effects and multi-timbral instruments will be explored to create compositions. All students will be taught the basics of music such as notes, accidentals, rhythm, key, meter, and dynamics.

BAND (756)
1.0 Credit

Prerequisites: A fundamental knowledge of a band instrument is necessary for membership. Entrance is attained through audition. Private lessons are encouraged and middle school participation is expected.

The Patriot Band meets first period every other day. Throughout the football season, rehearsals begin at 7:00 A.M. Summer rehearsals begin in mid-August. Performances include football games, parades, assembly programs, pep rallies and concerts. Grading, seating and continued membership are determined through periodic auditions and attendance.
CONCERT CHOIR (758)
1.0 Credit
Prerequisites: The major prerequisites are a strong interest in singing and the ability to sing melody and harmony parts as determined by audition. Previous membership in choral organizations, while helpful, is not required.

The Concert Choir is a choral organization, which meets first block every other day. Membership in this choir provides an opportunity for singing a variety of music repertoire. Two major concerts are presented each year (December and May), in addition to occasional assemblies and/or community programs. Opportunity is provided to strengthen abilities in music reading and to improve techniques in breathing, tone quality, diction, and phrasing through the preparation of music to be presented in concerts. A formal and informal (with choreography) choral setting enhances the repertoire. This ensemble is open to all interested students in 9th through 12th grade.

PATRIOT CHOIR (760)
1.0 Credit
Prerequisites: The major prerequisites are a strong interest in singing and the ability to sing melody and harmony parts as determined by audition. Previous membership in choral organizations, while helpful, is not required.

The Patriot Choir is a choral organization, which meets first block every other day. Membership in this choir provides an opportunity for singing a variety of music repertoire. Two major concerts are presented each year (December and May), in addition to occasional assemblies and/or community programs. Opportunity is provided to strengthen abilities in music reading and to improve techniques in breathing, tone quality, diction, and phrasing through the preparation of music to be presented in concerts. A formal and informal (with choreography) choral setting enhances the repertoire. This ensemble is open to all interested students in 9th through 12th grade.

ORCHESTRA (763)
1.0 Credit
Prerequisites: Audition

The Orchestra is open to all string players possessing a fundamental knowledge of the instrument. The number of wind and percussion players are limited in order to balance the instrumentation of the orchestra and are chosen by audition. The wind and percussion players form a separate group called the Wind Ensemble and the string players also form a separate group called the String Orchestra. Both groups perform in two concerts throughout the year and rehearse from 7:00-8:00 a.m. during block 1 orchestra. The orchestra plays a wide selection of music for public concerts in November, December, April, May. The orchestra also provides music for many school programs including commencement. Grading, seating, and continued membership are determined through periodic auditions and attendance.

LES CHANTEURS (783)
0.0 Credit
Prerequisites: The major prerequisites are a very strong interest in choral music, extensive music reading ability, and membership in the Concert Choir. Auditions are required prior to selecting this course. Membership is by audition only.

Les Chanteurs is a choral organization that rehearses a portion of block one during regular school hours and rehearses after school at least once a week. Membership in this choir provides an opportunity to sing a variety of music levels. In addition to two major concerts presented each year (December and May), Les Chanteurs present many school and community concerts. Membership is limited to approximately 36 students who are selected from the Concert Choir through auditions.

THE HISTORY OF MUSIC (753)
0.5 Credit

This course will explore the various composers and stylistic periods of music from Medieval to current. Basic concepts and elements of music will be explored in depth and will be related to current popular music as well.
# PRACTICAL ARTS DEPARTMENT—INDUSTRIAL ARTS

## PRINTS AND GRAPHICS 1 (727)

### 0.5 Credit

This is an introductory course in printmaking and design. Students will incorporate printing techniques that have been in use for centuries, such as screenprinting and linoleum blocks with the most modern techniques, computer graphics. Designs and texts will be transferred onto paper and fabric, from the computer. Students will also learn other printing techniques such as pen and inking and printing with stencils.

## ARCHITECTURAL DESIGN 1 (729)

### 1.0 Credit

Learn about the principals and elements of design in planning and building homes. Draw custom functional floor plans for living and work areas. Learn space planning, traffic patterns, environmental needs, and landscape planning. Learn basic building codes, blueprint reading, and mechanical and structural housing components. Discuss the impact of housing on the local, and state economies and the career opportunities. Design and build to scale architectural projects assigned. Mechanical drawing is a prerequisite or with teacher approval.

## ARCHITECTURAL DESIGN 2 (730)

### 1.0 Credit

INDIVIDUAL WORK. Each student is assigned client profiles and will design architectural products and spaces to meet the client's needs. Architectural drawing of a custom space with correct architectural symbols, concerns for traffic patterns, environment, energy conservation, and special needs design. Discuss design trends, production, and technology in today’s building market of houses, work areas, furniture and landscapes. Each student will build their designs to scale. Architecture I is a prerequisite.

## MECHANICAL DRAWING (734)

### 1.0 Credit

Mechanical Drawing is an introduction to drafting equipment and multi-view projection. Emphasis is on the mechanical aspect of drafting. Students will become proficient in the use of all drafting instruments and exhibit an understanding of all techniques associated in the field of drafting. Mechanical drawing is a prerequisite for architecture.

## WOODWORKING 1 (735)

### 1.0 Credit

Woodworking 1 is a beginner’s course featuring the safe use of handtools and machines associated with woodworking principles. Students will learn basic shop practices in pattern layout and job setup for a safe learning experience as well as methods of cabinet construction and finishing techniques.

## WOODWORKING 2 (736)

### 1.0 Credit

Woodworking 2 is a course in wood joining and related machine processes involved in working with hardwoods. Advanced woodworking methods are included in furniture construction. Students select areas of Woodworking to specialize.

## WOODWORKING 3 (737)

### 1.0 Credit

Woodworking 3 is a course that will be partly independent but with instruction on advanced construction techniques.
HEALTH/PHYSICAL EDUCATION

The Health and Physical Education Department allows students to have the opportunity to develop a range of fundamental motor and movement skills that form the basis of leisure, sporting, and recreational activities. Students will benefit from gaining an understanding of the importance of personal and community actions to aid their physical, social, and emotional health. Courses are designed to promote health and life-long participation in physical activity for a long, healthy life.

TARGET (823)
0.5 Credit

The TARGET physical education program is designed for the student who may not excel and achieve high grades in the normal physical education environment. The TARGET student may not enjoy activities of the competitive nature that are offered in regular PE classes. This program includes low impact activities that will promote physical wellness as well as build positive self-esteem. Students will be expected to set goals and make progress towards these goals using TARGET journals which document exercise and diet. The TARGET program includes activities such as: use of the Freedom High School Fitness Center, state of the art walking track and weight room. TARGET Physical Education may be taken in place of regular physical education to meet graduation requirements.

HEALTH 1 (831)
0.5 Credit

This health course is required for all ninth grade students. It must be satisfactorily completed for graduation. This course will include aspects of global health, including AIDS awareness, nutrition, fitness, decision-making skills, and lifestyle modification. Basic sex education instruction will also be included.

HEALTH 2 (832)
0.5 Credit

This health course is required for all tenth grade students. It must be satisfactorily completed for graduation. The health course will include curriculum dealing with relationships, appropriate decision-making skills in relation to alcohol and other substance, reading a medicine label and discussing over-the-counter and prescription medicines. Sex education includes information the male and female anatomy, signs of pregnancy along with the importance of prenatal care, and stages of labor and childbirth, STI’s and AIDS, decision-making processes in relation to abstinence, methods of birth control, and various issues dealing with teenage sexuality.

PHYSICAL EDUCATION 9/10 (828)
0.5 Credit

The physical education curriculum offers a variety of activities. Students will be involved in weight training, fitness activities, swimming, team sports, racquet activities, lifetime sports, and other teacher-selected activities. This course must be satisfactorily completed for graduation in both grades 9 and 10.

PHYSICAL EDUCATION 11/12 (906)
0.5 Credit

This physical education curriculum offers a variety of activities. Students will be involved in team sport activities, racquet activities, aerobics, fitness activities, weight training, swimming and other teacher selected activities. This course must be satisfactorily completed for graduation, and students may only take this course once in each grade.
HEALTH AND PHYSICAL EDUCATION ELECTIVES

MAXIMUM FITNESS (825)  
0.5 Credit  
Prerequisite: Students must have authorization from PE Chair  

This course is designed for the student who wants to improve his/her fitness level through an intense individualized total conditioning program. Students will learn basic exercise physiology, nutrition and its role in fitness. A thorough fitness testing and appraisal will aide the students in designing and applying their conditioning program. This class involves running over two miles per day along with strength training every other day. Students must be able to complete the two-mile run. Students may utilize this credit for either the 10th, 11th, or 12th grade Physical Education requirement.

F.O.T.S. (FUTURE OPPORTUNITIES THROUGH SPORTS) (826)  
0.5 Credit  

This course is designed to give students the opportunity to explore a variety of sport and fitness related activities that may provide a future source of income. Students will learn the rules of several sports, such as football, basketball, softball, baseball, etc. and be introduced to the role of an official for these sports. Also, it will introduce CPR, First Aid, and Lifeguarding skills necessary for certification as a lifeguard; therefore, a large portion of instruction is completed in the pool.

ELECTIVE PHYSICAL EDUCATION 11-12 (908)  
0.5 Credit  

This course is offered to those juniors and seniors who would like to take Physical Education more than nine weeks during the school year. Students must have a grade average of B or higher in their previous physical education class and receive a recommendation and approval by the department. Students may only take this course once in each grade level.

PE ATHLETE (911)  
Prerequisites: Students must be active participants in the Freedom High School athletic program and have the authorization of the varsity coach.

Students may utilize this course for either their 11th or 12th grade physical Education requirement. This course is offered only to the student-athlete population. The course affords in season athletes the opportunity to maximize the strength training, cardio-vascular and technical aspects of their discipline in a classroom environment. The Physical Educator communicates with the head coaches on the specific needs of the athletes. This course involves an intense strength-training component on a daily basis.

HEALTHY LIVING (835)  
0.5 Credits  

This course is an elective Health/PE course for students who are interested in improving their general health. Whether they are interested in maintaining a healthy weight, cleaning up their diet, or learning the basics of strength training and cardiovascular exercise – this class will cover it all. The course will follow a hybrid format: students will spend time in both the classroom and in the fitness facilities. Healthy Living is open to students in grades 9-12.

At the completion of this course, students will be able to:
- Identify healthy nutritional choices for weight loss from each of the six major nutrients.
- Demonstrate several different strength-training exercises for general health.
- Describe the physical, mental, emotional, and social benefits of healthy living.
- Apply techniques learned in class to real-life situations and improve student health.
- Calculate various fitness formulas, including Target Heart Rate Zone, Maximum Heart Rate, Recommended Calories per Day, and One Repetition
ENGLISH FOR SPEAKERS OF OTHER LANGUAGES
(ESOL - Grades 9-10-11-12)

All students taking ESOL classes are classified
ELL (English Language Learners)

ESOL LANGUAGE ARTS LABORATORY (063 / 063B)
2.0 Credits
Prerequisites: English Language Learner as classified by language assessments
Reading level assessed using the Scholastic Reading Inventory (SRI)

This READ 180 course focuses on improving reading comprehension skills, accompanied by vocabulary study and writing skills, that are needed to be more successful in academic areas. The READ 180 program will be used as the main reading component of this course. This course should be taken by those ELLs who demonstrate a need for this program based on the Scholastic Reading Inventory (SRI).

ESOL ENGLISH PROFICIENCY DEVELOPMENT (064 / 064B)
2.0 Credits
Prerequisites: English Language Learner as classified by language assessments
Reading level assessed using the Scholastic Reading Inventory (SRI) and the Scholastic Phonics Inventory (SPI)

This ESOL SYSTEM 44 course focuses on improving phonemic awareness and reading comprehension skills, accompanied by vocabulary study and writing skills, which are needed to be successful in academic areas. The SYSTEM 44 program will be used as the main reading component of this course. It should be taken by those ELLs who demonstrate a need for this program based on the Scholastic Phonics Inventory (SPI).

ESOL 3 ENGLISH LANGUAGE DEVELOPMENT (072 / 072B)
1.0 Credit / 2.0 Credits
Prerequisites: English Language Learner as classified by language assessments
Concurrent with ESOL 3 Reading or READ 180

This English language development class is for students who are highly motivated but whose native language is a language other than English. It is a continuation of ESOL 2 English Content Language Development. An integrated language approach, which incorporates language in the content areas, is utilized in order to better prepare the students for success in mainstream courses in the following year. An emphasis is placed on the writing process, higher order thinking skills and reading in the content areas as well as literature.

Note: This course is 1.0 credit if taken with READ 180, 2.0 credits if taken with ESOL 3 Reading.

ESOL 4 ENGLISH LANGUAGE DEVELOPMENT (073)
1.0 Credit
Prerequisites: English Language Learner as classified by language assessments
Concurrent with Transitional English for English Language Learners

This English language development class is a continuation of ESOL 3 English Language Development. The class is designed to give the students greater linguistic competencies by working with complex grammatical structures, involving the students in literature and continuing to develop the writing process. The students are required to fully participate in discussions pertaining to literary selections read by the class. A great emphasis is placed on broadening the students’ active vocabulary.

ESOL ENGLISH PROFICIENCY DEVELOPMENT LEVEL 4 (083)
1.0 Credit
Prerequisites: English Language Learner as classified by language assessments
Concurrent with ESOL English Language Development

This transitional English for language learners course further develops the English Language Learner’s skills in academic reading, writing, and (academic delete in parenthesis) oral/aural communication. Literature selections parallel those used in the mainstream ELA classes. This course prepares students for continuation of higher education upon graduation.
ESOL ENGLISH LANGUAGE AND LITERATURE (084)
1.0 Credit
Prerequisites: English Language Learner as classified by language assessments
Completion of ESOL 4 courses

This extension course is for those students who have completed the ESOL 4 classes and who are still at the Advanced level of English development. Students will continue to improve reading and writing skills necessary for success in content area courses. Test-taking strategies will also be developed.

ESOL 3 UNITED STATES HISTORY (082)
1.0 Credit
Prerequisites: English Language Learner as classified by language assessments
Concurrent with ESOL ACD 3 Language Development

This United States history course is geared for the academically motivated student who is seeking entry into an academic history program during the following year. This course provides a general survey of United States history from discovery, exploration, and colonization through the present. This course will acquaint the students with the basic premises upon which the U.S. was founded and enable them to have a better understanding of American culture and the American political system.
To enhance curricular choices for all students, the Bethlehem Area School District proudly partners with Bethlehem Area Vocational-Technical School (BAVTS) to offer hands-on experience and specialized skills in a variety of Career Pathways. Students in grades 10, 11, and 12 have the option of choosing to attend either the Northampton or Bethlehem campus of BAVTS part-time, where they can apply the academic knowledge learned at the high school, while refining the technical skills required for college admissions and successful employment.

BAVTS CURRICULUM LEVELS
Start your program at BAVTS in your sophomore, junior, or senior year. If you register as a sophomore, you’ll benefit from a full three-year sequence to help you meet your goals.

LEVEL 1 – THE CORE CURRICULUM PROGRAM
A one-year program that rotates three (3) shops is the first year at BAVTS. It is designed to assist students for entry level in a given occupational specific program area. This program is related to the work goals of quality education as established by the Pennsylvania Department of Education. The integrated system for Workforce Education Curriculum will be used to integrate vocational education with academic skills. The CORE curriculum program is delivered through a plan of competency-based instruction and is articulated with the academic areas at Bethlehem, Northampton and Saucon Valley School Districts as well as with each job specific lab.

Level 1 students receive a foundation in the occupational departments chosen. This curriculum provides the essential skills and knowledge that apply to an entire occupational area along with related math.

LEVEL 2 – CONTINUATION IN STUDENT SELECTED MAJOR
Students will spend the year focusing on professional skill development in the major selected. Level 2 students work with highly specialized equipment and theories along with higher-level math and career studies. A sample of a Level 2 student’s BAVTS schedule would involve three periods of the selected major and one period of math.

LEVEL 3 – MASTERY OF PROGRAM MAJOR
Students will continue to refine their skills making it possible for them to be eligible to receive national certification in their field. On-the-job training through apprenticeships and co-op placements are possible opportunities for students at this level. After graduation, preparation received by Level 3 students will enable them to successfully continue on their chosen path – college or work force.

THE ACADEMIES AT BAVTS*
*The Academy programs are honors-level programs.
BAVTS offers high achieving students the opportunity to accent their high school schedule by attending one of two (2) Academy programs. These programs run yearly in 80-minute blocks, which is approximately 240 hours in length. The offerings begin with Applied Engineering and our collegial association with Lafayette College and Lehigh University, to the Academy for Medical Sciences that spends the second half of the school year training at Lehigh Valley Hospital-Muhlenberg. These public/private partnerships create a wonderful opportunity for student exploration and skill enhancement while enrolled in high school coursework. Academy courses may be taken as independent college preparatory units; Level I courses are not required.

- The Academy for Applied Engineering
- The Academy for Medical Sciences
MATH & LITERACY INITIATIVE
The Math and Literacy Coaches at BAVTS present students with real-life activities, in which integrated academics are included at all levels of instruction. Incorporated in the lessons of each course are cooperative learning exercises, discovery lessons, use of manipulatives and application labs. Academic integration strategies are included in all curricula in an effort to support student success on standardized tests, industry related certifications and future career goals.

STATE-OF-THE-ART INDUSTRIAL TRAINING LABS
Advisors from business and industry work closely with our staff to make sure our programs and equipment are up to date. Along with the essential specialized technical and industrial equipment, BAVTS has over 400 computers available for student use in a wide range of applications such as CAD, graphic design, video, and engineering.

STUDENT ORGANIZATIONS

FFA (Future For Agriculture)
This is the oldest CTSO in the United States. The FFA Organization serves as part of the instructional program, preparing students for careers in agriculture and related fields. This includes all phases of Horticulture including sales, floriculture, and landscaping. The local FFA Chapter plans and conducts activities to develop skills, leadership abilities, and spirit cooperation among members. A unique feature of the FFA is that learning does not end in the classroom. Students use knowledge gained in the classroom as a foundation for supervised experience programs in activities for FFA. This includes participation in local fairs, shows, and social events held by the local chapter.

HOSA (Health Occupations Students of America)
HOSA is a national career and technical organization for secondary, post secondary, and adult students enrolled in the health occupations education. Activities of HOSA are an integral part of the instruction program that provides occupational skills, as well as leadership skills. It was officially formed in November 1976, and comprises state organizations under the auspices of the State Board of Education and Health Occupations Education chartered by the national organization.

NTHS (National Technical Honor Society)
NTHS is an honor society for career and technical students who have distinguished themselves in both academic pursuits and career and technical excellence. Membership is by invitation and eligibility is based upon grades at the sending high school, BAVTS and student activities and involvement in the community. Students also need a recommendation from their sending school and their career and technical instructor. Students completing grades 10 and 11 are eligible to be considered for membership.

SkillsUSA
The SkillsUSA organization is composed of students from the different trade, industrial and health occupation labs in our school. The various programs help students develop leadership qualities through educational, career and technical, civic, recreational and social activities. Excellence in scholarship, craftsmanship, and personal development are encountered through a national achievement program and national competitive activities. The SkillsUSA Championships is the national level competition, and is part of the annual SkillsUSA National Leadership Conference. In the competition, students demonstrate the occupational and leadership skills they have learned in the lab and in the classroom.

Local HOSA Chapters provide programs and activities to help individuals develop their physical, mental, and social well-being. Members strengthen their leadership and citizenship abilities through interaction with professional, business, and other student organizations.
CABINETMAKING
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.

CARPENTRY – Building Trades
The Building Trades program involves several different construction disciplines including, but not limited to carpentry, electrical, and masonry. 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.

CARPENTRY
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.

ELECTRICAL CONSTRUCTION
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.

HEATING/VENTILATION AND AIR CONDITIONING
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.
MASONRY

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.

PLUMBING

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 hydraulic 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.

COMMERCIAL ART

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.

FASHION INDUSTRIES

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.

GRAPHIC (& Print Technology) COMMUNICATIONS

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.
VIDEO & MEDIA ARTS

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.

WEB DESIGN

A web designer must be able to lay out, 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.

BAKING

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.

CULINARY ARTS

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.

CULINARY & EVENT PLANNING

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. This program also 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).
ACADEMY FOR MEDICAL SCIENCES*

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.

*See Academy program description on page 61.

HEALTH CAREERS

Students in this program of study will receive high quality training that meets the needs of business and industry. Instruction consists of core course content with experiences in various health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting, etc. In addition, the skills taught will include the seamless integration of academic concepts with technical competencies. Furthermore, the skills taught will identify and refine aptitudes for job advancement, security and portability. At the end of the program students will take the nationally recognized NOCTI test that will measure a student’s mastery of occupational skills. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas.

AUTO COLLISION REPAIR

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

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.
PRECISION MACHINING

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

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.

COSMETOLOGY

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.

ESTHETICIAN

The objective of the Esthetics program is to thoroughly train all students in the field of anatomy of the skin, skin diseases and disorders, facial hair removal, facial massage, facial machines, facial treatments, applying make-up, special occasion make-up, corrective make-up, artificial eye lashes, safety precautions, electrotherapy and light therapy, skin care and make-up. Before practicing as an Esthetician in the state of Pennsylvania, students must complete 300 hours of training in a licensed esthetics program. To enter the program, students must have completed a 10th-grade education. After meeting the requirement for education, students must take the Pennsylvania examination for esthetics licensing, which includes testing in esthetics theory and a practical examination.

HORTICULTURE/LANDSCAPING

Students in this program learn landscaping techniques, how to grow greenhouse foliage, bedding plants, and flowering bulb plants. They will practice floral and landscape design basics and make flower arrangements. Students experience all aspects of the Horticulture/Landscape industry including propagation, culture and use of flowering and tropical indoor plants. A large part of the program is marketing, sales, and customer service, as well as the identification of plants important to the local labor industry. At the end of the program students will take the nationally recognized NOCTI test that will measure a student’s mastery of occupational skills. Students may qualify for the Pennsylvania Skills Certificate, indicating high performance and job readiness in multiple areas.
NAIL TECHNICIAN

Training as a Nail Technician can lead to a lifetime of possibilities. According to the Bureau of Labor Statistics’ Occupational Outlook Handbook, employment of manicurists and pedicurists is expected to grow 19 percent through 2018, creating a high demand for professionally-trained technicians. The objective of the technician course is to thoroughly train all students in the field of natural and artificial nail care. Once a student has completed 200 hours, he or she will be eligible to sit for the State Board Examination, earn a Pennsylvania Nail Technology License, and obtain his or her first job as a professional technician.

PROTECTIVE SERVICES

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.

ACADEMY FOR APPLIED ENGINEERING*

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.

*See Academy program description on page 61.

ELECTRONIC ENGINEERING & MANUFACTURING

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.

PRECISION MACHINING

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 how 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.
Fast-Track Program In partnership with Bethlehem Area Vocational-Technical School

What is the Fast-Track Program?
This program is designed to give Freedom High School ninth grade students who are at or above grade-level standards the opportunity to attend Bethlehem Area Vocational-Technical School during their freshman year. This is a career exploration opportunity that will rotate students through a minimum of ten career areas offered at BAVTS on a flex schedule during block one of their school day. By the end of the school year the students should have a clear indication of what their potential career goals will be and what path at the secondary level will get them there.

The Fast-Track Rotation
Students will attend a different program area during first block (8:00am – 9:10am) for ten consecutive days and on the eleventh day they will start the same rotation over again.

In the event that there is a school closing or delay rotating students will miss that days planned activities.

How will the Fast-Track students be graded?
Students in the Fast-Track program will be assigned to a homeroom teacher who will act as their teacher of record and rotation facilitator. This individual will be responsible for gathering performance data from the program instructor who will provide daily work ethic grades.

A sample schedule is provided below (This schedule is based on 15-23 Students):

<table>
<thead>
<tr>
<th>WEEK ONE</th>
<th>WEEK TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday: Commercial Art</td>
<td>Plumbing</td>
</tr>
<tr>
<td>Tuesday: Graphic Communications</td>
<td>Cabinetmaking</td>
</tr>
<tr>
<td>Wednesday: Culinary &amp; Events Management</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Thursday: Health Careers</td>
<td>Automotive Tech.</td>
</tr>
<tr>
<td>Friday: Protective Services</td>
<td>Welding</td>
</tr>
</tbody>
</table>

After week two we repeat the rotation...
The schedule would be altered and include more program areas should the number of students enrolled meet or exceed 24. In this event the class would be divided in half and the groups would flip-flop rotations at mid-semester. Other courses available for rotation are listed below:

<table>
<thead>
<tr>
<th>Building Trades</th>
<th>HVAC</th>
<th>Horticulture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fashion Industries</td>
<td>Precision Machining</td>
<td>Web Design</td>
</tr>
<tr>
<td>Baking</td>
<td>Video Media Arts</td>
<td>Masonry</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>Cosmetology</td>
<td>Carpentry</td>
</tr>
</tbody>
</table>

**Fast-Track Students Stay Together**

The ninth graders will be in their own program and not part of the traditional AM rotation at BAVTS. This will assist in maintaining the integrity of the Team approach that some schools are utilizing throughout our sending districts.

For information on career opportunities, the education necessary to obtain them and salary information please visit the CareerLink Lehigh Valley website at http://www.careerlinklehighvalley.org/##.