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**A Message from the Principal  
to  
Students and Parents**

This book contains all of the courses and the suggested course map for East Allegheny High School. These courses are the result of years of curricular work that took place with our faculty and took into account requirements for the Keystone Exams. The courses are aligned with the Pennsylvania Common Core State Standards and are designed to be rigorous for all students of all abilities. Many courses heterogeneously group students in order to maximize the student's ability. The Board of Education, Administration, and Faculty believe that all students can achieve and that high expectations must be established for all students to succeed. This is done to provide all students with the knowledge and skill base they will need to compete in post-secondary studies and the global economy. Providing anything less does a disservice to our students and community.

Students and parents should review the course select book carefully, and students should select courses based upon their post graduation goals. A student's past academic performance, teacher recommendation, parent and student input, test data, and administrative/counselor interpretations will determine placement in courses.

Our counselors meet with students on a regular basis to review course selection, academic progress, and to provide assistance with academic and personal issues. If you or your child is having difficulty with the scheduling process, please contact your child's school counselor immediately to help resolve the issue or answer a question.

Parents may contact their child's school counselor via email or by calling the school's main number. Students can also schedule an appointment with their counselors during the school day. It is important that students pay attention to the information provided about selecting courses and that they adhere to all deadlines for course submission.

East Allegheny High School Administration and Faculty will make every effort to work with you and your child to insure that the proper classes are selected that will best prepare your child for college or the world of work and that the curriculum will be rigorous and challenging. Please take some time to discuss with your child what courses he or she would like to take and how those courses will prepare your child for life after high school.

Donald MacFann  
Principal  
East Allegheny Senior High School

**MINIMUM REQUIREMENTS FOR GRADUATION  
STATE & LOCAL  
(for the class of 2016)**

English	4 Credits
Social Studies	4 Credits
Science	4 Credits
Math	4 Credits
Physical Education	4 Years

**FRESHMAN YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives

**SOPHOMORE YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives

**JUNIOR YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives

**SENIOR YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives

**MINIMUM REQUIRED CREDITS FOR GRADUATION ARE 24.**

No High School diploma will be issued until all minimum credit requirements for graduation are met. This means students must earn at least a final grade of 'D' or above to earn credit for a course. If they do not earn at least 24 credits, they will not receive an East Allegheny High School diploma. **Students may not participate in the graduation ceremony unless they are receiving a diploma.** To make up required courses, consult with your School Counselor for information regarding accredited institutions where summer or evening programs are available. Fulfilling graduation requirements and any incurred tuition or cost are the responsibility of students and parents.

\*The accounting of your credits is **your** responsibility. If there is doubt in your mind, arrange a conference with your counselor for clarification.

**MINIMUM REQUIREMENTS FOR GRADUATION  
STATE & LOCAL  
(for the classes of 2017 and beyond)**

English	4 Credits
Social Studies	4 Credits
Science	3 Credits
Math	3 Credits
Physical Education	4 Years

**FRESHMAN YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives/Equivalent

**SOPHOMORE YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives/Equivalent

**JUNIOR YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives/Equivalent

**SENIOR YEAR**

English  
Social Studies  
Math  
Science  
Physical Education  
Two (2) Electives/Equivalent

**MINIMUM REQUIRED CREDITS FOR GRADUATION ARE 24.**

No High School diploma will be issued until all minimum credit requirements for graduation are met. This means students must earn at least a final grade of 'D' or above to earn credit for a course. If they do not earn at least 24 credits, they will not receive an East Allegheny High School diploma. **Students may not participate in the graduation ceremony unless they are receiving a diploma.** To make up required courses, consult with your School Counselor for information regarding accredited institutions where summer or evening programs are available. Fulfilling graduation requirements and any incurred tuition or cost are the responsibility of students and parents.

\*The accounting of your credits is **your** responsibility. If there is doubt in your mind, arrange a conference with your counselor for clarification.

## **Keystone Testing**

The Pennsylvania Department of Education requires all students to take the Keystone Exams as a requirement for graduation. The Keystone Exams will be given in the winter, spring and summer of the 2015-2016 school year and assess Algebra, Biology, and English Literature/Comprehension performance. The exams will be issued to all students enrolled in the above mentioned academic areas.

Individual Keystone Exams are comprised of two modules responsible for measuring student performance specific to Pennsylvania Common Core Standards. The exams are much like finals and are designed to measure individual student retention toward specific academic content. Students will take a particular Keystone Exam in the grade that they took the course. For example, if a student takes Algebra I in 9<sup>th</sup> grade, that is the year that the student will take the Keystone Exam. The exams are scheduled to be given in January and May and will mirror the facilitated content found within the curriculum. In order to pass the exams, students must score in the proficient or advanced range on the test.

Students are required to score in the proficient or advanced range on 3 Keystone Exams in order to graduate, and in future school years will take different exams each year in high school. During the 2015-2016 school year, students will be required to score proficient or advanced in Algebra, English Literature, and Biology. Students and parents will be informed of which exams they will be taking at the start of each school year.

The East Allegheny High School will offer our students every available incentive to succeed on the Keystone Exams. As such, students who show proficiency on the Keystone Exams will be given course credit toward their graduation requirement. By showing proficiency, the students will have displayed their retention of the course material and will be issued a passing grade in the form of an Administrative “D” if they have fallen short of receiving a passing grade within a specific course.

### **Keystone Remediation:**

Students who did not pass a specific Keystone Exam(s) will have the opportunity to retake the exam(s), however, they will be required to participate in remedial programming for those Keystone subjects that they failed to score in the proficient range. **These remedial classes will be mandatory for all those who did not score in the proficient range and will supersede any elective course.**

### **Class of 2017 and beyond**

Students who do not score proficient on a Keystone Exam and have been remediated will have to complete a Project Based Assessment created by the Pennsylvania Department of Education. **Students must be remediated once and have failed the exam twice in order to be eligible for the Project.**

### **Class Rank and Grade Point Average**

At East Allegheny High School, there are two statistics reported on a student's transcript: the grade point average, and the class rank. The difference between the two is as follows:

**Grade Point Average:** Grade Point Average (GPA) is calculated at the end of each quarter and is shown on students' report cards. Final grades are used to calculate the GPA that is shown on the students' transcript. The GPA is "**unweighted**" in that all grades that are used to calculate this average use the same scale, regardless of whether the class is on the, Academic level, Honors level or AP level. The scale used is:

<b>A (100% - 90%) =</b>	<b>4.0</b>
<b>B (89% - 80%) =</b>	<b>3.0</b>
<b>C (79% - 70%) =</b>	<b>2.0</b>
<b>D (69% - 60%) =</b>	<b>1.0</b>
<b>F (59% - 40%) =</b>	<b>0.0</b>
<b>Q (No credit due to attendance policy violation) =</b>	<b>0.0</b>

ALL courses, including elective and Physical Education courses, are included in GPA and class rank calculation.

**Class Rank:** In order to distinguish between students who have taken Academic courses and those who have taken Honors or AP courses, class rank is used. The class rank, therefore, is "**weighted**" to reflect the difficulty level of students' particular schedules. The following weights are utilized in this calculation:

<u>LEVEL</u>	<u>WEIGHT</u>		
<b>AP</b>	<b>A = 7.0</b>	<b>B = 6.0</b>	<b>C = 5.0</b>
<b>Honors</b>	<b>A = 6.0</b>	<b>B = 5.0</b>	<b>C = 4.0</b>
<b>Academic</b>	<b>A = 5.0</b>	<b>B = 4.0</b>	<b>C = 3.0</b>

**\*Note: All elective courses, including Forbes, will receive "Academic" weight.**

By calculating class rank based on this scale, the result is a higher rank for a student who took higher-level courses than a student with lower-level courses.

For example, a student who took Academic courses in 9<sup>th</sup> grade and achieved final grades of straight A's would have a 4.0 GPA. Another student with Honors courses in 9<sup>th</sup> grade who achieved straight A's would also have a 4.0 GPA. However, to indicate that the student with the Honors courses had a more difficult schedule, he or she would be ranked higher than the student who took the Academic courses.

**Sample schedules:**

<u>STUDENT #1</u>		<u>STUDENT #2</u>	
Academic English/9	A = 5.0	Honors English/9	A = 6.0
Academic Civics	A = 5.0	Honors Civics	A = 6.0
Academic Algebra I	A = 5.0	Honors Geometry	A = 6.0
Academic Biology/Lab	A = <u>5.0</u>	Honors Bio/Lab	A = <u>6.0</u>
	$20.0 \div 4 = 5.0$		$24.0 \div 4 = 6.0$

For class rank purposes, the student with 6.0 weighted quality points average (WQPA), would be ranked higher in their class than the student with 5.0 weighted quality points (WQPA).

**SUGGESTIONS FOR PLANNING YOUR PROGRAM**

- Become familiar with courses offered and what the courses are designed to teach. Also, know the category of the courses offered and the appropriate selection for your past performance and ability.
- Select subjects that fulfill requirements for graduation, future education, and occupational choices. If in doubt about career goals, it is wise to select a broad base of academic subjects.
- For students interested in careers that require college training, such as health-related professions, engineering, science, mathematics or education, a strong academic background is necessary.
- A student who plans to continue his/her education on the college level should begin to make plans in his/her high school career. Among the critical foundations:
  - Enrollment in academic classes in both required and elective courses.
  - Participation in test taking:
    - PSAT (grades 10 and 11)
    - SAT (grades 11 and 12)
  - Knowledge of the particular entrance requirements for the college of one's choice.
  - Consultation with the Guidance Department regarding college plans.
- For those interested in entering the job market immediately after high school, a firm foundation in English, Math, Science, and Social Studies is needed. Computer courses are strongly recommended.
- Discuss possible selections with teachers, counselors, and/or administrators and your parents for guidance in making wise choices.

## FAILURE OF A CLASS

1. If a student fails an academic class in a year, the student is permitted to “double up” on these credits in subsequent years in order to meet graduation requirements.
2. Summer school information is available in the guidance office. **It is your responsibility to see your counselor for credit evaluation and make ups.**
3. Please refer to the Student Handbook for information on the school district’s retention policy.

## CYCLE COURSES

The East Allegheny High School schedule operates on a six-day cycle. This means that each day is numbered 1 through 6, then begins at 1 again. Classes that are affected by the cycle are physical education classes, health, and science labs. The purpose of the cycle is to maximize the use of time in order to provide a quality education to our students. For example, within one period, a student may have science lab on day 1 and physical education on days 2, 3, 4, 5 and 6. Therefore, he or she can take different subjects within one class period.

## ONLINE COURSES

In the area of online course requirements, the online course would not count toward a student's grade point average. The online course will count as credit earned toward graduation only if it is taken for credit recovery of a failed course. Online courses can count as a pre-requisite course requirement for subsequent courses. A student cannot take an online course in lieu of taking the same course with a teacher here at East Allegheny. A student can take an additional online course in a topic the student failed during the course of the year as a credit recovery course. Students who wish to take a summer cyber course in order to meet a course pre-requisite must have earned a 90% as a final grade for the year in the course that he or she just finished during the regular school year and must then maintain a 90% grade average in the online course in order to advance to the next course during the regular school year.

## COURSE SEQUENCE CHANGES

Please note that there are flow charts found in this book for each academic department that provide a suggested sequence for the enrollment of courses. However, the administration is aware that there are cases where a student may deviate from these sequences due to any of the following reasons:

- a. A student may “double up” on certain courses within an academic area either for credit recovery or to move up to the Honors track from the Academic track.
- b. A student has already taken and passed courses within his or her own grade level, so now may take courses outside of the suggested grade level.
- c. Students transferring in from other schools may not have taken the same courses listed within our suggested sequences and therefore, has to take something outside of grade level.



## SCHEDULE CHANGES

1. Elective courses will not be changed. (Please see page 13 for clarification of the scheduling process.) Upon selecting, be absolutely sure you know what the course entails and your responsibility for that course.
2. **Student/Parent class changes will be made only during the allotted schedule change period. That time period will be from the time scheduling begins until three business days after the last day of school.** If a student is being placed in a class of a higher academic standing against the recommendations of the teacher, the student and parents must sign a waiver acknowledging that the student did not meet the stated pre-requisites to be admitted into the course and was placed there at the parent's request. (Thus, if the student flounders in the course, it is established that the parents and students were notified about the teachers concern.)

## DUAL ENROLLMENT

The **Dual Enrollment Program** provides an opportunity for juniors or seniors to earn college credits while still in high school by attending a local college or university. Students must demonstrate exceptional academic performance and attendance to be approved for dual enrollment. The student and their family are responsible for meeting all financial obligations for the dual enrollment program.

Following are procedures to follow for registration:

1. Register for Dual Enrollment at the East Allegheny Guidance Office
2. **Choose courses at CCAC, Penn State or other local college:**
  - o [www.ccac.edu](http://www.ccac.edu)
  - o [www.ga.psu.edu](http://www.ga.psu.edu)
3. If taking Math, English or some Science, take placement exam at CCAC. Call for an appointment (724)325-6614; Penn State Greater Allegheny (412) 675-9010.
4. Complete Dual Enrollment Application. Include High School Counselor's signature and transcript (letter for Penn State).
5. **Make appointment with advisor:**  
**CCAC** (724)325-6614  
**Penn State** (412) 675-9010  
 Once the advisor has signed the application you can immediately register.
6. **Register and pay for the courses.** Tuition payment plans are available through CCAC and reduced tuition is available at Penn State Greater Allegheny.

More information is available in the Guidance Office.

## NCAA ACADEMIC ELIGIBILITY REQUIREMENTS

A student who is planning to attend a Division I or Division II college and participate in athletics must meet eligibility requirements. **The NCAA, on their website at [www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net), provides a full explanation of these requirements.** It is the responsibility of the student to be aware of and meet these requirements. The fee is also the responsibility of the student. A student must graduate from high school. The minimum grade point average acceptable is a 2.00. Students must also take either the SAT or ACT exam. Information on these tests is located in the Guidance Office.

**Listed below are the core courses needed to become eligible for an NCAA Division I school (NOTE: a C or better must be earned in order for these classes to be eligible):**

English	4 years
Mathematics	3 years of courses at the level of Algebra I or above
Natural or Physical Science	2 years including at least one year of a laboratory course
Additional Courses in English, mathematics, natural or physical science.	1 year
Social Science	2 years
Additional academic courses (in any of the above areas or foreign language, computer science, philosophy, or non-doctrinal religion)	4 years

**Division II academic eligibility requirements are as listed below.**

English	3 years
Mathematics (Algebra I or higher)	2 years
Natural or physical science (including at least one laboratory course)	2 years
Additional courses in English, mathematics, or natural or physical science	2 years
Social Science	2 years
Additional academic courses (in any of the above areas or foreign language, computer science, philosophy, or non-doctrinal religion)	3 years

## **DEFINITIONS OF COURSE CATEGORIES**

### **ADVANCED PLACEMENT COURSES**

Students enrolled in AP Statistics, AP English 12 and AP U.S. History are required to take the AP exam in their respective subject areas, and the District will cover the cost of the tests. These exams are scheduled during the first two weeks of May.

The scores on the AP Exams range from 1 to 5. Generally, colleges will accept a score of 3 or above to substitute for college credit. **It is the student's responsibility to contact their prospective college to determine which scores they will accept.**

### **HONORS COURSES**

Students who qualify for Honors Courses at East Allegheny High School will be expected to follow an intensive study program, which will delve into challenging areas of academic pursuit.

The entry window for Honors Courses will be prior to the beginning of the school year. No schedule changes into an Honors Course will be made after the first day of school.

### **ACADEMIC COURSES**

These courses are primarily designed to offer a challenging curriculum to those students who have demonstrated both an aptitude and a desire to attend a four-year college, technical school or enter the workforce upon graduation.

### **ELECTIVE COURSES**

These courses are offered to students as a means of enhancing the basic academic course offerings. We offer a wide selection of courses in the areas of the arts, music, family and consumer sciences and technical offerings. Students are encouraged to explore these classes as a means of gaining a well-rounded education.

## **FORBES ROAD CAREER AND TECHNOLOGY CENTER**

### **PHILOSOPHY STATEMENT**

East Allegheny High School in its function to provide a comprehensive education for its entire student body works in conjunction with Forbes Road Career and Technology Center. It is the sincere hope that the combined efforts of both educational institutions will enable all participating students to acquire the necessary skills, which will allow them to take their rightful places in society.

### **OBJECTIVES FOR STUDENTS**

Students upon completion of their academic and vocational studies at both East Allegheny High School and Forbes Road Career and Technology Center will be able to utilize the knowledge and skills gained from both institutions and to transfer them into viable employment situations.

### **SCHEDULING**

Students are permitted to attend Forbes Road CTC beginning in the tenth grade if they achieve a score of Proficient or Advanced on 2 out of the 3 Keystone Exams taken in ninth grade. However, the Administration recognizes the need to fulfill a student's IEP. Representatives from Forbes come to East Allegheny to speak to all ninth graders in the spring regarding the programs of study they have to offer. After that, once the scheduling process begins, a student would indicate on his or her course selection sheet if they plan to attend Forbes the following year. In addition, an application to Forbes Road CTC is also required prior to admission. Applications may be found in the Guidance Office. **Please refer to page 56 of this booklet for a listing of programs.**

### **PERFORMANCE PROCEDURES**

Performance procedures are as follows:

1. Student must adhere to attendance/discipline standards and policies at both East Allegheny and Forbes to remain enrolled at Forbes.

Students must demonstrate proper deportment and safety practices while at Forbes. Repeated violations will warrant a review that may lead to a return to the regular curriculum offered at East Allegheny High School.

## COURSE SELECTION SHEET PROCEDURES

1. Students are to select six (6) courses plus physical education in the main body of the select sheet.
2. Students are then given the opportunity to select two alternative courses in the event one or more of his/her main selections are in conflict, or may not be offered.
3. Alternate choices will be used to resolve any scheduling problems.
4. Alternate selections can be made from required or elective courses.
5. If a student chooses not to select alternate choices, the administration will develop the student's schedule.

## SCHEDULING PROCESS

Students should exercise extreme care in the selection of their courses. They should take advantage of every possible source of assistance and guidance.

In selecting courses, students should give serious thought to such matters as prior success and failures, pre-requisites, special interests and aptitudes, and future college and career plans. Course selections should be **firm** decisions, thoughtfully made after careful consultation with parents, teachers, and counselors. **It is our goal to have all scheduling completed prior to the close of the current school year. If this goal is met, no class changes will occur after the third business day following the last day of school.** These austere measures must be undertaken because course selection changes create budgetary, scheduling, and staffing difficulties. **Students and parents should be absolutely sure they are aware of what a course entails when making their selections.**

If we do not make our goal of having all the scheduling finished before the close of school, we will adjust the dates accordingly.

**Once the school year has started, the only class changes that will be made are those initiated by a teacher, who in his/her professional opinion, feels that a student has been misplaced and has no chance of being successful in that particular class (i.e. failing at interim time of the first marking period). Therefore, a parent who wishes to request a schedule change for a student should contact the teacher directly to discuss the schedule change. These teacher initiated class changes must be received in the guidance office by the interim of the first marking period. The requested changes must be on the proper form, found in the Guidance Office. There will be no exceptions to this procedure. The administration recognizes the need to fulfill an IEP.**

## NATIONAL HONOR SOCIETY

Students who excel in academics may consider joining the National Honor Society. Any student in grades 10 through 12 will be considered for membership if a teacher recommends them or if they nominate themselves for membership.

The following are the qualifications for membership:

1. All prospective members must have a 3.7 or better GPA, based on a 4.0 scale.
2. All grades that a student earns will be included in the average.
3. Student's cumulative grade point average will include all grades from the previous four nine weeks' grading periods.
4. To be eligible for membership in the National Honor Society, the prospective member must have a least two (2) Honors/AP courses.
5. Any prospective member who has a "D" or lower in any course during the previous four nine weeks will not be eligible.
6. Any prospective member who has been suspended out of school or in-school in the previous four nine weeks will not be eligible.
7. Once a student has been nominated and it has been determined that he or she is eligible for membership, an application **must** be completed and submitted for review.
8. All prospective members must agree to abide by the NHS Chapter By-Laws.

**ENGLISH DEPARTMENT  
ADVANCED PLACEMENT COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>0005</b>	<b>ENGLISH</b>	<b>11</b>	<b>Pre-AP</b>

This course, designed for students with superior language arts abilities, will prepare students for college level English courses and the Advanced Placement test during their senior year. Students will be required to read widely and deeply, with an emphasis on the works of American and British authors. Students should expect homework every night; therefore, exemplary study skills are essential. Students will need to devote a substantial amount of time to this course in order to be successful. The completion of the summer reading component is mandatory.

Prerequisites for admittance to this course:

- 85% or higher in the student's current Honors English course
- A score of Advanced or Proficient on the Keystone Literature Exam
- Students who do not meet this grade requirement may be admitted at the discretion of the teacher.

<b>0010</b>	<b>ENGLISH</b>	<b>12</b>	<b>AP</b>
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This course will prepare students for college level English and for the Advanced Placement English Literature and Composition Examination, which students will take in May. Many colleges offer credit for a score of "3" or above on the exam. Class will focus on the analysis of modern and classical literature through discussion and writing. Emphasis will be placed on refining students' oral and written communication skills. Students should possess a love of reading, as they will be required to read widely and deeply, with an emphasis on the works of American and British authors. Students should expect homework every night; therefore, exemplary study skills are essential. Students will need to devote a substantial amount of time to this course in order to be successful. The completion of the summer reading component is mandatory.

Prerequisite for admittance to this course:

- 85% or higher in Pre-AP English
- A score of Advanced on the Keystone Literature Exam
- Students who do not meet this grade requirement may be admitted at the discretion of the teacher.

**ENGLISH DEPARTMENT  
HONORS COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>0015</b>	<b>ENGLISH</b>	<b>9</b>	<b>HONORS</b>

This course, which focuses on studying literature of various genres, is designed for students who possess superior language arts ability. Throughout the year, students will read and analyze poems, short stories, novels and plays from classical and contemporary writers. Students will enhance their reading comprehension, writing, grammar, communication and vocabulary skills. Students will also complete a research project and write multi-paragraph compositions. Completion of the summer reading component is mandatory.

**Prerequisite:** Students applying for admission to this course must satisfy the criteria listed below.

1. A grade of 85% or higher in the student's current English and Reading course.
2. Students must achieve a score of "Advanced"/"Proficient" on the 8<sup>th</sup> grade PSSA Reading Test
3. Students must maintain a grade of 85% or higher to remain in Honors English the next year.
4. Students who do not meet this grade requirement may be admitted at the discretion of the teacher

<b>0025</b>	<b>ENGLISH</b>	<b>10</b>	<b>HONORS</b>
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This course is designed for students who possess superior language arts ability. Students will refine comprehension, critical thinking, vocabulary, and grammar skills while reading a variety of World Literature. Additional genres of literature will be assigned, read independently, discussed, and assessed during the course of the school year. Writing and speaking skills will be emphasized through multi-paragraph compositions, as well as the completion and presentation of a rigorous informative research project.

Finally, this class entails a summer reading component that is mandatory and must be completed and turned-in the first day of school. Students who fail to submit the summer assignment will not be able to proceed with the class.

**Prerequisite:** Students applying for admission to this course must satisfy the criteria listed below.

1. A grade of 85% or higher in the student's current English course
2. Students must maintain a grade of 85% or higher to remain in Honors English the next year.
3. A score of Advanced or Proficient on the Keystone Literature Exam
4. Students who do not meet this grade requirement may be admitted at the discretion of the teacher



**ENGLISH DEPARTMENT  
HONORS COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>0035</b>	<b>ENGLISH</b>	<b>11</b>	<b>HONORS</b>

This course is designed for those students who have a sound and thorough knowledge of the language arts. This course will focus on selected readings in American Literature, with an emphasis on analytical techniques. Multiple multi-paragraph compositions and a research project are additional components. Completion of the summer reading component is mandatory.

**Prerequisite:** Students applying for admission to this course must satisfy the criteria listed below.

1. A grade of 85% or higher in the student's current English course.
2. Students must maintain a grade of 85% or higher to remain in Honors English the next year.
3. A score of Advanced or Proficient on the Keystone Literature Exam
4. Students who do not meet this grade requirement may be admitted at the discretion of the teacher

<b>0045</b>	<b>ENGLISH</b>	<b>12</b>	<b>HONORS</b>
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This course is designed for seniors who possess superior language arts abilities. Using British Literature as a focus, students will refine literal, analytical and evaluative comprehension skills. Writing and speaking skills will also be emphasized: students will write several multi-paragraph compositions, prepare several oral reports, and complete a research project. Completion of the summer reading component is mandatory. Additional independent reading projects will be assigned during the school year.

**Prerequisites:** Students applying for admission to this course must satisfy the criteria listed below.

1. A grade of 85% or higher in the student's current English course.
2. Students must maintain an 85% or higher if prior course was an Honors course.
3. A score of Advanced or Proficient on the Keystone Literature Exam
4. Students who do not meet this grade requirement may be admitted at the discretion of the teacher

**ENGLISH DEPARTMENT  
ACADEMIC COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>0064</b>	<b>ENGLISH</b>	<b>9</b>	<b>ACADEMIC</b>
<p>This course focuses on reading and analyzing literature of various genres. Throughout the year, students will read poems, short stories, novels and plays from classical and contemporary writers. Students will enhance their reading comprehension, writing, grammar, communication and vocabulary skills. Students will also complete a research project and write multi-paragraph compositions.</p>			
<b>0074</b>	<b>ENGLISH</b>	<b>10</b>	<b>ACADEMIC</b>
<p>Using World Literature as a focus, students will improve and enhance comprehension, critical thinking, vocabulary, and grammar skills. Additional genres of literature will be read and discussed as a class through whole group instruction and assessment. Writing and speaking skills will be emphasized through a variety of writing assignments as well as the completion and presentation of a collaborative research project.</p>			
<b>0084</b>	<b>ENGLISH</b>	<b>11</b>	<b>ACADEMIC</b>
<p>Through the study of American Literature, the student's comprehension and ability to critically analyze literary works are further developed. In addition, vocabulary study, grammar and usage review, and multi-paragraph compositions are components of the course. Students will read out of class novels, and may complete a research project.</p>			
<b>0094</b>	<b>ENGLISH</b>	<b>12</b>	<b>ACADEMIC</b>
<p>Through the study of British Literature, the skills of critical reading and writing will be refined. Students will be expected to complete several multi-paragraph compositions, to prepare an extensive research project and to complete independent reading assignments. Speaking skills will also be emphasized with the completion of several speeches and oral presentations. Vocabulary and grammar skills will also be components of the course.</p>			
<b>8090</b>	<b>ESL ENGLISH</b>	<b>9-12</b>	<b>ACADEMIC</b>
<p>This course for English Language Learners (ELLs) is designed to parallel the English courses offered in the mainstream classes. A focus is placed on the four domains of language: reading, writing, speaking and listening. Students will read and respond to level-appropriate story selections and work to develop oral and written competence in English. Students will participate in a "process over product" approach to writing in which students will receive guided practice across each step of the writing process. Content will be made comprehensible through a variety of theory-based strategies for ELLs, including the use of scaffolding through images, gestures, technology, and inquiry-based learning.</p>			

**ENGLISH DEPARTMENT  
ELECTIVE COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>0201</b>	<b>JOURNALISM I</b>	<b>9-12</b>	<b>ELECTIVE</b>

This elective course explores careers in journalism while developing skills needed in the profession. Students will learn various journalistic writing styles to compose hard news, various features, critical reviews, editorials, columns, etc. for class and the school newspaper. Students will use various researching techniques such as observation, interviews and Internet searching. They will be responsible for the school's newspaper, and other student news productions depending on ability levels.

**Prerequisite:** Students wishing to enroll in this course must have "80%" average in their current English class.

<b>0202</b>	<b>JOURNALISM II</b>	<b>10-12</b>	<b>ELECTIVE</b>
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This elective course is designed for students who successfully completed Journalism I with an average of 85% or above. Students will continue to master the writing skills necessary for a career in journalism while taking on the responsibilities of planning the content, editing the writing, and designing the layout of the school newspaper.

<b>0203</b>	<b>JOURNALISM III</b>	<b>11-12</b>	<b>ELECTIVE</b>
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This elective course is designed for students who successfully completed Journalism II with an average of 90% or above. Students will continue to master the writing skills necessary for a career in journalism while taking on the major responsibilities of planning the content, editing the writing, and designing the layout of the school newspaper.

<b>0204</b>	<b>PUBLIC SPEAKING (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>
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This semester course will be for students who want to learn to think clearly and express themselves effectively before an audience. Students will be able to increase their fluency as a speaker and their self-confidence. Students will gain practical experience through participation. Students will prepare and deliver a variety of timed speeches.

<b>0205</b>	<b>FILM ANTHROPOLOGY (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>
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This semester course will challenge students to look at the social, political, and economical influences of classic American film. Units will be organized by genre: epic, western, romance, crime, science fiction, and drama. Students will study the cultural effects of these films. Assessment will be determined by student presentations based on anthropological research. Students will give speeches and write essays that demonstrate knowledge and mastery of each genre. Quizzes and class participation will also be included.

**ENGLISH DEPARTMENT  
ELECTIVE COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>0206</b>	<b>CLASSICAL MYTHOLOGY</b> (SEMESTER COURSE)	<b>10-12</b>	<b>ELECTIVE</b>

**This course is designed and recommended for students in grades 10-12 who have scored an Advanced or Proficient on the Keystone Literature Exam.** This semester course will introduce the student to major Greek and Roman myths. Students will understand how these myths shaped and were shaped by the cultures of classical antiquity. Students will be able to recognize the importance of mythology in literature and art. Students will be graded on four major exams, regular quizzes on assigned sections, and positive classroom participation.

<b>0207</b>	<b>CREATIVE WRITING</b> (SEMESTER COURSE)	<b>10-12</b>	<b>ELECTIVE</b>
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**This course is designed and recommended for students in grades 10-12 who have scored an Advanced or Proficient on the Keystone Literature Exam.** A course designed for those who want to express and finesse their creative sides in writing. Although this course is predominately a writing course, students will also read some literature to use them as models. Students will observe what other authors do well in order to strengthen their own creative writing abilities. They will write short stories, poems, plays, and creative essays.

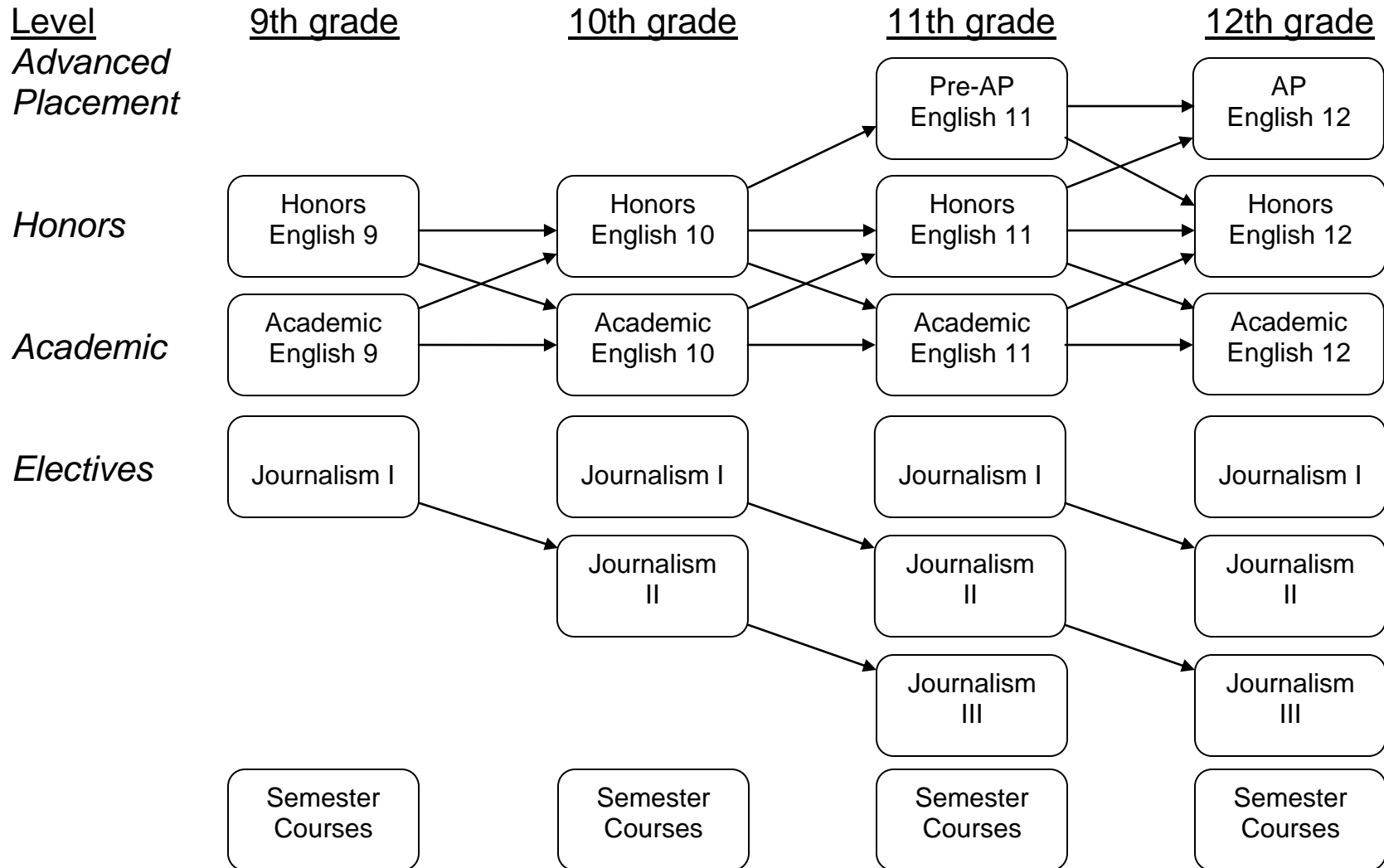
<b>0208</b>	<b>CRIME FICTION</b> (SEMESTER COURSE)	<b>10-12</b>	<b>ELECTIVE</b>
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**This course is designed and recommended for students in grades 10-12 who have scored an Advanced or Proficient on the Keystone Literature Exam.** This semester course will introduce the student to crime fiction. A crime is a violation against the laws of society: however, most crimes have a direct impact upon a single person or a limited number of persons. A detective is brought in to solve crimes, especially mysterious crimes. The student will focus on the relationship between the criminal, victim, and the detective. Students will be graded on a weekly reading journal, short answer quizzes, essay tests, and positive classroom participation.

<b>0209</b>	<b>READING ACROSS the CURRICULUM</b>	<b>9-11</b>	<b>ELECTIVE</b>
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This course is designed to provide instruction in basic and developmental reading skills and strategies while emphasizing individual progress. Course content depends on students' abilities entering the course and is designed to accelerate student growth in reading ability. Instruction may focus on reading silently or aloud, vocabulary development, comprehension, reading fluency, decoding skills, reading/writing connections, text-based collaboration, and self-directed learning. Placement in this course will be based upon PSSA/Keystone Literature results as well as teacher recommendation.

## English Department



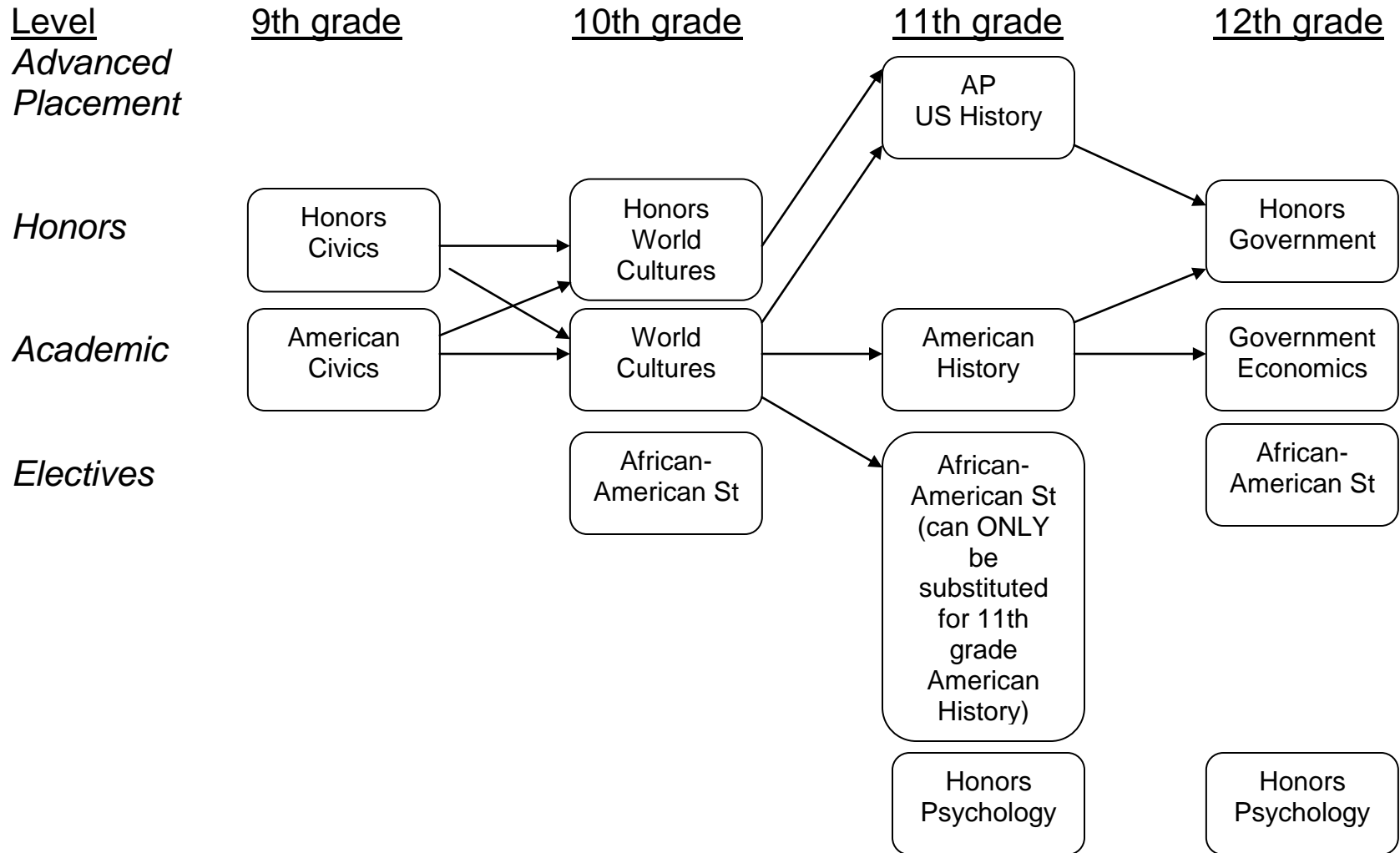
## **SOCIAL STUDIES DEPARTMENT**

The Social Studies Department is charged with preparing students to become citizens for life in a multi-cultural technological world in the 21<sup>st</sup> Century. Students must be aware of the strengths and weaknesses of themselves and others and to be able to cooperate in order to solve the complex problems confronting society today. They must be adaptable, tolerant, and able to work with others. To facilitate this goal, the Social Studies Department offers a three-tiered, four-year program.

Students may enroll in AP, Honors, or Academic Social Studies Courses according to availability by grade level. These courses will emphasize the development of vocabulary; require extensive reading of complex materials with reaction in written and oral presentations.

Comprehensive Social Studies is a four-year program. Each required course is a part of this program. In today's career-oriented world, Social Studies disciplines such as History, Geography, Economics, Sociology, and Government provide depth and scope for making decisions. Learning how to learn is a goal of the Social Studies Program. Students will engage in a variety of learning experiences including the use of media and other technology as well as traditional written materials for research and observation. Students can expect to make written, oral and media-centered presentations and exhibit samples of their work.

## Social Studies Department



**SOCIAL STUDIES DEPARTMENT  
ADVANCED PLACEMENT COURSE**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>1000</b>	<b>US HISTORY</b>	<b>11</b>	<b>AP</b>

This course will prepare students for college level History classes and for the Advanced Placement US History Examination, which students will take in May. Many colleges offer credit for a score of "3" or above on the exam. Class will focus on the analysis of American History through discussion and writing. Emphasis will be placed on refining students' analytical, oral, and written communication skills. Students should expect homework every night; therefore, exemplary study skills are essential. Students will need to devote a substantial amount of time to this course in order to be successful. The completion of the summer reading component is mandatory.

Prerequisites:

- 90% or higher in the student's current Social Studies course
- A score of "Advanced" on the tenth grade Literature CDT test section
- Recommendation of 10<sup>th</sup> grade Social Studies teacher

**HONORS COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>1001</b>	<b>GOVERNMENT &amp; ECONOMICS IN AMERICA</b>	<b>12</b>	<b>HONORS*</b>

This College in the High School curriculum is divided into two parts. The first 27 weeks will be a comprehensive study of American Government and citizenship. The following subjects will be included in the course: use of newspapers to explain current political problems in our society; the United States Constitution; equal protection under the law; how Congress and State Legislatures make laws; State and Federal Court systems; voting procedures in the United States; the function of the President and governors; and the function of counties, municipalities and school districts in local government. Students will be required to complete semester projects and to do extensive outside readings and written work

The last quarter will be a comprehensive study of Economics focusing on theoretical and practical aspects of this discipline. Students will be engaged in the theoretical aspects of supply, demand, price, and the business cycle, plus the practical aspects of credit, investing, and consumer spending. The application of theory to the practical is an important aspect of this course. The student will participate in a series of economic labs to ensure that the application of theory to practical uses will be maximized.

College Credits for this course are through Carlow University and are \$60 a credit (subject to change by Carlow) (3 credits = \$180)

Prerequisites:

- A 90% or higher in the previous social studies class taken
- A recommendation from the 11<sup>th</sup> grade social studies teacher



**HONORS COURSES (continued)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>1002</b>	<b>WORLD CULTURES</b>	<b>10</b>	<b>HONORS*</b>

World Cultures is an honors level course that strives to develop an appreciation of the world we live based on its historical and cultural foundations. This course, designed to make students life-long learners, increases an appreciation of how cultures develop by implementing an interdisciplinary approach to learning. The World Cultures curriculum is intricately tied to both the literature/arts and the process skills component of the sophomore level of the Scholars' Center for the Humanities. It is designed to prepare students to link historical events to literature, art, architecture, philosophy, poetry, and the politics of a wide variety of cultures from the start of the earliest civilizations to present day.

This full year course prepares students to develop higher level critical thinking skills, incorporate primary source readings, use analytical discussion to predict possible outcomes, and manipulate a wide range of research techniques to aid in presentation skills within the classroom. This student-centered course is aimed at grooming students to be able to discern pertinent information in the formulation of cogent projects to understand and compare cultures

World Cultures is an honors level course for sophomores dealing with the historical and cultural foundations of civilization. Students will be engaged in various activities designed to display the link between the past and present. Activities are designed to challenge students to go beyond the text and discern important concepts of themes within each unit

Students can expect to participate in the following activities: oral presentations, written examinations, debates, role playing, technology-based projects, historical film studies, document based questions and primary sources

**Prerequisites:**

90% in Academic Civics class and teacher recommendation

85% in Honors Civics class and teacher recommendation

<b>1003</b>	<b>CIVICS</b>	<b>9</b>	<b>HONORS*</b>
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Honors Civics is an honors level course for freshmen designed to challenge students to develop an understanding of various concepts and involvement in citizenship and government. Students will be introduced to federal, state and local governments, gain knowledge of citizenship duties and responsibilities, as well as a survey of Pennsylvania History and current events in this full year course. Students will engage in various activities designed to apply rigorous written and oral skills that go beyond the text and are relevant to their civic duties. Students can expect to participate in the following curriculum based activities: written examinations, oral presentations, use primary source documents, writing document based essay questions, discussion/debates, technology based projects, historical film studies, webquests, map, table and graph activities.

**Prerequisites:**

90% in 8<sup>th</sup> Grade History

Teacher Recommendation (HS or MS)

<b>1101</b>	<b>HONORS PSYCHOLOGY</b>	<b>11-12</b>	<b>ELECTIVE</b>
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This is a College in the High School Course taught through Carlow University. This course is designed for students who plan post-secondary training in fields that involve human behavior such as business, medicine, sales, law or education. Human behavior is studied with emphasis on personality development, mental health, emotional growth, learning theories, as well as dreams and ESP. Students will be asked to keep a notebook of personal investigation as well as an academic notebook. Human behavior will be studied on both a personal as well as an academic level. Students will be required to complete semester projects and to do extensive outside readings and written work.

College Credits for this course are through Carlow University and are \$60 a credit (subject to change by Carlow) (3 credits = \$180)

**Prerequisites:**

- A 90% or higher in the previous social studies class taken
- A recommendation from the previous social studies teacher

**\*An 85% grade average must be maintained to continue in the Honors track.**

**SOCIAL STUDIES DEPARTMENT  
ACADEMIC COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>1004</b>	<b>AMERICAN CIVICS</b>	<b>9</b>	<b>ACADEMIC</b>

This course approaches Civics in a theoretical, academic, and practical nature. Students will be introduced to the federal, state, and local governments. The students will gain the knowledge to become productive citizens. The students will also learn to appreciate their civic duties. The curriculum will include written and oral exercises, quarterly projects, reading assignments, current event activities, discussion skill exercises, map, table, and graph reading activities. The groundwork for research paper writing will be laid through instruction and practice.

<b>1014</b>	<b>WORLD HISTORY &amp; CULTURES</b>	<b>10</b>	<b>ACADEMIC</b>
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Students will study the history of major world cultures. As the world grows more interdependent, it is imperative that people understand each other. The growth of civilization will be emphasized in a series of activities designed to promote an understanding of present day events. Students will examine, compare and contrast the geographical and cultural aspects of civilizations in historical context. They will also investigate political, economic and social aspects of world cultures. The activities will include written and oral reports, projects, reading assignments including primary and secondary source material, discussion, map, table and graph reading activities.

<b>1024</b>	<b>HISTORY OF THE AMERICAN NATION</b>	<b>11</b>	<b>ACADEMIC</b>
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This course is designed to examine the history of the United States (1865 to the present) starting with the Reconstruction Era, Gilded Age, and Western Expansion. The majority of the class will emphasize the 20<sup>th</sup> Century through investigating how the American Economic, Political and Social systems have changed during the history of the United States. The student will be able to recognize the roots of today's society, political system, and economy in the study of the American past. The student must be a self-motivated learner willing to follow a rigorous course of study that will be evaluated through oral discussions, objective tests and written essays.

<b>1034</b>	<b>GOVERNMENT &amp; ECONOMICS IN AMERICA</b>	<b>12</b>	<b>ACADEMIC</b>
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The Academic 12<sup>th</sup> Grade Social Studies Course is divided into two parts. The first semester will be a comprehensive study of American Government and citizenship. The following subjects will be included in the course: use of newspapers to explain current political problems in our society; the United States Constitution; equal protection under the law; how Congress and State Legislatures make laws; State and Federal Court systems; voting procedures in the United States; the function of the President and governors; and the function of counties, municipalities and school districts in local government.

The second semester will be a comprehensive study of Economics focusing on theoretical and practical aspects of this discipline. Students will be engaged in the theoretical aspects of supply, demand, price, and the business cycle, plus the practical aspects of credit, investing, and consumer spending. The application of theory to the practical is an important aspect of this course. The student will participate in a series of economic labs to ensure that the application of theory to practical uses will be maximized.

<b>8091</b>	<b>ESL-SOCIAL STUDIES</b>	<b>9-12</b>	<b>ACADEMIC</b>
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This course accommodates ESL students as they become familiar with American culture, as well as the school culture. Culturally relevant pedagogical practices will enable students to share aspects of their native culture and compare and contrast them to American culture. Students will further develop their English communication skills in relation to the Social Studies topics of civics, citizenship, history, and geography. Close attention will be paid to students' ongoing development of academic language. Cross-curricular connections will be made to ESL-English.

**SOCIAL STUDIES DEPARTMENT  
ELECTIVES**

**1102                    AFRICAN-AMERICAN                    10-12                    ELECTIVE  
                                 STUDIES\***

This course will examine the accomplishments and struggles of Black Americans from roots in Africa through the Civil Rights Era of the 20<sup>th</sup> Century with a special focus on the Western Pennsylvania experience. Scholars, entertainers, athletes, businessmen and ordinary people have stories to tell. Students will engage in activities that are designed to understand present events in their historical context. Activities will include biographical investigations, written and oral reports, projects, computer research, role-playing, class discussion, interactions with African American professionals, reading assignments, and homework.

**\*African-American Studies will be permitted to be substitute for the 11<sup>th</sup> grade Academic American History course.**

## **MATHEMATICS DEPARTMENT**

The East Allegheny math department has adopted the Pennsylvania Core Standards. The goal of the Mathematics Department is to provide all students an opportunity to learn the mathematics they will need to be productive citizens. Today's students will live their lives in a world far more technologically advanced than what is in place presently. With continual progress in the field of mathematics and technology, this generation will be required to know more mathematics than ever before and will need to apply this knowledge to their daily lives and future careers.

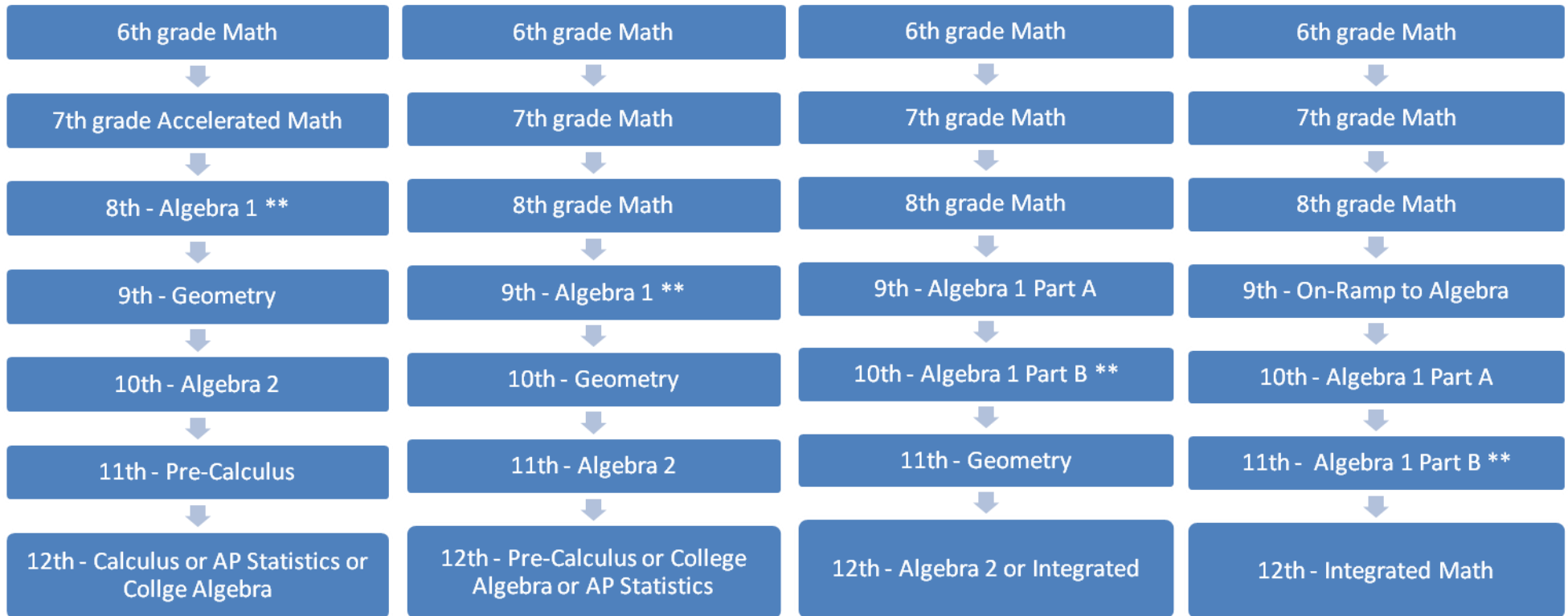
Problem solving and critical thinking skills will be developed through practical mathematical applications. Content will be comprised of the base of knowledge that students will need to enter a four year traditional college, community college/technical school, post-secondary training or to embark upon a variety of technical occupations. Students will be prepared for mathematics they will encounter in their future mathematics courses and in life.

## **TECHNOLOGY**

While computation is vital in the information age in which we live, technology has drastically changed the methods by which we compute. To function in the modern world, it is necessary to compute and estimate in a variety of settings. A goal of the East Allegheny Mathematics Department is to prepare young people to select and use appropriate mental, paper and pencil, calculator, and computer methods effectively.

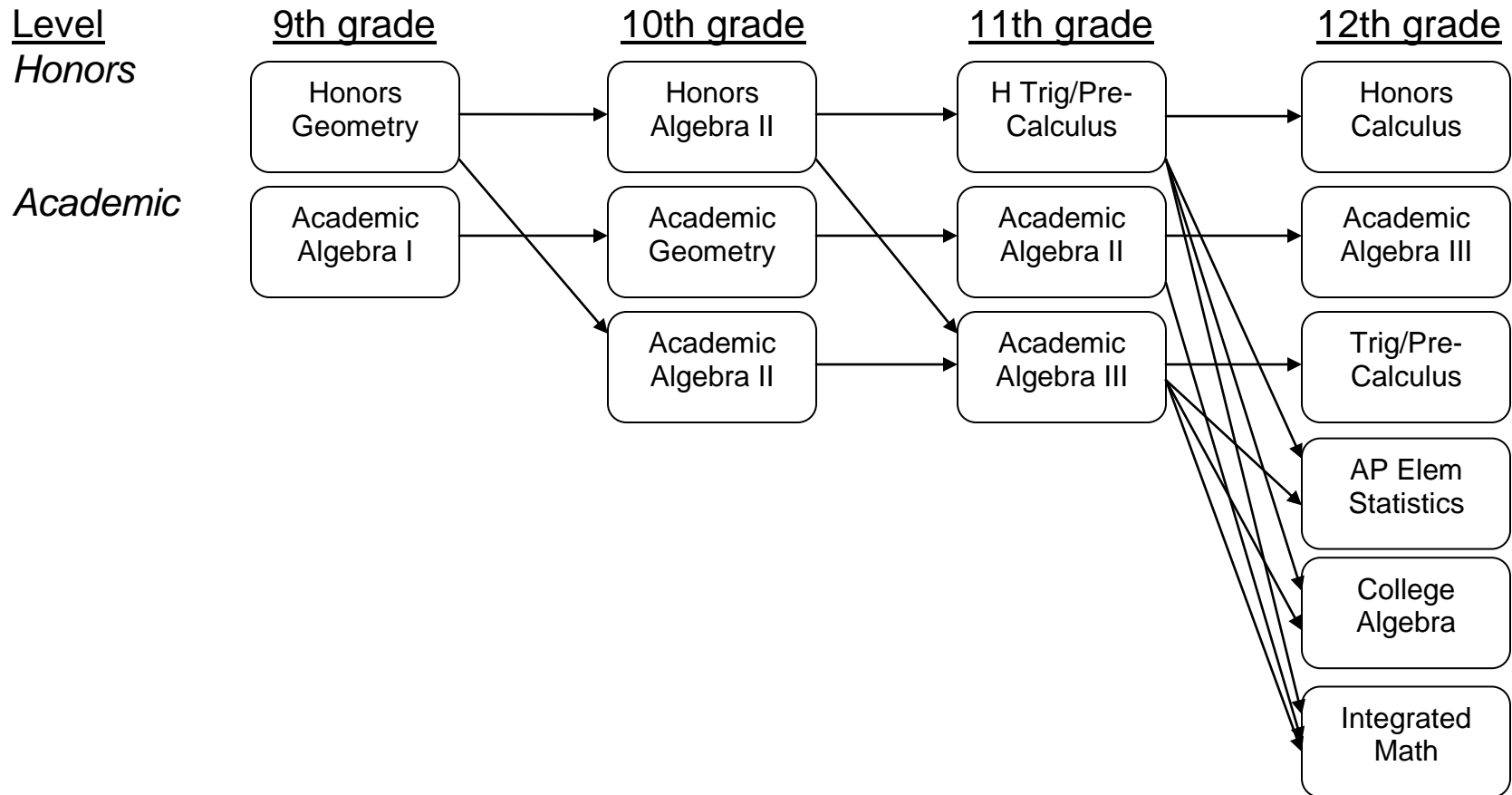
Most classes will use a graphing calculator. The students would benefit from getting their own graphing calculator to use in class. The department recommends the TI-83 Plus or higher, which can be used in high school and college classes.

## Math course progressions for students graduating in or after 2017



**\*\* Keystone Exam administered**

## Mathematics Department (Class of 2016)



**MATHEMATICS DEPARTMENT  
HONORS COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
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<b>2202</b>	<b>AP ELEMENTARY STATISTICS</b>	<b>12</b>	<b>ADVANCED PLACEMENT</b>
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AP Statistics is equivalent to a one-semester, introductory, non-calculus-based, college course in statistics. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data and preparing for the Advanced Placement Statistics Exam. Exemplary study skills and substantial amount of time is required for students to be successful. Students are exposed to four broad conceptual themes:

*Exploring Data:* Describing patterns and departures from patterns.

*Sampling and Experimentation:* Planning and conducting a study.

*Anticipating Patterns:* Exploring random phenomena using probability and simulation.

*Statistical Inference:* Estimating population parameters and testing hypotheses.

Important components of the course include the use of technology, projects and laboratories, cooperative group problem-solving, and writing, as a part of concept-oriented instruction and assessment. Students with the appropriate mathematical background are encouraged to take both AP Statistics and Calculus in high school.

**Prerequisites:**

85% or higher in Honors Algebra 2 or Pre-Calculus is required.

Computer Applications is strongly suggested for the use of spreadsheets.

<b>2015</b>	<b>GEOMETRY</b>	<b>9-10</b>	<b>HONORS*</b>
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Geometry is a complete and comprehensive course aligned with the Pennsylvania Common Core Standards. Students will explore complex geometric situations and deepen their explanations of geometric relationships, moving toward formal mathematical arguments. The Mathematical Practice Standards apply throughout the course and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Tools of Geometry, Reasoning and Proof, Parallel and Perpendicular Lines, Congruent Triangles, Relationships within Triangles, Polygons and Quadrilaterals, Similarity, Right Triangles and Trigonometry, Transformations, Area, Surface Area, and Volume, and Circles. This course is designed for the student who is preparing for college and/or the workforce.

Prerequisite: Students applying for admission to this course must satisfy the criteria listed below.

1. 95% or higher in Algebra 1:High School
2. 90% or higher in LAC, Algebra 1:8<sup>th</sup> Grade Committee recommendation which will take into account student course work and Keystone Algebra 1 Exam score.
3. An 85% grade average must be maintained to have teacher recommendation to remain in any honors math course for the following year.

<b>2025</b>	<b>ALGEBRA II</b>	<b>10-11</b>	<b>HONORS*</b>
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Algebra 2 is a complete and comprehensive course aligned with the Pennsylvania Common Core Standards. It builds on the students' work with linear, quadratic, and exponential functions by introducing polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout the course and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Expressions, Equations, and Inequalities, Functions, Equations, and Graphs, Linear Systems, Quadratic, Polynomial, Radical, Exponential, Logarithmic and Rational Functions, Sequences and Series, Probability and Statistics, and Basic Trigonometric Functions. This course is designed for the student who is preparing for college.

Prerequisite: Students applying for admission to this course must satisfy the criteria listed below.

1. 85% or higher in Honors Geometry.
2. 95% or higher in Academic Geometry.
3. An 85% grade average must be maintained to have teacher recommendation to remain in any honors math course for the following year.

**MATHEMATICS DEPARTMENT  
HONORS COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
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<b>2035</b>	<b>TRIGONOMETRY/PRE-CALCULUS</b>	<b>11-12</b>	<b>HONORS*</b>
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Trigonometry/Pre-Calculus is offered to provide the background necessary to pursue mathematics and related areas at the collegiate level. The student selecting this course should have achieved a high level of success in previous academic mathematics studies. A strong emphasis will be placed on the study of the algebraic functions, trigonometric functions, matrices, sequences, conic sections and analytic concept of the function and its importance in mathematics.

Prerequisite: Students applying for admission to this course must satisfy the criteria listed below.

1. 85% or higher in Honors Algebra 2.
2. An 85% grade average must be maintained to have teacher recommendation to remain in any honors math course for the following year.

<b>2045</b>	<b>CALCULUS</b>	<b>11 - 12</b>	<b>HONORS*</b>
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This course consists of a full academic year of work in calculus and related topics comparable to courses offered at the university level. Calculus is offered for the mathematically able students who have a thorough knowledge of college preparatory mathematics, including Algebra I and II, Geometry, Trigonometry and some analytical geometry (equations and graphs, lines, and conics). Topics covered will include elementary functions, differential calculus, and integral calculus.

Prerequisite: Students applying for admission to this course must satisfy the criteria listed below.

1. 85% or higher in Pre-calculus.



**MATHEMATICS DEPARTMENT  
ACADEMIC COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>8300</b>	<b>ON RAMP TO ALGEBRA</b>	<b>9</b>	<b>ACADEMIC</b>
<p>On Ramp to Algebra is a program designed to build and solidify foundational skills and conceptual understanding necessary to be successful in Algebra I. It provides explicit instruction in math skills, problem solving and key concepts. The program is specifically designed to prepare students for success in Algebra I. Units of study will include foundations of Algebra, Operations with Fractions, Positive and Negative Numbers, Ratio and Proportionality, Showing Relationships with Graphs, and Expressions, Equations and Exponents.</p>			
<b>2054</b>	<b>ALGEBRA I</b>	<b>9-12</b>	<b>ACADEMIC</b>
<p>Algebra I is a complete and comprehensive course aligned with the Pennsylvania Common Core Standards. The critical areas, called units, deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Foundations of Algebra, Solving Equations, Solving Inequalities, Introduction to Functions, Systems of Equations and Inequalities, Exponents and Exponential Functions Equations, Polynomials and Factoring, Quadratic Functions and Equations, Radical Expressions and Equations, Rational Expressions and Functions, Data Analysis and Probability. This course is designed for the student who is preparing for college and/or the workforce.</p>			
<b>2055</b>	<b>ALGEBRA 1 PART A (FOUNDATIONS OF LINEAR ALGEBRA)</b>		<b>ACADEMIC</b>
<p>This course is aligned with the Pennsylvania Common Core Standards and covers the first year of a two year algebra course. The critical areas, called units, deepen and extend understanding of linear relationships and by applying linear models to data that exhibit a linear trend. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Foundations of Algebra, Solving Equations, Solving Inequalities, Introduction to Functions, Linear Functions, Systems of Equations and Inequalities. This course is designed for the student who is preparing for their future career.</p>			
<b>2056</b>	<b>ALGEBRA 1 PART B (NON-LINEAR ALG with DATA ANALYSIS)</b>		<b>ACADEMIC</b>
<p>This course is aligned with the Pennsylvania Common Core Standards and covers the second year of a two year algebra course. The critical areas, called units, deepen and extend understanding of non-linear and exponential relationships by contrasting them with each other and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Exponents and Exponential Functions Equations, Polynomials and Factoring, Quadratic Functions and Equations, Radical Expressions and Equations, Rational Expressions and Functions, Data Analysis and Probability. This course is designed for the student who is preparing for their future career.</p>			

**\*\*Placement into these courses is based upon performance in the student's 8th grade math class, CDT testing, teacher and administrator recommendation, as well as parental input.**

**MATHEMATICS DEPARTMENT  
ACADEMIC COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
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<b>2064</b>	<b>GEOMETRY</b>	<b>9-12</b>	<b>ACADEMIC</b>
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Geometry is a complete and comprehensive course aligned with the Pennsylvania Common Core Standards. Students will explore complex geometric situations and deepen their explanations of geometric relationships, moving toward formal mathematical arguments. The Mathematical Practice Standards apply throughout the course and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Tools of Geometry, Reasoning and Proof, Parallel and Perpendicular Lines, Congruent Triangles, Relationships within Triangles, Polygons and Quadrilaterals, Similarity, Right Triangles and Trigonometry, Transformations, Area, Surface Area, and Volume, and Circles. This course is designed for the student who is preparing for college and/or the workforce.

**Prerequisite:** Students applying for admission to this course must satisfy the criteria listed below.

1. 80% or higher in 8<sup>th</sup> grade Algebra 1.
2. 9<sup>th</sup> grade students taking this course must pass the Keystone Algebra 1 Exam.

<b>2074</b>	<b>ALGEBRA II</b>	<b>10-12</b>	<b>ACADEMIC</b>
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Algebra 2 is a complete and comprehensive course aligned with the Pennsylvania Common Core Standards. It builds on the students' work with linear, quadratic, and exponential functions by introducing polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout the course and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Units of study will include Expressions, Equations, and Inequalities, Functions, Equations, and Graphs, Linear Systems, Quadratic, Polynomial, Radical, Exponential, Logarithmic and Rational Functions, Sequences and Series, Probability and Statistics, and Basic Trigonometric Functions. This course is designed for the student who is preparing for college.

<b>2084</b>	<b>ALGEBRA III</b>	<b>11-12</b>	<b>ACADEMIC</b>
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This class is intended for the college-bound or technically oriented student. Topics of study will include quadratic functions, polynomial functions, exponential and logarithmic functions, rational functions, periodic and trigonometric functions, and probability and statistics. Graphing calculators will be an integral part of the course.

**Prerequisite:** Students applying for admission to this course must satisfy the criteria listed below.

1. Algebra 2.

**MATHEMATICS DEPARTMENT  
ACADEMIC COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
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**2203 COLLEGE ALGEBRA 12 ACADEMIC**  
This yearlong course is intended for the student who plans to attend college. The main objective of this course is to teach students the skills necessary to successfully complete a College algebra class. Topics of study will include systems of inequalities, matrices and determinants, sequences, series, and probability and topics in analytic geometry.

Prerequisite: Students applying for admission to this course must satisfy the criteria listed below.

1. 75% or higher in Algebra 3.

<b>2205</b>	<b>INTEGRATED MATH</b>	<b>12</b>	<b>ACADEMIC</b>
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This course is intended for the senior who is interested in learning about personal finance. Course topics include personal financial planning, budgets and balance sheets, careers and education, paying taxes, understanding insurance, economic plans, personal credit and credit cards, personal loans, banking procedures, methods of saving and investing.

Prerequisite: Students applying for admission to this course must satisfy the criteria listed below.

<b>2309</b>	<b>ALGEBRA 1 KEYSTONE REMEDIATION</b>	<b>9-12</b>	<b>ELECTIVE</b>
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**MANDATORY course for students who received a score of Basic or Below Basic on the Algebra 1 Keystone Exam.**

This semester course will provide additional instruction in conjunction with Keystone Algebra 1 - Module 1, Operations and Linear Equations & Inequalities and Keystone Algebra 1 - Module 2, Linear Functions and Data Organizations. This course is intended to strengthen student performance levels by providing targeted in-depth instruction in Operations with Real Numbers and Expressions (A1.1.1), Linear Equations (A1.1.2), Linear Inequalities (A1.1.3), Functions (A1.2.1), Coordinate Geometry (A1.2.2), and Data Analysis (A1.2.3). Module 1's focus includes representing and/or using numbers in equivalent forms, applying number theory concepts to show relationships between real numbers in problem-solving settings, using exponents, roots and/or absolute values to solve problems, using estimation strategies in problem-solving situations, simplifying expressions involving polynomials, write, solve and/or graph linear equations and systems of linear inequalities using various methods. Module 2's focus includes analyzing and/or using patterns or relations, interpreting and/or using linear functions and their equations, graphs, or tables, describing, computing, and/or using the rate of change (slope) of a line, analyzing and/or interpreting data on a scatter plot, using measures of dispersion to describe a set of data, using data displays in problem-solving settings and/or to make predictions, applying probability to practical situations.

Students will continue in this course on a semester basis until they receive a score of Proficient or Advanced on the Algebra 1 Keystone Exam. This course shall be taken concurrently with a student's regularly-scheduled Math course and will not substitute for Math credit required for graduation (see p. 3 and 4 for graduation requirements).

**SCIENCE DEPARTMENT**

In order to better prepare for the new Biology Keystone Exam, a change in course sequence will take place within the science department.

Beginning with the class of 2017 and on, proficiency on the Biology Keystone Exam is a State requirement.

**BEGINNING WITH CLASS OF 2017 AND BEYOND:**

- 9<sup>th</sup> GRADE: Biology (Honors/Lab, Academic/Lab, or Biology Part A)
- 10<sup>th</sup> GRADE: Chemistry (Honors/Lab or Academic/Lab), Chemistry-V, Biology Part B.
- 11<sup>th</sup> GRADE: Physics (Honors/Lab or Academic/Lab), Chemistry-V, Integrated Science-V.
- 12<sup>th</sup> GRADE ELECTIVES: Anatomy & Physiology (Honors/Lab or Academic/Lab), Honors Physics II/Lab, Honors Chemistry II/Lab, Honors Biology II/Lab, Human Body-V, STS-V, and Integrated Science-V. (These could be taken as 11th grade electives if students choose to "double up".)

**SCIENCE DEPARTMENT  
HONORS COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>3025</b>	<b>BIOLOGY I</b>	<b>9</b>	<b>HONORS*</b>

This is an accelerated course and is designed for those students already enrolled in the Honors science program. It relies heavily on above average reading comprehension, laboratory and critical thinking skills. High expectations are placed on experimentation, reading, and writing that will enhance proficiency in the study of all levels of biological organization. This course will address the major themes of biology: biochemistry, cell structure and function, DNA and genetics, evolution, biodiversity, ecology, and environmental science. This course is recommended for students planning to pursue a career in the science field. This class meets 7 periods per 6 day cycle.

**PREREQUISITES:**

1. A 90% average or higher in 8<sup>th</sup> grade science (for 9th graders)
2. A 90% average or higher in 8<sup>th</sup> grade Algebra I (for 9th graders)

**\*An 85% grade average must be maintained to continue in the Honors track.**

<b>3045</b>	<b>CHEMISTRY I</b>	<b>10-11</b>	<b>HONORS*</b>
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This course is designed for the student who has a strong background in science and math. It will focus on the conceptual as well as mathematical view of chemistry. The topics to be investigated in depth will include the following: metric system, elements, atoms, mixtures and solutions, the periodic table, periodic trends, quantum numbers, electron configurations, chemical bonding, molecules, polarity, chemical nomenclature, chemical equations, stoichiometry, and kinetic theory. This class meets 7 periods per 6 day cycle.

**PREREQUISITES:**

1. A 90% in Biology I or 85% in Honors Biology I.

**SCIENCE DEPARTMENT  
HONORS COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>3035</b>	<b>PHYSICS I</b>	<b>11-12</b>	<b>HONORS*</b>

This course is designed to give the student a strong working foundation in the principles and theories of physics. Topics of study include: kinematics, work, power, energy, the structure of matter and thermodynamics. Emphasis throughout the course is placed on in-depth problem solving and data analysis. Successful completion of algebra I and geometry is recommended along with at least current enrollment in trigonometry. It is recommended for **ALL** students who plan to attend any four-year college, regardless of their intended major. This course meets 7 periods per 6 day cycle.

**PREREQUISITES:**

- 1 A 90% in Biology I or 85% in Honors Biology I.
- 2 An 85% or better in Geometry.

<b>3074</b>	<b>PHYSICS II</b>	<b>12</b>	<b>HONORS*</b>
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This course is designed as the second year of a two-year sequence in the study of physics and picks up where Physics I left off. Honors physics II, in combination with Honors Physics I is designed to parallel the development of physics in most collegiate programs. Physics II studies topics not included in Physics I. Topics of study include: wave theory, sound, optics, electricity, magnetism and astrophysics. A strong background in mathematics is required. This course meets 7 periods per 6 day cycle.

**PREREQUISITES:**

- 1 A 90% in Physics I or 85% in Honors Physics I.

<b>3014</b>	<b>BIOLOGY II</b>	<b>12</b>	<b>HONORS*</b>
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Honors Biology II is a rigorous course involving a deeper, more detailed examination of the topics seen in a college freshman biology course. Students will study the following themes: structure, function and biochemistry of the cell, photosynthesis and cellular respiration, DNA and RNA structure, Transcription and Translation, genetics, natural selection, population genetics, classification of organisms, and ecology. This course takes advantage of and extends a student's prior knowledge in biology and chemistry. Students will be expected to complete reading and writing assignments, lab reports, analyze data and literature to further understand the topics. This course meets 7 periods per 6 day cycle.

**PREREQUISITES: A 90% in Biology I and Chemistry I or 85% in Honors Biology I and Honors Chemistry I.**

<b>3094</b>	<b>CHEMISTRY II</b>	<b>12</b>	<b>HONORS*</b>
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This course is intended for science-oriented students. This is a fast paced and challenging course that requires students to utilize the information that they acquired in first year academic or honors chemistry. The students are expected to understand chapter 1-10 from academic chemistry or honors chemistry. Students are required to do independent learning. This course is a more vigorous mathematical and problem-solving course compared to first year chemistry. Strong math skills are needed. This course is lab-oriented. The following topics will be covered: stoichiometry, reactions, bonding geometry of molecules, acids and bases, electrochemistry, organic chemistry, solutions, kinetics, and gases. This course meets 7 periods per 6 day cycle.

**PREREQUISITES: A 90% in Biology I and Chemistry I or 85% in Honors Biology I and Honors Chemistry I.**

**SCIENCE DEPARTMENT  
HONORS COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>3084</b>	<b>ANATOMY &amp; PHYSIOLOGY</b>	<b>11-12</b>	<b>HONORS*</b>

Honors Anatomy and Physiology is a rigorous course that involves a more in-depth examination of the human body. Students will study the human body from the cellular level to the complete organism. The topics of study are as follows; anatomical terms, biochemistry of cells, tissues, integumentary system, skeletal system, muscular system, nervous system, special senses, endocrine system, blood, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system. Genetics, disease, nutrition and microbiology are approached in terms of the human organism. The total program is designed to stimulate student's involvement in lectures, class discussions, laboratory experiments and extensive dissection. The student will be required to analyze data and literature to complete multiple writing assignments and projects. This course meets 7 periods per 6 day cycle.

**PREREQUISITES: A 90% in Biology I and Chemistry I or 85% in Honors Biology I and Honors Chemistry I.**

**SCIENCE DEPARTMENT  
ACADEMIC COURSES**

The Academic program of studies represents the traditional, content centered Science Curriculum. The aim of these courses is to prepare students to meet the rigors of academic life in College Science Education. Academic Chemistry and Physics courses require one lab period per 6 day cycle.

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>3044</b>	<b>BIOLOGY/LAB</b>	<b>9</b>	<b>ACADEMIC</b>

This introductory course provides students with a solid foundation in scientific terminology, theories and concepts related to the study of living things. All levels of biological organization will be studied in this course. The main areas of study will include biochemistry, cell structure and function, DNA and genetics, evolution, biodiversity, ecology, and environmental science. Class lectures/discussions will be reinforced through imaginative, inquiry-oriented investigations, demonstrations, and audio-visual materials. This class meets 7 periods per 6 day cycle.

**PREREQUISITE: A passing grade in 8<sup>th</sup> grade Science.**

<b>3050</b>	<b>BIOLOGY PART A</b>	<b>9</b>	<b>ACADEMIC</b>
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This course will focus on Module A of the Keystone Exam and topics include: characteristics of living things, comparison of cellular structure and function (prokaryotic/eukaryotic), levels of biological organization, unique properties of water, structure and function of biological macromolecules, enzyme regulation of biochemical cellular reactions, energy transformation in living things (photosynthesis/cellular respiration), comparison of cellular transport mechanisms, and maintenance of biological balance. This class meets 6 periods per 6 day cycle.

<b>3051</b>	<b>BIOLOGY PART B</b>	<b>10</b>	<b>ACADEMIC</b>
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This course will focus on Module B of the Keystone Exam and topics include: review of Module A material, stages of the cell cycle, comparing outcomes of mitotic and meiotic division, DNA replication, transcription and translation, relationships between DNA, alleles, genes, and chromosomes in inheritance, predicting outcomes of Mendelian and non-Mendelian patterns of inheritance, genetic mutations altering DNA and their impact within populations, genetic engineering, natural selection, population genetics, speciation, evidence for evolution, the scientific method, levels of ecological organization, energy flow through ecosystems (food chains/food webs), biogeochemical cycles, natural and human impact on ecosystems, and evolution of populations. This class meets 6 periods per 6 day cycle.

\*\* Placement into these courses is based upon performance in the student's 8<sup>th</sup> grade science class, CDT testing, teacher and administrator recommendation, as well as parental input.

<b>3054</b>	<b>CHEMISTRY/LAB</b>	<b>10-11</b>	<b>ACADEMIC</b>
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This course introduces the student to a scientific vocabulary, theories and the laws that are basic to an understanding of chemistry in our modern world. Both laboratory work and discussions are designed to familiarize the student with the composition of our world and the changes in composition that may or may not occur. The relationships of properties to structure are emphasized and concepts are examined mathematically whenever applicable. The topics to be investigated will include the following: metric system, elements, atoms, the periodic table, periodic trends, quantum numbers, electron configurations, chemical bonding, molecules, polarity, chemical nomenclature, chemical equations, stoichiometry, kinetic theory, and intro to organic chemistry. This class meets 7 periods per 6 day cycle.

**PREREQUISITES:**

1. Successful completion of Biology
2. Successful completion of Algebra I

**SCIENCE DEPARTMENT  
ACADEMIC COURSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>3064</b>	<b>PHYSICS</b>	<b>11-12</b>	<b>ACADEMIC</b>

Concepts of Physics is designed to serve as a broad foundation using simple situations to answer questions involving physics in the everyday world, covering topics such as motion, force, energy, thermodynamics, optics, electricity and magnetism. Algebra is used to develop, test and explain models of phenomena to which the student has been exposed. This course is designed for the student who has a strong background in science and math. This course meets 7 periods per 6 day cycle.

**PREREQUISITES:**

1. Successful completion of Chemistry
2. Successful completion of Algebra I and Geometry

<b>3101</b>	<b>ANATOMY &amp; PHYSIOLOGY</b>	<b>11-12</b>	<b>ACADEMIC</b>
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This course provides the student with an in-depth study of the human body and how it functions. All facets of the human body are explored through cellular, tissue, organ and organ systems of the body. Genetics, disease, nutrition and microbiology are approached in terms of the human organism. The total program is designed to stimulate student's involvement in lectures, class discussions, laboratory experiments and extensive dissection.

**PREREQUISITES:** A 70% or better in Academic or Honors Biology and Academic or Honors Chemistry.

<b>3201</b>	<b>FORENSIC SCIENCE</b>	<b>11-12</b>	<b>ACADEMIC</b>
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Forensic Science is the application of science to the legal system. Forensic science utilizes principles, facts, and lab techniques from the fields of chemistry, biology, physics and earth science to process crime scene evidence. This course is an interdisciplinary class involving biology, anatomy, chemistry, physics, and earth science with an emphasis in complex reasoning and critical thinking. In addition, students must incorporate use of technology, communication skills, language arts, mathematics and social studies. Students will be expected to complete reading and writing assignments. Topics will include an introduction to forensics (forensic history, careers, processing the crime scene), fingerprinting, documentation (handwriting, paper and ink analysis), biology, serology (blood typing genetics, spatter patterns), DNA, physical evidence (sand, soil, etc.), hairs and fibers, and ballistics. Mock crime scenes will be investigated and real case studies analyzed. This course meets 7 periods per 6 day cycle.

**PREREQUISITES:** Successful completion of Biology and Chemistry.

**\*FORENSIC SCIENCE will not be offered for the 2015-2016 academic year.**



**SCIENCE DEPARTMENT  
VOCATIONAL COURSES**

The Vocational Science program of study is an alternative to the traditional, content-centered curriculum. The aim of these courses is to restructure science teaching and learning to meet the diverse needs of students who attend Forbes Road area CTC by delivering a solid academic foundation in Science within a restricted schedule. A student's ability to apply the process and products of science to their individual and collective existence is as important as the knowledge itself. Consequently, science information is presented with a new focus that is more relevant to the student's past experiences, present agendas and future needs.

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>3052</b>	<b>BIOLOGY-V</b>	<b>10-11</b>	<b>ACADEMIC</b>

This course is designed to acquaint students with the fundamental concepts of life and living organisms. The focus will be to familiarize students with the basic building blocks of life, study of structure and function of cells, cell division, DNA structure and protein synthesis, heredity and genetics, evolutionary concepts, natural selection, interactions of ecosystems, and classification of living organisms. The course will also include an examination of environmental topics such as watersheds and wetlands, pollution and humankind's effects on the earth and living organisms and systems with an emphasis on Pennsylvania-specific case studies. This course meets 6 periods per 6 day cycle.

<b>3112</b>	<b>CHEMISTRY-V</b>	<b>10-11</b>	<b>ACADEMIC</b>
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This course introduces the student to a scientific vocabulary, theories and the laws that are basic to an understanding of chemistry in our modern world. Discussions are designed to familiarize the student with the composition of our world and the changes in composition that may or may not occur. The relationships of properties to structure are emphasized and concepts are examined mathematically whenever applicable. The topics to be investigated will include the following: metric system, elements, atoms, the periodic table, periodic trends, electron configurations, chemical bonding, molecules, polarity, chemical nomenclature, chemical equations, stoichiometry, kinetic theory, and intro to organic chemistry. This class meets 6 periods per 6 day cycle.

<b>3122</b>	<b>INTEGRATED PHYSICAL SCIENCE-V</b>	<b>11</b>	<b>ACADEMIC</b>
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This course is designed to meet the needs of the technical student with a broad range of academic skills. These skills will be tailored to provide the needed technical knowledge base to meet the requirements of a post-high school technical institution. Emphasis will be on physical science (approximately 50% chemistry and 50% physics). This course meets 6 periods per 6 day cycle.

<b>3132</b>	<b>HUMAN BODY-V</b>	<b>12</b>	<b>ACADEMIC</b>
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This course provides the student with an in-depth study of the human body and its systems. The human body is explored on a cellular, tissue, organ and system level, with emphasis on the body systems. Genetics, disease, nutrition and microbiology are approached in terms of the human organism. The program is designed to give students a basic awareness of the make-up and function of the human body and its systems. Student involvement in lectures and class discussions will be encouraged. This course meets 6 periods per 6 day cycle.

**PREREQUISITES:** Must have completed 3 prior Science Courses.

<b>3142</b>	<b>SCIENCE, TECHNOLOGY AND SOCIETY-V</b>	<b>12</b>	<b>ACADEMIC</b>
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This course will introduce students to the relationships that exist between science, technology, and society. Emphasis will be placed on how new developments and research impact the choices we make. This course will focus on a review of topical literature, which will be discussed from a scientific perspective and societal impact. This course meets 6 periods per 6 day cycle.

**PREREQUISITE:** Must have completed 3 prior Science Courses.

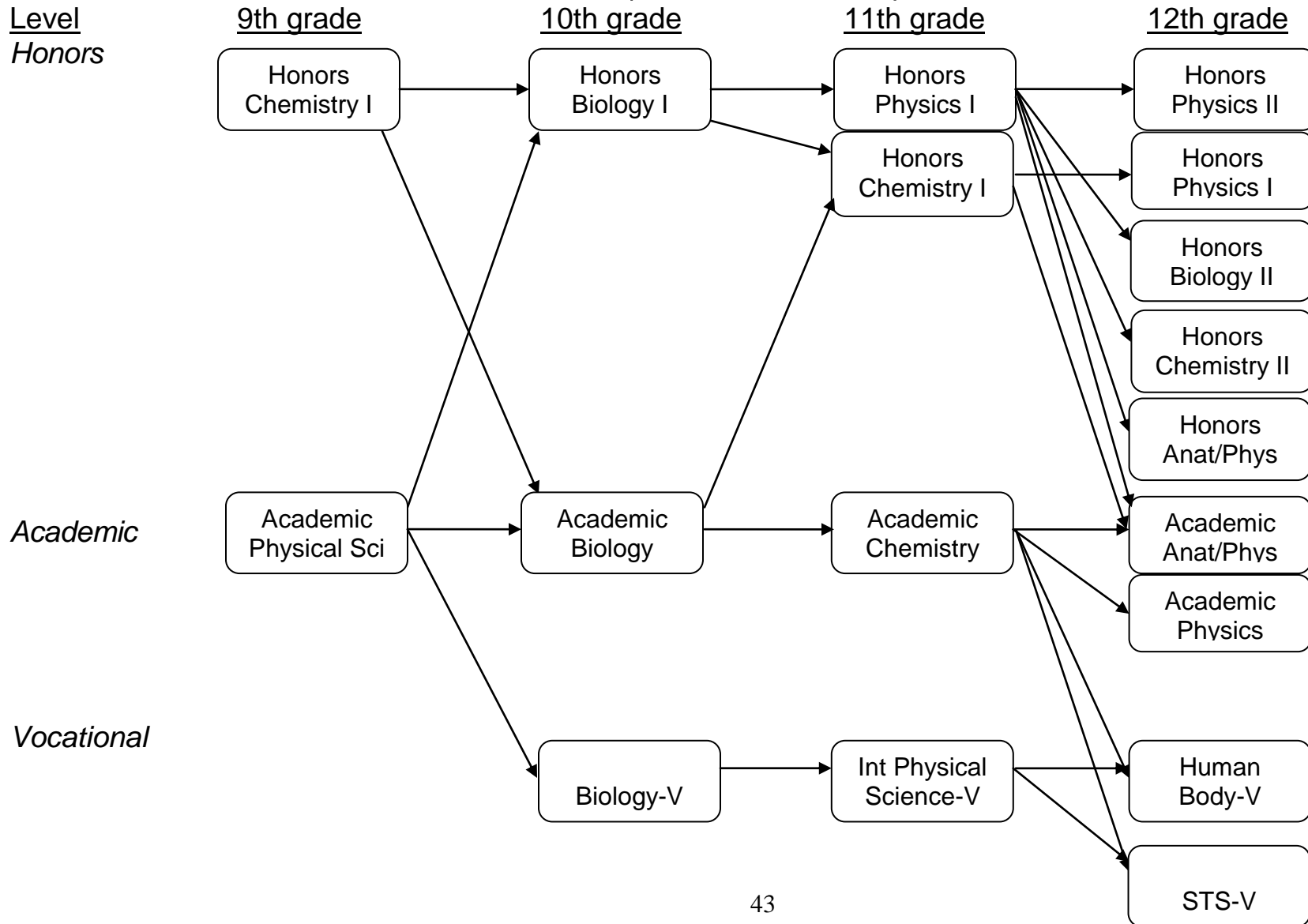
**SCIENCE DEPARTMENT  
KEYSTONE REMEDIATION COURSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>COURSE TYPE</b>
<b>3300</b>	<b>BIOLOGY KEYSTONE REMEDIATION</b>	<b>ELECTIVE</b>
<b>MANDATORY course for students who received a score of Basic or Below Basic on Modules A and B of the Biology Keystone Exam.</b>		

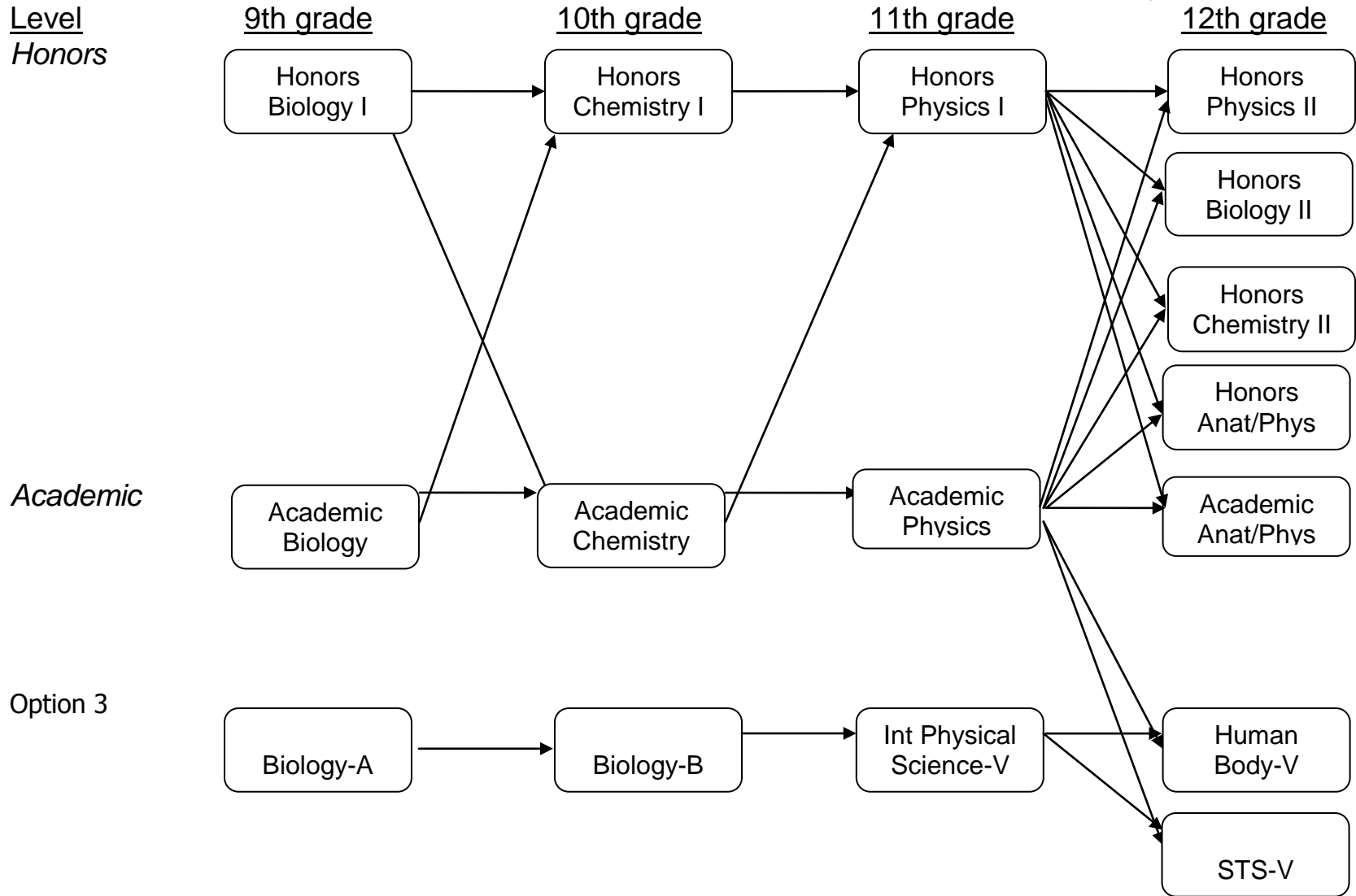
This "non-lab" semester course will provide additional biology instruction in conjunction with Biology Modules A and B. This course is intended to strengthen student performance levels by providing targeted in-depth instruction on Basic Biological Principles (BIO.A.1), Chemical Basis for Life (BIO.A.2), Bioenergetics (BIO.A.3), and Homeostasis and Transport (BIO.A.4), Cell Growth and Reproduction (BIO.B.1), Genetics (BIO.B.2), Evolution (BIO.B.3), and Ecology (BIO.B.4).

Students will continue in this course on a semester basis until they receive a score of Proficient or Advanced on Module A of the Biology Keystone Exam. This course shall be taken concurrently with a student's regularly-scheduled Science course and will not substitute for Science credit required for graduation (see p. 3 and 4 for graduation requirements).

## Science Department (Class of 2016)



## Science Department (Class of 2017 and beyond)



**WORLD LANGUAGE DEPARTMENT  
SPANISH**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>4004</b>	<b>SPANISH I</b>	<b>9-12</b>	<b>ELECTIVE</b>

This course is designed for beginning students to develop skills in listening, speaking, reading and writing. Students will interact both with each other and the available technology to practice vocabulary, grammatical constructions, idiomatic expressions and comprehension. Students will also have the opportunity to discover various aspects of the culture through the use of multi-media.

<b>4014</b>	<b>SPANISH II</b>	<b>10-12</b>	<b>ELECTIVE</b>
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This course is a continuation of Spanish I. Emphasis will be placed upon working toward increasing listening, conversational and comprehension skills. More cultural experiences will be provided through the use of multi-media. Competencies in the area of reading and writing will be further developed.

<b>4024</b>	<b>SPANISH III</b>	<b>11-12</b>	<b>ELECTIVE</b>
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Spanish III continues to develop comprehension, listening, speaking, reading and writing skills. Advanced grammar constructions will be introduced and practiced. Literary selections will be utilized to promote skills and further cultural understanding. More cultural experiences will be provided through the use of multi-media.

<b>4034</b>	<b>SPANISH IV</b>	<b>12</b>	<b>ELECTIVE</b>
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At this advanced level, communication skills will be emphasized. Survival skills in the target language will be developed. This course will combine all elements of foreign language study to promote a high level of oral proficiency. Students will be expected to work independently with available technology.

**PREREQUISITE: Students must have a grade of 80% in Spanish III and/or receive a teacher recommendation to enroll in this class.**

**WORLD LANGUAGE DEPARTMENT  
FRENCH**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>4044</b>	<b>FRENCH I</b>	<b>9-12</b>	<b>ELECTIVE</b>
<p>This course is designed for beginning students to develop skills in listening, speaking, reading and writing. Students will interact both with each other and the available technology to practice vocabulary, grammatical constructions, idiomatic expression and comprehension. Students will also have the opportunity to discover various aspects of the culture through the use of multi-media.</p>			
<b>4054</b>	<b>FRENCH II</b>	<b>10-12</b>	<b>ELECTIVE</b>
<p>This course is a continuation of French I. Emphasis will be placed upon working toward increasing listening, conversational and comprehension skills. More cultural experiences will be provided through the use of multi-media. Competencies in the areas of reading and writing will be further developed.</p>			
<b>4064</b>	<b>FRENCH III</b>	<b>11-12</b>	<b>ELECTIVE</b>
<p>French III continues to develop comprehension, listening, speaking, reading and writing skills. Advanced grammar construction will be introduced and practiced. Literary selections will be utilized to promote skills and further cultural understanding. More cultural experiences will be provided through the use of multi-media.</p>			
<b>4074</b>	<b>FRENCH IV</b>	<b>12</b>	<b>ELECTIVE</b>
<p>At this advanced level, communication skills will be emphasized. Survival skills in the target language will be developed. This course will combine all elements of foreign language study to promote a high level of oral proficiency. Students will be expected to work independently with available technology.</p> <p><b>PREREQUISITE: Students must have a grade of 80% in French III and/or receive a teacher recommendation to enroll in this class.</b></p>			

**COMPUTER CLASSES**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>5211</b>	<b>WORD &amp; POWERPOINT I (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>

Introduction to Microsoft Word and PowerPoint. Topics include:

1. Word
  - a. Creating and Editing a Word Document
  - b. Creating a Research Paper
  - c. Creating a Cover Letter and a Resume
2. PowerPoint
  - a. Creating and Editing a Presentation
  - b. Creating a Presentation with Illustrations and Shapes

**All students are encouraged to take this course.**

<b>5212</b>	<b>WORD &amp; POWERPOINT II (SEMESTER COURSE)</b>	<b>10-12</b>	<b>ELECTIVE</b>
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This course is a continuation of Word and PowerPoint I. Topics include:

1. Word
  - a. Creating a Document with a Title Page, Table, Chart, and Watermark
  - b. Generating Form Letters, Mailing Labels, and Directories
  - c. Creating a Professional Newsletter
2. PowerPoint
  - a. Creating a Presentation with Custom Backgrounds and SmartArt Diagrams
  - b. Working with Information Graphics

**Prerequisite: 70% or higher in Word & PowerPoint I**

<b>5213</b>	<b>WORD &amp; POWERPOINT III (SEMESTER COURSE)</b>	<b>11-12</b>	<b>ELECTIVE</b>
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This course is a continuation of Word and PowerPoint II. Topics include:

1. Word
  - a. Working with Document Sharing Tools
  - b. Creating an Outline Form
  - c. Enhancing an Online Form and Working with Macros, Document Security, and XML
2. PowerPoint
  - a. Reusing a Presentation with Multimedia
  - b. Creating a Self-Running Presentation Containing Animated Shapes

**Prerequisite: 70% or higher in Word & PowerPoint II**

**COMPUTER CLASSES (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>5214</b>	<b>EXCEL &amp; ACCESS I (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>

An introduction to Microsoft Excel and Access. Topics include:

1. Excel
  - a. Creating a Worksheet and an Embedded Chart
  - b. Formulas, Functions, Formatting, and Web Queries
  - c. What-If Analysis, Charting, and Working with Large Worksheets
2. Access
  - a. Creating and Using a Database
  - b. Querying a Database
  - c. Maintaining a Database

**Prerequisite: Algebra I**

<b>5215</b>	<b>EXCEL &amp; ACCESS II (SEMESTER COURSE)</b>	<b>10-12</b>	<b>ELECTIVE</b>
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This course is a continuation of Excel and Access I. Topics include:

1. Excel
  - a. Financial Functions, Data Tables, and Amortization Schedules
  - b. Creating, Sorting, and Querying a Table
  - c. Creating Templates and Working with Multiple Worksheets and Workbooks
2. Access
  - a. Creating Reports and Forms
  - b. Multi-Table Forms
  - c. Using Macros, Switchboards, PivotTables, and PivotCharts

**Prerequisite: 70% or higher in Excel & Access I**

<b>5216</b>	<b>EXCEL &amp; ACCESS III (SEMESTER COURSE)</b>	<b>11-12</b>	<b>ELECTIVE</b>
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This course is a continuation of Excel and Access II. Topics include:

1. Excel
  - a. Using Macros and Visual Basic Applications with Excel
  - b. Formula Auditing, Data Validation, and Complex Problem Solving
  - c. Importing Data, Working with PivotCharts, PivotTables, and Trendlines
2. Access
  - a. Advance Report Techniques
  - b. Advance Form Techniques
  - c. Administering a Database System

**Prerequisite: 70% or higher in Excel & Access II**

<b>5217</b>	<b>WEB DESIGN (SEMESTER COURSE)</b>	<b>10-12</b>	<b>ELECTIVE</b>
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This semester course offers a comprehensive presentation of DreamWeaver CS3 and will expose students to proper Web site design and management techniques. Student will learn the proper procedures to create Web sites suitable for coursework, professional purposes, and personal use developed through an exercise-oriented approach that allows learning by doing. Students will be given an email account, web space and a domain and will be required to complete their own Web site as a final project.



**TECHNOLOGY EDUCATION  
DEPARTMENT**

Technology is a part of EVERYTHING we do in life. People can travel to outer space, receive transplanted parts to their bodies and live better and longer due to advancements in modern technology. Technology is using knowledge, tools, and skills to increase our potential, to solve problems, and to modify our world.

Technology education teaches four areas of technology important to our society: communications, manufacturing, transportation and construction. Unique opportunities are provided for students to gain experience in problem solving, skill and processes, as well as personal and social growth.

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>6501</b>	<b>TECHNOLOGY EDUCATION I</b> (SEMESTER COURSE)	<b>9-12</b>	<b>ELECTIVE</b>

This semester course is designed to introduce the student to the four areas of Technology Education (Tech.Ed). The four areas are Communications, Transportation, Construction, and Manufacturing. The **communications** section will cover measuring and design using basic drafting principles. Students will understand the design process and be able to make drawings in the oblique and prospective styles. The **transportation** section students will explore the various modes of transporting humans and goods. Research will be done on the various modes and students will use this data to produce models of that type of transportation system.

The **construction** section will focus on the various structures and the forces that work against structural materials. Students will construct and test small models of a few of these structures. Data will be recorded and reports will be made on how to improve these structures.

The **manufacturing** section of the course will deal with the tools materials and processes used in the woodworking industry. Students will gain hands on experience using hand tools and machines to complete a few small woodworking projects.

<b>6511</b>	<b>TECH.ED. II</b> (SEMESTER COURSE)	<b>10-12</b>	<b>ELECTIVE</b>
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This semester course is designed to improve the skills obtained in Tech.Ed.I. Emphasis will be placed on students developing their ideas into plans for making new products. Students will work individually and in groups to design, develop, and construct projects in all four areas of technology. Modern techniques of working with wood and wood products will be explored as well as developing the student's ability to become more proficient at problem solving activities. Students will gain experience on setting up an assembly line and mass producing a project as well as being able to create a self-designed project.

**PREREQUISITE:** Passing Tech.Ed. I

<b>6521</b>	<b>PRODUCT DEVELOPMENT/TECH.ED. III</b>	<b>11-12</b>	<b>ELECTIVE</b>
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In Tech. Ed. III, students will use skills learned in tech Ed 1 and 2 to construct a Grandmother Clock, new machines, and advanced techniques will be utilized in the construction of the project.

Students will also be able to make some individual projects on their own upon completion of the clock. They will research projects on their own and provide a detailed plan for any future projects, which they can make during the remainder of the school year.

**PREREQUISITE:** Passing Tech. Ed. I & II

**TECHNOLOGY EDUCATION  
DEPARTMENT (CONT.)**

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>6531</b>	<b>ROBOTICS AND COMMUNICATION TECHNOLOGY (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>

*Communication Technology*

Communication is the process of sending and receiving a message. Students will become familiar with the technological advances in this field. Emphasis will be placed on working with electrical circuitry and simple house wiring. Students will also explore the innovations in the communication technology, which includes fiber optics, the microchip and other new telecommunication systems.

Students will also work on computers. Students will disassemble a computer to learn about the different parts and how they function. They will then reassemble the computer. Basic troubleshooting as well as upgrading will be discussed.

*Robotics Technology*

Robots are a fast growing area of interest and students will be able to learn about different robots and how they function with hands on use of various robots and robotic devices. Students will learn basic programming of robots using the VEX robots and RobotC programming language. Many different robots will be constructed and programmed to complete various tasks and objectives, ipads and Nexus tablets will be used to control robots, drones and quad copters.

Students will become familiar with the newest types of transportation used today. These will include automated guided vehicles (AGV'S), electric cars, and hovercrafts. Students will construct a compressed air racecar and build and launch a model rocket. Other problem solving activities will also occur in class.

<b>6541</b>	<b>DRAFTING/COMPUTER- DRAFTING/DESIGN (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>
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This semester course is designed to introduce the fundamentals of drafting to the beginning student. Various ways to communicate ideas graphically by means of lines, shapes, symbols and other conventional indications are studied. This is a language universally used in our technological society. A basic breakdown of the course includes the ability to develop free hand sketching, lettering, mechanical drawing, geometry of technical drawing, views of an object, dimensioning, working drawings, pictorial drawings and 2-point perspective drawing. The student uses as aids the basic tools of the draftsman (T-square, triangle, ruler, etc.) and learns about mechanical drafting styles.

Students will take part in different activities such as bridge designing and building as well as other projects to aid in their learning of structure and design. Students will also be given the basic hands-on use with a CAD System. While using the equipment and constructing the drawings, he/she learns about industrial materials and the processes of their production as used in the world about us including the home, school and industry.

**TECHNOLOGY EDUCATION  
DEPARTMENT (CONT.)**

<b><u>COURSE NO.</u></b>	<b><u>COURSE NAME</u></b>	<b><u>GRADE</u></b>	<b><u>COURSE TYPE</u></b>
<b>6571</b>	<b>ARCHITECTURAL DRAFTING (SEMESTER COURSE)</b>	<b>9-12</b>	<b>ELECTIVE</b>

This semester course is designed to give the students experience in the building design process, creating drawings of commercial buildings as well as residential. Students will learn how to draw various types of floor plans and include furniture and fixtures as well as outdoor things such as trees, shrubs and other landscaping. Students will also make elevation views of all four sides of the building to show what they would look like from that side of the building.

Students will then learn how to cost estimate the materials and labor for the building job. Computer aided drawing programs will then be used to allow the student to go through the entire drawing process with the aid of the computer and compare the two different ways of completing this process, both by hand and with the use of a CAD program. Students will also design and build a wood bridge to learn about construction skills and engineering.

ART DEPARTMENT			
COURSE NO.	COURSE NAME	GRADE	COURSE TYPE
7001	<b>FINE ARTS</b> (SEMESTER COURSE)	9-12	<b>ELECTIVE</b>

This course is designed for all first year art students and is the essential step toward future art courses. Basic drawing skills designed to aid in better ways of seeing are stressed with emphasis on eye-hand coordination. Line, value, perspective and composition are explored in a series of exercises. A wide variety of procedures and approaches are introduced. Fine Arts will cover two-dimensional (drawing, painting) and three-dimensional (sculpture) in order to encourage experimentation with different media and to learn how to effectively use the natural creativity we all possess.

7005	<b>CRAFTS &amp; CULTURES</b> (SEMESTER COURSE)	9-12	<b>ELECTIVE</b>
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Crafts and Cultures is an introductory course designed to open up an exploration of the rich arts and crafts developed by and strongly identified with major cultures of the world. Students will gain skill in creating crafts such as jewelry-making, basket-making, print-making and weaving while gaining an understanding of the origins and purposes of each craft form.

7011	<b>ADVANCED FINE ARTS</b>	10-12	<b>ELECTIVE</b>
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Advanced Fine Arts is sequentially organized to allow a progression from Fine Arts to more complex techniques, materials and projects. This course encourages the development of skills, perception and visual problem solving. Process and development of ideas in two and three-dimensional forms will be stressed. Students will develop a portfolio of art work for entrance into art school and scholarship opportunities.

**Prerequisite:** Fine Arts course required with a grade of C or above or the submission of 4 works of art to be approved by instructor.

7015	<b>CRAFTS &amp; CULTURES II</b> (SEMESTER COURSE)	10-12	<b>ELECTIVE</b>
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This class is designed to further explore crafts of specific cultures. Students will complete large-scale weaving, print making, and jewelry projects. Process and development of crafts are based on in-depth studios in specific cultures.

**Prerequisite:** Crafts & Cultures course required or the submission of 3 works of art to be approved by instructor.

7021	<b>STUDIO ART I</b>	11-12	<b>ELECTIVE</b>
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Studio is an art college or art school preparatory course with a focus on students attaining the highest levels of skill and creative thinking in order to produce scholarship worthy art. All students are required to register for art scholarship competitions. Studio Arts is sequentially organized to allow a progression from skills learned in Advanced Fine Arts to highly creative and complex techniques, materials and projects. At the end of the first nine week period students in Studio II may choose to continue class projects including murals or create a highly individualized learning path into a single art area such as painting. Students are expected to develop a portfolio of work due at the conclusion of the course.

**Prerequisite:** Advanced Fine Arts course is required or submission of 4 works of art to be approved by instructor.

7022	<b>STUDIO ART II</b>	11-12	<b>ELECTIVE</b>
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This course is designed for the student that has completed both fine arts courses and the studio arts course (pre-requisites). Students selecting STUDIO II will create a highly individualized learning path in a single art area such as painting. They will further develop and enhance a visual portfolio of works.

**Prerequisite:** Advanced Fine Arts and Studio courses are required or submission of 8 works of art to be approved by instructor.

## ART DEPARTMENT (CONT.)

<b>COURSE NO.</b>	<b>COURSE NAME</b>	<b>GRADE</b>	<b>COURSE TYPE</b>
<b>7031</b>	<b>CERAMICS &amp; SCULPTURE I</b> (SEMESTER COURSE)	<b>9-12</b>	<b>ELECTIVE</b>

Ceramics and Sculpture explores the capabilities of the uses of clay and its decorative properties as well as sculpture in varied materials from papier maché, cardboard, plaster, clay etc. Exploration of various materials will enable students to create three-dimensional art forms. This course will focus on developing skills in wheel throwing and hand-building.

<b>7041</b>	<b>CERAMICS &amp; SCULPTURE II</b>	<b>10-12</b>	<b>ELECTIVE</b>
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Students will use basic techniques, tools, materials and previously acquired skills to extend and enhance their ability and knowledge of ceramics and sculpture. Solving problems, experimentation and refinement of forming, throwing on the wheel and construction of three-dimensional works will be explored in the advanced study. Surface design and glazing experimentation will be emphasized.

**Prerequisite:** Ceramics and Sculpture or approved submission of 3 pieces of ceramic work.

<b>7051</b>	<b>CERAMICS &amp; SCULPTURE III</b>	<b>11-12</b>	<b>ELECTIVE</b>
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Students will be challenged to make technically more difficult 3-D works while being introduced to new materials (slips, stains, metal and glass). There is a strong focus on the ideals of perfecting a skill, independent work, and professionalism.

<b>7061</b>	<b>GRAPHICS I</b> (SEMESTER COURSE)	<b>9-12</b>	<b>ELECTIVE</b>
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This course offers a basic introduction and overview to Graphic Communications. Through the first quarter, fundamental principles of computer layout and design will be explored using Adobe Photoshop software. The second half will include glass etching design and airbrushing. Some of the project areas include Photoshop computer projects, plastic dye-sublimation (keychain/mini license plate design), glass etching, t-shirt airbrush design. A complete portfolio will be maintained in this course.

<b>7071</b>	<b>GRAPHICS II</b> (SEMESTER COURSE)	<b>10-12</b>	<b>ELECTIVE</b>
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Students will continue the studies of Graphic Communication areas covered in Graphics 1, utilizing more advanced methodology and theory. Some of the areas introduced will include digital photography, video production and green screen technology. Some project areas include numerous photography projects, radio commercial, sales pitch advertisements, music video, and lip dubs. Various media types will be introduced such as screen printing design (T-shirt/textile printing), banner design and printing plus a more in depth look at dye-sublimation (mugs, license plates, plastics printing) Adobe Photoshop/Illustrator and Pinnacle Studio computer software will be utilized in this course to reinforce computer skills. A complete portfolio will be maintained in this course.

**Prerequisite:** Graphics 1 course required with a C or higher.

<b>7081</b>	<b>GRAPHICS III</b>	<b>11-12</b>	<b>ELECTIVE</b>
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This third level course will permit students to practice, apply and utilize their Graphic Arts I and Graphic Arts II skills and experiences through the demands of a production shop and assigned project work. Students will apply previously learned skills to actual school district production jobs. This class will simulate a real work environment permitting students to experience the demands and satisfactions of the graphic arts field. Advanced digital graphic design applications will also be introduced and explored in this class. A portfolio and journal of all work will be maintained in this course.

**Prerequisite:** Graphics I, Graphics II courses required with a C or higher

## MUSIC DEPARTMENT

COURSE NO.	COURSE NAME	GRADE	COURSE TYPE
7501	HIGH SCHOOL BAND	9-12	ELECTIVE

This course is both elective and selective. It teaches advanced mechanics and fundamentals of music through rehearsals and performances. This ensemble teaches a strong musical language that provides the student with an advanced understanding of musical concepts, enhancing the student's abilities on the instrument of study. Active participation can direct the student to a vocation in music or related areas. The ensemble does a variety of performances. In the fall, the band supports the Varsity football team at all games and pep rallies. It also participates in community parades and several band competitions. In the winter and spring, the band performs at in and out of school concert events. Active participation will give members additional performance opportunities through PMEA District, Region, and Honors band.

The band is an all-inclusive ensemble. Students are required to participate in *ALL* marching and concert band activities. This includes in/out of school rehearsals and performances. Grading criteria will include participation in rehearsals and performances, playing auditions, and advancement on instrument of study.

In the event that a student has a practice conflict with another East Allegheny extra-curricular sport, the student will be expected to split the practice time as much as possible. If it is a game/performance conflict, alternate plans will be made available. No student will be expected to miss a game for ANY rehearsal.

7511	ORCHESTRA	9-12	ELECTIVE
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This offering is both elective and selective. It teaches advanced techniques, mechanics, and fundamentals of music through live performance, in order to develop the student's playing ability. At the same time, it teaches a musical language which gives the student a deeper understanding of music. Active participation in this course can direct the student to a vocation or avocation in music or related areas. This performing group provides in and out of school concerts and plays a major role in the annual musical.

***Since the orchestra is a performing group, extra rehearsals are called as needed.*** Students are required to attend these rehearsals and all performances.

7521	CONCERT CHOIR	9-12	ELECTIVE
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This course is both selective and elective and is intended for students with prior singing experience. Students will work together as an ensemble to develop an appreciation for choral singing, music, and the arts in general. A wide variety of music from various cultures, time periods, and genres will be used to teach students to sing with proper vocal technique and musicality. Additionally, students will focus on mastering foundations of music theory/literacy and developing aural skills through the use of solfege.

The choir is a performing ensemble and students will be expected to attend a minimum of 5 performances a year: 3 concerts, Baccalaureate, and Commencement. Students will also be expected to attend a few after school rehearsals throughout the year in preparation for these performances.

**Attendance at these concerts/performances is mandatory and will comprise the majority of the student's grade.** Other grading criteria include individual vocal evaluations, written tests, and daily participation.

7522	CHORUS	9-12	ELECTIVE
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This course is intended for the beginning singer. This course teaches basic techniques, mechanics and fundamentals of music through live performance. The students work together as an ensemble to develop an appreciation for choral singing, music and the arts. A wide variety of music from various cultures, time periods, and genres will be used to teach students to sing with proper vocal technique and musicality. Students will explore the basic foundations of music theory/literacy and begin to develop aural skills through the use of solfege. The choir is a performing ensemble and **students will be expected to attend a minimum of 5 performances a year: 3 concerts, Baccalaureate, and Commencement.** Students will also be expected to attend a few after school rehearsals throughout the year in preparation for these performances. **Attendance at these concerts/performances is mandatory and will comprise the majority of the student's grade.** Other grading criteria include individual vocal evaluations, written tests, and daily participation.

## FORBES ROAD CAREER AND TECHNOLOGY CENTER

<b>COURSE NO.</b>	<b>SESSION</b>	<b>GRADE</b>	<b>STATUS</b>
<b>8012</b>	<b>FIRST SESSION—AM 7:15-10AM</b> <u>(Only for new admissions, first time attending)</u>	<b>10,11</b>	<b>HALF-DAY</b>
<b>8022</b>	<b>SECOND SESSION—PM 10AM-1PM</b> <u>(Only for students who previously attended)</u>	<b>11,12</b>	<b>HALF-DAY</b>
<b>8032</b>	<b>THIRD SESSION—PM 7:15AM-1PM</b> <u>(Only for students with special permission from Forbes Road after completing 70% of competencies.)</u>	<b>11,12</b>	<b>FULL-DAY</b>



## Forbes Road Career & Technology Center

607 Beatty Road • Monroeville, PA 15146 • 412-373-8100 • FAX (412) 373-3208

**2015-16**

### Architecture/Construction

**Building Construction Technology** .....CIP 46.9999  
 Building Construction Technology students gain technical knowledge as well as practical hands-on training in the trade which includes carpentry, plumbing, electrical, masonry and blueprint reading. Individuals learn to apply technical knowledge and skills in the maintenance and repair of residential and commercial buildings.

**Heating, Ventilation & Air Conditioning**.....CIP 47.0201  
 The program trains students to become qualified HVAC technicians and mechanics. A major portion of the instruction focuses on how to install, diagnose, service and maintain residential and commercial control wiring of HVAC systems.

**Electrical Technology** .....CIP 46.0399  
 Electrical Technology prepares students for entry level electrical and electronics careers. Their technical applications include green technology instruction within this state-of-the-art electrical laboratory. Computerized training equipment is utilized to prepare the students for careers in the "high-tech" electrical field.

**Landscape Design** .....CIP 01.0601  
 Landscape Design prepares students to be employees of nurseries, greenhouses, florists or landscape businesses. The curriculum includes turf management, landscape design and safety, pest and disease management and irrigation. Students obtain practical skills on our 42 acre campus and in the new greenhouse.

### Health Careers/Law Enforcement

**Emergency Response Services** .....CIP 43.9999  
 This program is for students interested in pursuing a career, volunteer service or post-secondary education in emergency medical, law enforcement, fire or emergency management services. ERS provides training in a fully equipped lab including a fire tower and fire truck.

**Health Science Technology** .....CIP 51.0899  
 This program provides students with the hands-on training necessary to offer care to patients while working alongside other qualified health care professionals. Students will be taught basic nursing skills, Anatomy & Physiology and care of the patient with common diseases. CPR, First Aid, Bloodborne Pathogens and Direct Care Staff Worker are certifications that the students may obtain.

### Information Technology

**Advertising Design** .....CIP 50.0402  
 The field of advertising and commercial art requires a person who possesses a wide range of creative skills. The curriculum includes the foundation for all creative/design fields. Students apply the design principles to create a variety of products and printed materials - to reach and compel the target audience to purchase products and services.

**Computer Networking & Security** .....CIP 11.0901  
 This exciting technical course prepares students to design, maintain and secure today's Information Technology (IT) Systems. Network Security Specialists acting as Ethical Hackers prevent data loss from cyber-attacks protecting valuable data. Network Security Specialists are in demand in Law Enforcement, corporations and government.

**Multimedia Design**.....CIP 11.0801  
 This program allows students to be creative with design presentations for entertainment, industrial and commercial applications. This curriculum utilizes digital/video cameras and projectors in conjunction with computers. Students create animations, manipulate photographs, create presentations and web pages.

### Manufacturing

**Advanced Manufacturing** **NEW NAME** .....CIP 48.0501  
 Advanced Manufacturing is a high paying field that requires both technical knowledge and hands-on training. Students will read blueprints, cut, shape, and finish metal products on state-of-the-art computer controlled machines. Student projects include making motorcycle parts, race car parts, machinist tools and combat robots.

### Service Occupations

**Baking & Pastry Arts** **NEW PROGRAM**.....CIP 12.0501  
 This course provides students with the basic skills needed for entry-level employment in the baking field. Students will prepare baked goods, perform cake decorating and gain banquet experience. Students have the opportunity to obtain the Serv-Safe certification.

**Cosmetology** .....CIP 12.0401  
 This program builds skills for a variety of careers within the cosmetology industry. The course includes skills in hair, skin and nail care as well as salon procedures. Upon completion of the required hours, students will be eligible to take the PA State Boards.

**Culinary Arts**.....CIP 12.0508  
 The Culinary Arts course offers instruction in the commercial restaurant industry including: gourmet and fine dining, customer service, menu planning, cost-control, sanitation and hygiene. The curriculum encompasses the complete food cycle including nutrition, ordering processes, menu design and presentation skills.

**Early Childhood Education** **NEW NAME** .....CIP 19.0708  
 The course encompasses all phases of early childhood development including physical, social, emotional and intellectual. The curriculum also includes nutrition, guidance, discipline, the value of play and the science of child development.

### Transportation

**Automotive Technology** .....CIP 47.0604  
 Automotive Technology provides instruction covering a wide range of skills for the high-tech automotive industry. This includes engines, computer diagnostics, maintenance, repair and the opportunity to earn a PA State Inspection and Emissions Certification.

**Collision Repair Technology** .....CIP 47.0603  
 The program provides the skills necessary to transform a wrecked vehicle into a masterpiece. Students receive instruction with state-of-the-art equipment for replacing or repairing auto body parts. Students learn to customize vehicles with painting techniques.

**Diesel Technology** .....CIP 47.0613  
 This program provides training on biodiesel, diesel, and gasoline powered medium/heavy trucks and equipment. This equipment is part of today's transportation, construction and manufacturing industries. Students can earn a PA State Inspection and Emissions Certification.

**Warehouse Management** .....CIP 52.0203  
 This program will actively engage students in the process of receiving, storing, shipping, controlling and distributing products. Students will use conveyors, hand trucks and carts to transport materials/supplies. They will work in the Forbes shipping and receiving department.

### Ninth Grade Exploratory Program

Ninth Grade Exploratory program begins with a two week session in Career Exploration. Students will then participate in four programs including safety, theory and lab areas.



## **HEALTH & PHYSICAL EDUCATION DEPARTMENT**

The Health and Physical Education Program is designed to provide students with knowledge to help acquire a lifestyle that promotes personal health and well being throughout life. The Health and Physical Education Department understands the importance of instilling in each student the fact that his/her own health is dependent upon the lifestyle choices that he/she makes. We feel confident that our curriculum provides students with the information needed to make educated decisions that will lead to a healthy life.

The Health and Physical Education Program at East Allegheny Senior High School is a diversified activity-based program that has been designed to encompass the interest, capabilities and limitations of all students within the school system. Because Physical Education is an activity-based course, students are required to be present to earn their grade. Therefore, students must be present no less than 65% of the time to pass. Students who have missed more than 65% of their Physical Education (including Swimming) will fail the quarter. The only exemption would be students who are medically excused. Activities are designed to allow students to safely and successfully engage in sports and physical fitness activities that encourage knowledge, skills and interest in personal and physical health throughout their lives.

Students enrolled in Pennsylvania schools are required by school law to participate in courses of instruction in Health and Physical Education.

### **SCHEDULING IN PHYSICAL EDUCATION**

#### **9<sup>th</sup> Grade Health and Physical Education**

Ninth grade students will engage in Health activities for one quarter that focus on the following subject matter: tobacco, alcohol, and chemical abuse (as per ACT 211), conflict resolution, decision making, character development, healthy relationships, abstaining from high risk behaviors, stress management, hygiene, first aid, nutrition, and weight management. The topics discussed in class are not limited to the ones listed above. The teacher reserves the right to alter lessons to best meet the needs of the students. All lessons will be driven by the National Standards for Health Education along with the Pennsylvania State Standards.

#### **Aquatics Component of the Physical Education Program**

As part of the regular Physical Education program, students will be required to participate in swimming. Instruction on the skills in addition to skills practice will be provided during class. Students will demonstrate their skill aptitude in aquatics while testing out of a swimming skills test. This test is a modified skills test incorporating skills from the Level I, Level II and Level III American Red Cross Water Safety Instruction skills assessments. Students who fail to pass out or students who do not participate in swimming will not be allowed to select their physical education activities and will remain in swimming until the swimming requirements are met.

As part of the Physical Education program, all students in grades 9 through 12 will have the opportunity to select from pre-determined sports or physical activities during each nine weeks (selection is dependent upon the space that is available for each activity) for a total of two activities each nine weeks. The students will be assigned to an instructor who will teach from the following areas:

TEAM SPORTS

Basketball  
Flag Football  
Gym Hockey  
Soccer  
Softball  
Team Handball  
Volleyball  
Ultimate Frisbee  
Mat Ball  
Hot Ball

INDIVIDUAL SPORTS

Bocce  
Aquatics  
Four Square  
Badminton  
Fitness  
Table Tennis  
Track and Field  
Indoor Horseshoes

Students will also be required to participate in a fitness component as included in the regular Physical Education program. The fitness component will include various fitness activities and fitness games as well as setting fitness goals.

**MEDICALLY EXCUSED STUDENTS**

When a physician indicates that a student must be excused from a specific activity, an attempt will be made to place him/her in another activity, with the physician's approval. Additionally, students who are medically excused from Physical Education are not permitted to participate in athletics for the duration of the medical excuse. Students who are medically excused from Physical Education may be required to complete a written project pertaining to Health and Physical Education. Upon completion of the assigned project(s), the student's work will be evaluated and the grade earned will be the student's grade for Physical Education.

When a physician indicates that a student must be excused from swimming classes, that student may be assigned written projects pertaining to aquatics. Upon completion of the assigned project(s), the student's work will be evaluated and the grade earned will be the student's grade for swimming. If a written project is not assigned, students will receive an "X" on their report card.

When a student is able to return to physical education, a physician's medical release must be presented to the physical education teacher before any activity will be permitted.