

**REYNOLDS JR-SR
HIGH SCHOOL
PROGRAM
OF
STUDIES**

2019-2020

Dear Parent/Guardian:

We are sending this letter to you to seek your assistance in planning for the educational program of your son or daughter.

Certain minimum standards established by the Commonwealth of Pennsylvania and the Reynolds School Board are outlined in the attached program of studies. The Reynolds School Board has adopted minimum graduation requirements to conform to Commonwealth curriculum guidelines. Election beyond these minimums is at the discretion of the student acting in cooperation with you and school personnel.

Since Reynolds High School is a four-year high school, the credits for graduation are accumulated in grades 9 through 12. In addition, the policy has been established that all students will carry a minimum of 6.5 credits each year.

The selection of courses should be given serious consideration and should be carefully planned. Students will not be permitted to add full year courses after the fifth day of school. Semester courses may not be added after the fifth day of each term. Students dropping a class before these days will receive a "W" withdrawal. Dropping a class after the fifth class day will result in a failing grade being assigned for that course.

It should be understood by both parent and student that a schedule will be generated from these course selections and requests for schedule changes reflecting a change in academic or career goals may require a parent conference.

Advanced Placement and Pre-Advanced Placement courses are offered in Calculus, Chemistry, English, Biology and Physics, to eligible students. The purpose of the AP course is to prepare students to successfully complete an Advanced Placement examination and thus earn advanced college credit. Students who take the AP courses must take the AP exam at district expense.

The counselors at the high school are available to help anyone wanting assistance in planning the educational program for his/her son or daughter. Parents who wish to discuss educational plans or related matters with school guidance personnel are invited to schedule an appointment by calling (724) 646-5700.

Scott L. Shearer
High School Principal

SS/jw

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PROMOTION POLICY

Students in grades seven and eight will be promoted to the next grade if they pass all full-time subjects for the year. The full-time subjects are listed as follows: English/Language Arts, mathematics, social studies and science. A student who fails no more than two full-time subjects, however, may be assigned to the next higher grade if that student successfully repeats the failed course(s) in an approved summer program. A student who fails three or more full-time subjects will be retained in their current grade unless granted special approval by the administration to enroll in an approved summer program. This approval shall not be granted unless special conditions exist which have adversely affected the student's achievement.

A student who fails two or more subjects in the same grade for two consecutive years may be administratively assigned to the next higher grade at the discretion of the principal in consultation with other appropriate administrators.

To be assigned to a ninth grade homeroom, a student must have passed the following four classes:

English/Language Arts, Social Studies, Science and Mathematics.

To be assigned to a tenth grade homeroom, a student must have earned a total of 6.5 credits.

To be assigned to an 11th grade homeroom, a student must have earned a total of 13 credits.

To be assigned to a 12th grade homeroom, a student must have earned a total of 19.5 credits.

ACADEMIC ELIGIBILITY

The Reynolds School Board has adopted the following policy regarding academic eligibility for all co-curricular activities and interscholastic athletics:

1. In order to be eligible for all co-curricular activities and interscholastic athletics, students must be passing all courses required for graduation.
 - A. To be eligible for athletics or co-curricular activities, seventh and eighth grade students must be passing the four core subjects of English/Language Arts, Social Studies, Science and Mathematics.
 - B. Seniors on work release must be enrolled in and passing a minimum of 4 credits.
 - C. The previous year's final grade is the controlling factor for all of the fall activities.
 - D. Nine weeks grades will be the controlling factor for participation in all school activities and athletics during the remainder of the school year. In all cases, however, the mid-term progress report grade will be used to determine restoration of eligibility for a student who has previously been declared ineligible. (Note: it is possible to be promoted but not be eligible because of failing a core subject).
2. A student must be in attendance for a minimum of 80 days per semester. Extenuating circumstances and extended illness, however, may be reviewed by the appropriate principal and a decision made which will be fair to the student while protecting the integrity of board policy. Physicians' statements may be required to restore eligibility.
3. If students are not in school by 10:00 A.M., they shall not participate in their particular activity that day unless an exception, for appropriate reasons, is granted by the school principal. This means that any student in any activity may not participate in either practice or scheduled events or contests on the day in question.
4. If a student is ineligible at the beginning of a marking period, he/she may practice if they attend the school sponsored tutoring sessions. The student may not participate in a scrimmage, tournament, or event with the team or organization while ineligible. If a student remains ineligible at midterm and/or the completion of the marking period, he/she may not continue to practice.

ALTERNATIVE LEARNING OPPORTUNITIES

AP Courses – Depending on interest and enrollment, we are offering Advanced Placement Courses in English, Calculus, Biology, Chemistry and Physics. Calculus and English are 1.0 credit, Biology, Chemistry and Physics are 1.5 credits and all will be weighted at 1.1. The weighting of Advanced Placement courses will be reflected in each student's Adjusted Grade Point Average (AGPA). The AGPA will be the determining factor for class rank at the conclusion of the school year. The completion of the AP Exam is required to receive a credit. Passing the AP Exam will result in Advanced Placement credits by colleges that accept AP credits. (The fee for taking the Advanced Placement Exam will be covered by the school district.)

Dual Enrollment - Students can earn high school and college credit by enrolling in course work at an approved local college. This program is available to 10th, 11th & 12th grade students who have a cumulative grade point average of 84% or better and a sincere desire to take college-level, credit-bearing courses at a local community college or four-year colleges and universities. If the funding is available, partial cost of the courses may be paid for through a grant from the state.

Distance Learning – Innovative technology will bring diverse educational opportunities to the students and staff at Reynolds High School. Students may choose to enroll in courses for credit, participate in short term seminars for non-credit or benefit from video field trips. Students in grades 11 and 12 may choose to enroll in courses for credit or non-credit seminars. Students in the GATE Program should consult with their teacher about appropriate program offerings. Interested students should see their guidance counselor for information about enrolling in this program. Credit courses may cost as much as \$500 which is the responsibility of the student.

Correspondence Courses – Students in grades 7 through 12 may enroll in correspondence courses for make-up credit or, in limited cases, to acquire original credit. Participation in this course work requires approval of the principal and the guidance counselor. Applications and additional information about this program are available in the guidance office. Fees for this program are varied based on the program and are the responsibility of the student.

Guided Independent Study – Students in grades 9 through 12 may elect to take courses by independent study with a mentor teacher. Arrangements and consent must be made through the guidance counselors and the mentor teacher.

Work Release - Twelfth grade students in the Work Release Program arrange regularly scheduled work in a career of their interest; attend an entrance interview with a guidance counselor to select goals/objectives; maintain journals of all activities; submit summary-reports on a quarterly basis; attend an exit interview with a guidance counselor to evaluate/assess the experience.

Home Education – Although the Board may approve a program of home education, pursuant to law, permitting students to study at home in accordance with Board policy, it is under no obligation to award a diploma or otherwise acknowledge the completion of a home-educated student's education. Additionally, any credits earned through an approved home-schooling program will not count towards graduation.

MINIMUM GRADUATION REQUIREMENTS

Students are required to schedule a minimum of 6.5 credits per school year.

A minimum of 26 credits and a Proficient/Advanced score on the Keystone Exams (Algebra, Biology, and Literature) is required by the Reynolds School District through its Board of Education for graduation.

These credits must include the following:

GRADES 9, 10, 11, 12

<u>Courses</u>	<u>Units</u>	<u>Courses</u>	<u>Units</u>
English	4.0	#Applied Computer Literacy	1.0
Social Studies	4.0	#Family & Cons. Science	1.0
Mathematics	4.0	#Intro to Materials Processing	1.0
Science	3.0	Health	1.0
		Physical Education	3.0
		Electives	6.5

Beginning with the Class of 2021 2 of 3 are required for graduation

* All high school level courses taken prior to 9th grade shall be counted as graduation credit and in the GPA.

KEYSTONE REMEDIATION

In addition to being assigned to taking remediation coursework, students who have not obtained proficiency on their respective Keystone/PSSA Exams may be rescheduled from a study hall and/or elective classes to participate in remediation coursework. Presently we use Study Island, a research-based program which is web-based so the students can access the program by simply logging on to www.studyisland.com from anywhere and learn at their own pace.

SUBJECTS OFFERED BY GRADE

<u>Ninth Grade</u>	<u>Credits</u>	<u>Tenth Grade</u>	<u>Credits</u>
English	1.0	English	1.5
World History	1.0	Early Am.Hist./U.S. Hist. I	1.0
Pre-AP Biology*	1.5	Pre AP U.S. History**	1.0
Biology I	1.5	Chemistry*	1.5
Algebra I	1.5	Pre-AP Chemistry*	1.5
Geometry*	1.0	Algebra II*	1.0
GATE	1.0	Geometry*	1.0
Materials Processing	1.0	Computer Graphic Design	1.0
Physical Education	.5	Health	.5
Academic Competition Exploration	.5	Accounting*	.5
Applied Computer Literacy	.5	Art I*	1.0
Intro. Family & Consumer Science	.5	Drawing & Painting*	1.0
Digital Photography*	.5	Spanish II*	1.0
Intro. To Art – 1 Semester	.5	German II*	1.0
Crafts*	.5	Entrepreneurship*	1.0
Spanish I	1.0	Manufacturing & Design*	1.0
German I	1.0	Accounting II*	.5
Concert Band	1.0	All 9th grade elective options are also available.	
Marching Band	1.0		
Concert Choir	1.0		
Guitar	.5		
Mass Media/Newspaper	.5		
Mass Media/Yearbook – 1 Semester	.5		
Mass Media/Video – 1 Semester	.5		
Intro to Materials Processing	.5		
Media Tech	.5		
Pre-Algebra	1.0		
Pre-Biology	1.0		

*Refer to course descriptions for pre-requisites.

**Currently Not Offered

SUBJECTS OFFERED BY GRADE

<u>Eleventh Grade</u>	<u>Credits</u>	<u>Twelfth Grade</u>	<u>Credits</u>
English	1.0	English	1.0
Pre - AP English*	1.0	AP English (Weighted Course)*	1.0
Modern Am. Hist./U.S. Hist. II	1.0	Gov't/Economics	1.0
Pre -AP U.S. History**	1.0	AP U.S. History (Weighted Course)**	1.0
AP U.S. History (Weighted Course)**	1.0	Science Trends	1.0
Science Trends	1.0	Physics*	1.5
Anatomy – 1 Semester	.5	AP Physics B (Weighted Course)*	1.5
Biology (Weighted Course)*	1.5	Biology II*	1.0
AP Chemistry (Weighted Course)*	1.5	AP Chemistry (Weighted Course)*	1.5
Algebra II*	1.0	Calculus*	1.0
College Algebra/Trigonometry*	1.0	AP Calculus (Weighted Course)*	1.0
Pre-AP Calculus*	1.0	College Algebra/Trigonometry*	1.0
Geometry*	1.0	Business Math*	1.0
Spanish III*	1.0	Spanish IV*	1.0
Art II*	1.0	Volunteer Service	.5/1.0
Practical Family Life	1.0		

All 9th and 10th grade elective options.

All 9th, 10th, and 11th grade elective options are also available.

*Refer to course descriptions for pre-requisites.

** Currently Not Offered

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COURSE DESCRIPTIONS

ART COURSES

Introduction to Art: (.5 Credit)

#0610

This beginner course is directed toward the ninth grade population or any upper class student seeking to begin serious art study or simply to enrich his/her education. It is a pre-requisite for admittance to all other art classes. The course content consists of a balanced program of creative work, allowing the student to explore the various directions that art may take.

Art I: **(1.0 Credit)** **(Pre-requisite: Intro. to Art with a 72% or better grade)** **#0620**

The art course will build upon the foundation of introduction to art. Students will creatively explore as broad a scope of materials and techniques – both two and three-dimensional – as time permits. Areas of study will include: photography and dark room techniques, color, design, crafts, commercial art, etc.

Art II: **(1.0 Credit)** **(Pre-requisite: Art I)** **#0621**

The student will continue to creatively explore, in greater depth, materials and techniques introduced in the previous art courses. Special emphasis will include painting, graphics, jewelry and silk screen. Time will be set aside four individual studio exploration in the art area of your choice.

Drawing and Painting: (1.0 Credit) (Pre-requisite: Intro. to Art with an 84% or better) Gr. 10-12 #0699

The Drawing and Painting course will expose the Art student to advanced skills and techniques of two dimensional art forms. The student will work with a variety of materials and mediums using the elements and principals of Art.

Crafts: (.5 Credit) (Pre-requisite: Intro. to Art) #0611

The student will be introduced to a variety of contemporary crafts exploring materials, methods and design. Special emphasis will include nine weeks of pottery. Other craft areas covered can include leather tooling, paper Mache, copper tooling, weaving basketry, batik, and macramé, copper enameling, stitchery and tile painting.

Digital Photography: (.5 Credit) (Pre-requisite: Intro.to Art with an 80% or better) #0612

This course will focus on digital photography. Students will develop an understanding of the digital mediums through the use of digital cameras, scanners, computers and related photography and graphic design software. Students are encouraged to be creative and develop the ability to critically analyze the work produced in the course.

Art/Independent Study: (1.0 Credit) (Pre-requisite: Art Faculty Approval)

This class is designed especially for the senior who already has a good background in art fundamentals and wishes to explore certain areas of special interest on an individual basis. These interest areas can include photography, airbrush, sculpture, graphics, painting or any other art field for which supplies and equipment are available.

BUSINESS EDUCATION COURSES

>>Applied Computer Literacy: (.5 Credit)

#0500

This is a half-credit course that introduces many of the word-processing features of Microsoft Word and spreadsheet features of Excel to you. You should have completed a keyboarding course with a passing grade and be able to key efficiently. Using Word will enhance your ability to prepare letters, reports, and other printed documents for your personal and educational needs. Information is presented in a step-by-step, hands-on manner progressing from simple to complex functions. Students will use Word software to create, edit and print various types of documents (letters, reports, etc.) and for simple desk-top publishing. (This course is required for graduation.)

Entrepreneurship: (1.0 Credit) Grades 10-12 #0540 **(Pre-requisites: Recommendation of Applied Computer Literature, Accounting, Computer Graphic Design)**

The focus of this course is to familiarize the students with the principles of owning and operating a business from the ground up. The company will consist of 5 different departments. The finance department will keep the company's financial records. The marketing and sales department will develop and carry out the company's marketing strategy. The production department will order raw materials, establish production goals, develop a production strategy and monitor quality control. The human resource team is responsible for developing the company's compensation plan and keeping attendance and payroll information. The president, officers, and all participants will gain valuable leadership and management experiences while performing several specific duties.

Accounting: (.5 credit) Grades 10-12 #0507 **(Pre-requisite: Applied Computer Literacy)**

This course presents accounting principles/application to various businesses. Covers the accounting cycle, income determination, and financial reporting. Includes a comprehensive study of the basic elements of accounting and emphasizes the nature and importance of accounting procedures.

Accounting II: (.5 credit) Grades 10-12 #0509 **(Pre-requisite: Accounting)**

This course presents accounting principles with an emphasis on practical application of Accounting I skills in a business environment.

>> Denotes courses required for graduation.

>>ENGLISH COURSES

English I: **(1.0 Credit)** **Grade 9** **#0010**

This course will be taught with the integration of literature, grammar and composition. The main purpose of this course will be to introduce students to major American and British writers. In addition to major writing assignments, students will read a variety of literary genres.

English II: **(1.5 Credit)** **Grade 10** **#0020**

In this English course, students will develop a number of multi-paragraph compositions using a variety of methods such as exposition, description, process, opinion and narration. The course will also acquaint the students with the techniques of research since an MLA research paper is required and also a persuasive speech. Students will experience participation in informative group discussions in order to develop discussion techniques and teamwork.

Keystone Literature A: **(1.0 Credit)** **#0032**

This course meets the required remediation set by the Pennsylvania Department of Education for any student who has not obtained proficiency on the Literature Keystone Exam. Keystone Literature A is a data driven course that will focus on Literature skills that are necessary to achieve proficiency on the Literature Keystone exam.

Keystone Literature B: **(1.0 Credit)** **currently not offered** **#0034**

This course meets the required remediation set by the Pennsylvania Department of Education for any student who has completed Keystone Literature A and has not obtained proficiency on the Literature Keystone Exam. Keystone Literature B is a data driven course that will focus on Literature skills that are necessary to achieve proficiency on the Literature Keystone exam.

English III College Prep: **(1.0 Credit)** **Grade 11** **#0030**
(Pre-requisite: Earned 76% or above in previous year Academic English and teacher recommendation.)

Designed for academic students, this course is offered as an aid in preparing for college entrance. Emphasis is placed upon methods of developing and testing verbal competency and upon the study of correct use of the language. Students will also study American Literature and writers. Reading and writing skills will be emphasized.

English III: **(1.0 Credit)** **#0031**

This course involves reading, vocabulary, writing, and the study of various processes that will be helpful to any student in the future. Some career planning is also included throughout the year. This course best suits students who are planning to go to the workforce, military, or a technical school following graduation.

>>Denotes courses required for graduation.

Pre - AP English:**(1.0 Credit)****#0033****(Pre-requisite: 85% or better in 10th grade English and recommendation of 10th grade English teacher)**

Advanced Placement English Literature and Composition Prep is a course designed to prepare students for the rigors of the senior level AP English course. Students will explore many genres in literature – novels, plays, poetry, essays, and short stories – from a wide variety of literary periods. Students will engage in critical and analytical discussion and writing in response to the above mentioned literature.

Assigned summer reading is required. Failure to fulfill the summer reading requirement will result in removal from the course. The level of intensity of AP associated courses should not be underestimated by students; high expectations and standards will be upheld by any who wish to stay in the AP track.

English IV College Prep:**(1.0 Credit)****Grade 12****#0040****(Pre-requisite: Earned 76% or above in previous year Academic English and teacher recommendation.)**

This course will refine composition skills and introduce in-depth research techniques to be used in the completion of three MLA term papers. In addition, the literature of England from the Anglo-Saxons to the modern period will be studied. Emphasis will be placed on public speaking presentations, communication skills and working as a team.

English IV:**(1.0 Credit)****Grade 12****#0041**

This course involves reading, vocabulary and the study of various processes that will be helpful to any student in the future; e.g., developing resumes, completing job applications and developing necessary writing skills for success.

AP English:**(1.0 Credit)****Grade 12****Weighted: 1.1****#0043****(Pre-requisite: 85% or better in Pre-AP English and teacher recommendation)**

Advanced Placement English Literature and Composition is a weighted course, concentrating on critical reading and writing skills. Students will explore many genres in literature – novels, plays, poetry, essays, and short stories – from a wide variety of literary periods. The focus of the course will be preparation for the Advanced Placement Examination; any student, however, will benefit from learning to read and write critically and analytically.

Assigned summer reading is required; additional assignments may also be required. Failure to fulfill summer reading requirements or other assignments will result in removal from the course.

All students will be required to take the AP Exam at district expense.

>> Denotes courses required for graduation.

FOREIGN LANGUAGES

German I:

(1.0 Credit)

#0420

German I is a beginner's course which emphasizes the skills of speaking, listening comprehension, reading and writing. In addition to these skills, the first year student will be introduced to the culture and customs of Germany.

German II:

(1.0 Credit)

#0421

Building upon the foundation learned in the first year course, the German II student will strengthen his/her skills in the areas of speaking, listening comprehension, reading and writing. By the end of the second year of study, the German II student will be acquainted with most aspects of German grammar and will have increased his/her first year vocabulary significantly.

German III/IV as Independent Study:

(1.0 Credit)

#0424

(Pre-requisite: 84% in German II, Faculty Approval)

This class is designed for juniors and seniors who would like to advance their knowledge of the German language and culture. Students will be responsible for meeting with the teacher and completing work on their own according to timeline set by the teacher.

Spanish I:

(1.0 Credit)

#0430

During the first year of Spanish, emphasis is placed on speaking and hearing the target language. This is aided through the use of CDs by native speakers. Writing skills are developed through the use of the textbook which is accompanied by a workbook.

Spanish II:

(1.0 Credit)

#0431

The second year of Spanish begins with a review of vocabulary and grammar learned during the first year. Emphasis is placed on further development of writing skills. Cultural readings, presented throughout the book, aid in the development of reading skills.

Spanish III:

(1.0 Credit)

#0432

Spanish III is a combination of materials learned during the first two years of Spanish and places an emphasis on Spanish literature, old and new.

Spanish IV:

(1.0 Credit)

#0433

Students must have completed materials required for Spanish I, II and III. Students in Spanish IV will further develop skills in preparation for college classes.

FAMILY AND CONSUMER SCIENCES

(Home Economics)

>>Introduction to Family and Consumer Sciences: (.5 Credit)

#0750

This semester course will build on concepts introduced in the eighth grade block class, in the areas of consumer interests, resource management, child care, food preparation, and nutrition. It will help students to gain usable skills in decision making and balancing responsibilities, as well as understanding family interactions and changes.

Practical Family Life:

(1.0 Credit)

#0751

This course addresses many areas of family and personal relationships. It also covers parenting, child development, healthy lifestyles and much more.

>>MATHEMATICS COURSES

Algebra I: (1.5 Credit)

Algebra I consists of performing all the basic mathematics material operations on unknowns. Equations and inequalities are solved and graphed. Statement problems are translated into math problems and solved. Equations are viewed on the coordinate plane. Systems of equations and fractional expressions are explored. In order to take in eighth grade, must also pass readiness test/teacher recommendation.

Keystone Algebra A: (1.0 Credit)

#0145

This course meets the required remediation set by the Pennsylvania Department of Education for any student who has not obtained proficiency on the Algebra I Keystone Exam. Keystone Algebra A is a data driven course that will focus on Algebra I skills that are necessary to achieve proficiency on the Algebra I Keystone exam.

Keystone Algebra B: (1.0 Credit)

currently not offered

#0146

This course meets the required remediation set by the Pennsylvania Department of Education for any student who has completed Keystone Algebra A and has not obtained proficiency on the Algebra I Keystone Exam. Keystone Algebra B is a data driven course that will focus on Algebra I skills that are necessary to achieve proficiency on the Algebra I Keystone exam.

Geometry: (1.0 Credit)

(Pre-requisite: Algebra I)

Geometry is a college preparatory course that is the study of lines, angles, polygons, and circles. Students will apply definitions, postulates and theorems to solve traditional problems as well as real world applications. This academic course stresses higher order reasoning and logical proof.

Algebra II: (1.0 Credit)

(Pre-requisite: Algebra I & Geometry)

Algebra is a college preparatory course. This course begins with a review of linear equations, inequalities, and systems. The study of quadratic equations, inequalities, and rational equations are emphasized (concepts as well as real-world applications). Problem solving strategies and skills are enhanced throughout the algebra. The application of graphing calculators will be used to confirm algebraic concepts. Higher order thinking skills such as logical thinking, analytical thinking and abstract thinking will be emphasized.

College Algebra/Trigonometry: (1.0 Credit)

#0140

(Pre-requisite: 80% or better in Algebra II and Geometry)

This course covers the topics needed for further academic study in math and/or sciences. Included are 1) a review of number properties and basic operation on polynomials, rational expressions, exponents and radicals, 2) solving algebraic and trigonometric equations, 3) trigonometric formulas, identities and graphs, 4) solving triangles, 5) systems of equations, 6) matrices and determinants, 7) sequences, mathematical induction and the binomial theorem and 8) introduction to conics section.

Business Math: (1.0 Credit)

SENIORS ONLY

#0143

(Pre-requisite: Algebra I and Geometry)

Business Math is an applications course covering the basic mathematics needed to function in everyday life. Budgeting, borrowing, and saving money will be stressed. Topics in this course include: types of income and careers, banking services such as checking accounts, credit cards, and loans. Also explored will be the process of owning your own car and home, insurance, investing, and how taxes are completed.

>>Denotes courses required for graduation.

Calculus: (1.0 Credit) #0141
(Pre-requisite: 80% or better in Algebra I, Algebra II, Geometry & College Algebra/Trig)

The Calculus course consists of a full year of calculus with elementary functions. It is comparable to introductory calculus in college and universities. This course is primarily concerned with the intuitive understanding of the concepts of calculus and experience with its methods and applications. Topics in this course will be functions and graphs, limits and continuity, differential calculus, and integral calculus through the volumes of solids of revolution.

Pre-AP Calculus: (1.0 Credit) #0139
(Pre-requisite: 85% or better in Pre AP Calculus and teacher recommendation)

This course covers the topics needed for further academic study in math and/or sciences and prepares students for the rigors of AP Calculus. Included are 1) a review of number properties and basic operation on polynomials, rational expressions, exponents and radicals, 2) solving algebraic and trigonometric equations, 3) trigonometric formulas, identities and graphs, 4) solving triangles, 5) systems of equations, 6) matrices and determinants, 7) sequences, mathematical induction and the binomial theorem, 8) introduction to conics section, 9) solving and graphing logarithmic and exponential equations, and 10) emphasis on limits and abstract algebra.

AP Calculus: (1.0 Credit) Grade 12 Weighted: 1.1 #0142
(Pre-requisite: 85% average or better in Math grades 8 - 11)

The AP Calculus course consists of a full year of calculus with elementary functions. It is comparable to introductory calculus in colleges and universities. This course is primarily concerned with the intuitive understanding of the concepts of calculus and experience with its methods and applications. Topics in this course will be functions and graphs, limits and continuity, differential calculus, and integral calculus through the volumes of solids of revolution.

All students will be required to take the AP Exam at district expense.

>> Denotes courses required for graduation.

MUSIC COURSES

Concert Band: **(1.0 Credit)** **#0640**

This course is open to students previously enrolled in the instrumental program or students with previous outside experience who pass an audition given by the Director of Bands. Concert Band exposes the student musicians to a wide and varied repertoire. Represented musical periods include Baroque, Classical, Romantic and Contemporary. Performances include a Fall Concert, Winter Concert, Music in Our Schools Concert, Spring Concert, and Commencement, along with various during-school performances.

Concert Choir: **(1.0 Credit)** **Grades 9-12** **#0631**

This course is open to those students selected through an open audition held in the spring for the following year. Concert Choir/Mixed Chorus will expose students to a wide variety and style of vocal music including Renaissance, Baroque, Classical, Romantic and Contemporary as well as Pop, Jazz and Broadway. Emphasis is placed on tone production, diction, articulation, breathing, music reading, and fun. A minimal performance schedule includes a Winter Concert and Spring Concert and occasional during-school performances, as scheduled.

Jazz Pep Band: **(1.0 Credit)** **currently not offered** **Grades 9-12** **#0642**

Jazz/Pep Band is a study of various jazz, pop, and rock styles of instrumental music including swing, Latin, ballads, and 12-bar blues. Students will work to compose their own solos to be inserted within the songs studied. Students will be expected to take part in scheduled performances at selected boys and girls basketball games, along with concerts, festivals, and any other venues to which the group accepts an invitation to perform.

Marching Band: **(1.0 Credit)** **Grades 9-12** **#0643**

This course is open to students previously enrolled in the instrumental program or students with previous outside experience. The Marching Band course gives students an opportunity to improve their playing, marching, and maneuvering skills. Students enrolled in this course will be expected to attend Band Camp as well as after-school rehearsals in order to fine-tune performances along with those members who are not enrolled in the course. Students are also expected to attend evening and weekend performances.

Guitar: **(.5 Credit)** **Grades 9-12** **#0644**

This course is designed for students with little to no previous experience playing the guitar. Students will begin with the fundamentals of reading pitches and rhythmic notation and will progress to playing basic chords that can be used to accompany singing. By the end of the course, students will be able to read basic lead sheet as well as tablature notation. Students must supply their own instrument.

Music for Theatre: **(1.0 Credit)** **currently not offered** **Grades 9-12** **#0693**

Music for Theatre is a study of musical theatre including aspects such as staging, public relations, proper vocal projection, and acting. Study contains both theoretical elements (history of theatre, elements of current productions, etc.) and hands-on practical application. By the end of this course, the student will have a working knowledge of how to operate the sound, lighting, and rigging equipment in place at RHS, as well as how to build and paint sets, props, and backdrops for a theatrical production.

PHYSICAL EDUCATION AND HEALTH COURSES

Anatomy: **(.5 Credit)** **#0740**

This semester course will emphasize the study of skeletal and muscular systems. It is especially helpful in preparation for future studies in nursing and other health related studies.

>>Health: **(.5 Credit)** **#0722**

Health is not just the absence of disease or sickness, but the state of complete physical, mental and social well-being. The primary goal in life is not merely to live long, but also to live well. Health education is a required program in the school curriculum to develop the individual's knowledge and understanding of the progressive health advances which are evident in his/her changing society and to motivate the individual to apply these principles and practices of healthful living.

>>Physical Education: **(.5 Credit)** **#0700, # 0704/0705**

The course includes the teaching of those activities that will aid in the development of the individual physically, mentally, emotionally and socially, and the contribution of skills for worthy use of leisure time. The methods used will be both demonstration and participation.

>>SCIENCE COURSES

Pre-Biology: **(1.0 Credit)** **#0218**

The Pre-Biology course is designed to introduce the basic biology concepts necessary to promote biological literacy. This course provides 9th graders with the necessary transition into the high school science program without restricting their options for science electives during their high school career. An emphasis will be placed on a complete understanding of the vocabulary necessary to understand biological processes. Successful completion of this class will be followed by Biology I in 10th grade, after which they will then complete the keystone biology test. The general concepts included are: the scientific method, basic chemistry, biochemistry, cell structure, function and processes, evolution, genetics, ecological relationships, and biotechnology. Pre-Biology is not a keystone exam testing course.

Biology I: **(1.5 Credit)** **#0219**

Biology I includes a brief history of the biological sciences and current developments in many related areas. It develops an awareness of the variety and extent of the living world and the interrelationships existing between creatures and their environment. It will also help students gain a knowledge of the functions of living things and the structures necessary for performing these functions. The course will also introduce students to the principles of heredity and its effect on themselves and other living organisms.

Keystone Biology A: **(1.0 Credit)** **#0220**

This course meets the required remediation set by the Pennsylvania Department of Education for any student who has not obtained proficiency on the Biology Keystone Exam. Keystone Biology A is a data driven course that will focus on Biology skills that are necessary to achieve proficiency on the Biology Keystone exam.

>>Denotes courses required for graduation.

Keystone Biology B:	(1.0 Credit)	not currently offered	#0221
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This course meets the required remediation set by the Pennsylvania Department of Education for any student who has completed Keystone Biology A and has not obtained proficiency on the Biology Keystone Exam. Keystone Biology B is a data driven course that will focus on Biology skills that are necessary to achieve proficiency on the Biology Keystone exam.

<u>Biology II:</u>	(1.0 Credit)	#0240
(Pre-requisite: Biology I and Chemistry)		

This course will cover organic evolution and a study of the simplest organisms to the most advanced to gain understanding of their relationships. Genetics is one of the cornerstones of the course. Different types of inheritance will be studied, including human genetics. Students will be studying patterns of inheritance with investigations of the fruit fly.

<u>Pre-AP Biology:</u>	(1.5 Credit)	Grade 9	#0223
(Pre-requisite: 85% or better in 8th grade science and recommendation of 8th grade science teacher)			

The Pre-AP Biology course is designed to prepare students for the AP Biology course. This course will differ from usual high school biology courses in the depth, breadth, and rate at which material is covered in the course. The course will also differ in the amount of time and effort students will put into the class. To get a feel, students will use the same textbook that is used in the AP Biology class. Students will not have a lab section, but will perform some of the AP labs during class time to get a feel for the requirements of a college biology laboratory. The Pre-AP course aims to provide students with the knowledge, skills and critical thinking ability to deal with the pace and amount of material that is to be covered in an AP Biology course. The goal of the course is to provide students with an understanding of biology and provide skills necessary to complete a college biology or AP Biology course.

<u>AP Biology:</u>	(1.5 Credit)	Grade 11	Weighted: 1.1	#0222
(Pre-requisite: 85% or better in Pre-AP Biology and teacher recommendation)				

The Advanced Placement Biology course is designed to be the equivalent of a college introductory biology course, usually taken by biology majors during their first year. The AP Biology course differs significantly from the usual high school biology course with respect to the kind of textbook used, the range and depth of topics covered, the scope of laboratory work performed by students, and the time and effort required of students. AP Biology aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The goal of a college introductory biology course, and therefore of an AP Biology course, is to provide a learning environment that enables students to develop a solid understanding of the principal concepts in biology. College Board guidelines are followed in shaping the course.

All students are required to take the AP Exam at district expense.

<u>Chemistry:</u>	(1.5 Credit)	#0230
(Pre-requisite: Algebra I)		

The course begins with a brief review of general science principles that apply to chemistry, includes matter of energy concepts, measurement, scientific methods and an overview of the development and purpose of chemistry. The main contents of the course are atomic structure, formula writing, chemical equations, mole concept and mass relations, gas laws, acids, bases and salts, and a survey of organic chemistry. Throughout the course, basic chemical laboratory techniques are explored in each chapter.

>> Denotes courses required for graduation.

Pre-AP Chemistry: **(1.5 Credit)** **#0234**
(Pre-requisite: 85% or better in Algebra I and 85% or better in Pre-AP Biology or Biology (preferably in Pre-AP Biology) and teacher recommendation.)

Pre-AP Chemistry is a course designed to expose college bound students, with an interest in science, to the forms, properties, and interactions of matter. It is taught at a college level, and tends to be very demanding. Additionally, this is a class that will require a significant amount of effort on your behalf. The course goals are to prepare students for the AP Chemistry course. Students will have a lab section to reinforce the concepts in Chemistry. Concepts include but not limited to: matter, atoms, chemical bonds, elements, compounds, mixtures, solutions, chemical reactions, molarities and stoichiometry.

AP Chemistry: **(1.5 Credit)** **Weighted: 1.1** **#0236**
(Pre-requisite: 85% or better in Pre-AP Chemistry and teacher recommendation)

AP Chemistry is a highly specialized course for qualified students whose future includes university attendance with a possible major in the sciences. AP Chemistry is equivalent to a rigorous first year college-level chemistry course and is designed for students with strong mathematics and problem-solving skills along with a genuine love of science and its application. Topics of study include Matter and Measurement, Atoms, Molecules and Ions, Stoichiometry, Thermochemistry, Periodic Properties, Chemical Bonding, Molecular Geometry, Properties of Solutions, Chemical Equilibrium, Acids and Bases, Thermodynamics, Electrochemistry. Many of these units involve a large amount of mathematical calculations and manipulations.

All students are required to take the AP exam at district expense.

Applied Physics: **(1.0 Credit)** **currently not offered** **#0242**

The main focus of this course is the study of basic physics principles that are observed in everyday life. Through hands-on labs, projects, and problem-solving using basic Algebra, students will study the concepts of measurement, force, motion, energy, electricity, sound and light.

Physics: **(1.5 Credit)** **#0243**
(Pre-requisite: Trigonometry – may be taken concurrently)

Physics is designed to give students an understanding and appreciation of the physical world around them. Topics covered in the class include motion, force, energy, rotational dynamics, acoustics, optics and electricity. Labs and projects help the students develop skills in problem-solving, data analysis and teamwork. Students should have passed or be currently enrolled in Trigonometry. **This course is a pre-requisite for AP Physics.**

AP Physics B: **(1.5 Credits)** **Grade 12** **Weighted: 1.1** **#0245**
(Pre-requisite: 85% or better in College Algebra/Trig and 85% or better in Physics and teacher recommendation)

AP Physics B is comparable to an introductory college level, algebra-based physics course. The course includes a study of the following areas: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. The goals of this course include an understanding of the key concepts as well as an application of these concepts to problem-solving. Laboratory experiences will be a key component.

All students will be required to take the AP Exam at district expense.

Science Trends: **(1.0 Credit)** **#0231**

Science Trends gives students the opportunity to study current topics in science. A major part of the class includes a study of the environment (ecosystems, biodiversity, pollution, resources, and energy production) and humans' influence on it. The remaining class time is used to explore science topics found in the news, including the Discovery Channel, magazine articles and new program specials.

>> Denotes courses required for graduation.

>>SOCIAL STUDIES COURSES

World History:

(1.0 Credit)

#0319

This course emphasizes a chronological study of how cultures developed in different parts of the world. Further, this course follows world history from the prehistoric period through the 21st century. Students will see the birth and development of Western and Eastern civilizations. Reviews world history from the end of the agricultural period, to the Industrial Revolution and then fast forward to today. The course looks at the effects of Nationalism, Imperialism and Democracy on the history of the world. Students will also learn about the ways World War II changed the face of the world. The course ends with an overview of the world today, and looks into the possible events that may happen in the future.

Early American History/U.S. History I:

(1.0 Credit)

#0329

A major focus of this course is to make the student aware of the historical, cultural, political and social events that have directly or indirectly shaped and altered civilizations throughout the course of history. The course will incorporate a broad body of historical knowledge:

- Use of historical evidence to defend and support basic arguments and positions.
- Differentiate between various schools of historical thought and interpretation.
- Interpret and draw conclusions from various pieces of historical data including original documents, cartoons, graphs, etc.
- Demonstrate an effective use of analytical skills of evaluation, cause and effect relationships, and compare and contrast.

Modern American History/U.S. History II:

(1.0 Credit)

#0330

Modern American History is a course that will cover the post-Civil War United States to the present day. The course will feature a chronological history of the growth of the United States as a world power. The course units will include: Reconstruction, The Settling of the West, The Age of Big Business, Imperialism, The Great War, The Depression, World War II, The Cold War and The Vietnam War.

Pre-AP U.S. History:

(1.0 Credit)

Grade 10 or 11 currently not offered

#0341

(Pre-requisite: 85% or better in 10th grade social studies and recommendation of 10th grade social studies teacher)

Pre-AP U.S. History course is designed for juniors to provide them with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. Students will learn to assess historical materials; relevance to a given interpretive problem, reliability, and importance; and to weigh the evidence and interpretations presented in historical scholarship. Pre-AP History should ultimately develop the skills necessary to arrive at conclusions on the basis of an informed judgment and interpret primary sources including maps, statistical tables, pictorial and graphic evidence of historical events. The course will be required for students who want to take AP History in their senior year.

AP U.S. History:

(1.0 Credit)

Grade 11 or 12 currently not offered

Weighted: 1.1 #0342

(Pre-requisite: 85% or better in Pre-AP History and teacher recommendation)

Advanced Placement U.S. History is a weighted course with a focus on analytical skills and factual knowledge necessary to formulate an in-depth understanding of U.S. History. Students will learn to assess historical materials; relevance to a given interpretive problem, reliability, and importance: and to weigh the evidence and interpretation presented in historical scholarship. Emphasis will be placed on the ability to develop conclusions on the basis of an informed judgment and the interpretation of primary sources including maps, statistical tables, pictorial and graphic evidence of historical events.

All students are required to take the AP Exam at district expense.

>>Denotes courses required for graduation.

<u>Government/Economics:</u>	(1.0 Credit)	#0340
In the senior year students will study both Economics and Law. Economics in the first half of the year, Law in the second. In Economics we will study supply and demand, the function and value of money, the Federal Reserve and our tax structure. In the Law we will study the foundations of the Law, the Criminal Justice System and Civil procedures. Students will be required to write a term paper, Law Case Study, possibly perform in a mock trial, a speech, or a debate. Throughout the year a heavy emphasis will be placed on current events.		

TECHNOLOGY COURSES

<u>>>Intro to Materials Processing:</u>	(.5 Credit)	#0514
This is a Semester course designed to build upon skills acquired in 8 th Grade Technology Block courses with emphasis placed on 3D modeling, measurement, the creation of functional drawings, design, and an introduction to the use of the tools and equipment available in the Fab Lab / Manufacturing areas of the building.		

<u>Materials Processing:</u>	(1.0 Credit)	#0515
(Pre-requisite: Intro to Materials Processing)		
This course is designed to build upon skills acquired in previous Technology courses with emphasis placed on design. Students will be engaged in team activity requiring social interaction and leadership skills. Some engineering aspects involved will be aerodynamics and material analysis. Students will utilize and build upon design skills and the use of CADD programs such as inventor.		

<u>Design and Manufacturing:</u>	(1.0 Credit)	#0516
(Pre-requisite: Materials Processing)		
In this course students will be responsible for a (kit purchase) and production of an electric guitar or bass. Great attention to detail will be necessary, due to the complexity of the product. Advance design skills for CADD Inventor will be required as well as advanced skills in Master CAM and Illustrator.		

<u>Computer Graphic Design:</u>	(1.0 Credit)	#0508
(Pre-requisite Applied Computer Literacy)		
This is a year course that will introduce students to graphic design and animation. The class will be using Adobe Illustrator and Adobe Photoshop in order to create graphics on the computer. Adobe Illustrator is used for creating various designs from scratch for graphic design applications by layering different colors and objects. Adobe Photoshop is used for editing and changing pictures and photographs. Auto Desk Mayo will be used to produce 3-D objects and animations. Students will develop independent skills in order to learn how to manipulate designs, photos, animations and more. Students will be able to create polished, professional-looking layouts, photographs, illustrations and animations.		

<u>Yearbook Mass Media:</u>	(.5 Credit)	#0056
(Pre-requisite: application with teacher recommendations)		
This course is designed to assist students in becoming efficient in the use and production of digital media through the medium of a high school yearbook. Students will be able to write pages, take photographs, use elements of graphic design, and employ marketing strategies through the completion of the high school yearbook.		

>> Denotes courses required for graduation.

Video Mass Media: (.5 Credit) #0054
(Pre-requisite: application with teacher recommendations)

This course is designed to assist students in becoming efficient in the use and production of digital media through the medium of a weekly television broadcast. Students will be able to write, film and produce weekly news broadcast shows.

Newspaper Mass Media: (.5 Credit) #0052
(Pre-requisite: application with teacher recommendations and samples of writing)

This course is designed to teach students basic skill in newspaper writing, editing, and formatting. Students will apply this knowledge through the publication of a monthly edition of the school newspaper, The Raider Invader.

Media Technology: (.5 Credit) #0512
(Pre-requisite: application with teacher recommendations)

This course will focus on using current social media venues to publish, post, and inform the community on the day to day activities of the Reynolds Junior-Senior High School. This includes maintaining an informational Reynolds High School Facebook page and other social media venues.

ADDITIONAL OPTIONS

Academic Competitions Exploration: (.5 Credit) #0046

Given a single, annually determined general topic, period, or culture to survey, students embark on an in-depth, interconnected study into virtually every academic discipline of the provided subject. Students will study Art, music, language and literature, science, social sciences, economics, and mathematics. Students will be assessed using some formal testing, but will primarily be graded based on their level of participation, research, production, and presentation of subject matter projects. This course will supplement the "Academic Decathlon" team's regular practice schedule and participation in competitions. Students are encouraged to be active team members to the greatest extent a student's extracurricular schedule allows.

GATE: (Gifted and Talented Education) (1.0 Credit) #0910

This program gives academically gifted students an opportunity to explore areas of interest beyond the regular classroom curriculum. Students may be recommended for participation by self, peers, teachers or parents. Pennsylvania State Law requires that a student be evaluated for the program by a multidisciplinary team composed of various educational personnel. The major focus of this course is to provide the student with the study of major issues and significant ideas, the opportunities to develop awareness, understanding, and enjoyment of a wide variety of literature, and projects that are interdisciplinary in nature. The annual goal of the gifted classroom is to improve the students' communication, thinking, and research skills.

Community Service: SENIORS ONLY (1.0 Credit) #0950

Students are encouraged to participate in Community Service/Volunteer Activities. Students will be responsible for a minimum of 30 hours of community service at a school approved site. Successful completion of the service project will include: submission of a community service request form, selection of a mentor teacher, a log of service hours verified by a site supervisor, visual evidence of service time, and a letter from the site supervisor confirming participation. Students will also present their project to a panel of judges in the spring of their senior year.

Mercer County Career Center: (3.0 credits per year)**Grades 11 and 12****#0900**

Students attending the Mercer County Career Center (MCCC) take the required academic courses at the high school and then the vocational courses are completed at the MCCC. All courses are competency based. Courses can be completed in 2 years with the exception of Cosmetology which is a 3 year program.

Initial contact is made in 8th grade for all students and then again in 9th and 10th grade. Those students with a continued interest, will have the opportunity in 10th grade to visit the MCCC prior to selecting a shop.

Courses offered at the Mercer County Career Center**Auto Body**

The automotive industry has a rich heritage and exciting future. That future is reflected in Auto Body Technology, one of the fastest growing and most innovative fields in the industry. You use cutting edge technology based on Automotive Service Excellence (ASE) Standards as you estimate damage, replace parts, refinish/detail automobiles and prepare a vehicle for customer delivery. Learn welding, plastic repair, refinishing/painting to create career opportunities in manufacturing, fabrication as well as auto body technology while earning I-Car certification. Instruction takes place in a safe, clean, well-equipped shop.

Auto Mechanics

The Auto Mechanics program is designed to provide the students with entry level skills and knowledge needed to diagnose and repair today's modern vehicles. The student's training is based on Automotive Service Excellence Standards (ASE) and includes the following: Braking systems, steering and suspension systems, engine performance, electrical and electronic systems, automatic and manual transmissions, HVAC (heating ventilation and air conditioning), and engine repair. Standard automotive business practices are also studied including: completing and calculating work orders, time cards, and parts invoices. The program also provides the students the opportunity to earn their Pennsylvania State Inspection license and their Northern Region Emission Inspector license. Students are able to work on trainer vehicles, customer vehicles, and their own vehicles.

Building Trades Maintenance

In Building Trades Maintenance, students learn basic skills in Electricity, Masonry, Plumbing, Carpentry, and HVAC/R (Heating, Ventilating, Air Conditioning, and Refrigeration). Many students develop advanced skills in one or more of these technical areas. Students will learn to safely operate a wide variety of hand tools and power machinery. During the first year students study and develop skills in all of the program areas. In the second year students are encouraged to specialize in one of the program areas. Students have the opportunity to apply for all union trades after completion of senior year.

Carpentry

Carpenters literally build the future by constructing and remodeling houses, apartments, and commercial buildings. Join the Carpentry Team and learn to build like a pro! Use computers and architectural design software to draw floor plans and renderings. Construct a house using the latest tools. Visit area work sites, meet professional builders, and visit the Carpenters Union to learn how to earn your journeyman's card. Visit colleges and learn about advanced degrees in Management and Engineering. Learn how experienced Carpenters advance into supervisory positions or own their own business.

Cosmetology

Experience the world of beauty and fashion through the Cosmetology program. Use cutting edge techniques to deliver precision haircuts, perms, chemical relaxing, braiding, manicures, facials and hair color treatments. Two days a week you will master your skills on customers in our student operated salon. Students successfully completing 1250 hours of instruction are eligible for licensure from the Pennsylvania State Board of Cosmetology.

Culinary Arts

The course is designed to give students the basic skills needed to start a career in the restaurant and hospitality industry. You will create foods, from appetizers to desserts, in our professionally equipped kitchen and bakery. The curriculum and professional equipment is designed to develop skills in all areas of the food service industry and equip students for immediate employment or post high school training. Students will be able to earn ServeSafe certification.

Diesel Mechanics

Learn the skills needed to pursue careers in a multitude of areas, including but not limited to: welding, hydraulics, pneumatics, electronics, as well as "bumper to bumper" diesel repair. In addition to classroom instruction, students diagnose, service, and repair all aspects of diesel related equipment. This is accomplished using modern "high-tech" scan tools and personal computer interfaces. Diesel engines have become more fuel efficient, lighter, quieter, and environmentally friendly. These factors have created an increased demand for talented and skilled technicians. This program has a long proud history of student success and service to the community.

Early Childhood Education

Learn the skills needed to work with young children, through working in a fully functional preschool. Obtain infant and child CPR and First Aid Certification.

Earn experience hours toward a Child Development Associate (CDA) Certification. Prepare for postsecondary schooling in the education field or prepare to enter the workforce in a child care center or as a family child care provider.

Electronics Technology

Instruction in this program will develop basic levels of knowledge, understanding and skills essential for entry-level employment in communications, industrial electronics, digital processing, robotics, avionics, biomedical technology and other electronics occupations. This program prepares individuals to apply basic electronic principles and technical skills to the production, calibration, estimation, testing, assembling, installation and maintenance of electronic equipment. Using the latest technology you will build telephones, security alarm systems and rockets. Students in Electronics Technology have the ability to earn college credits at California University of PA.

Entrepreneurial Studies

Get prepared for both the workforce and to continue post-secondary education. Learn how to use common business software applications and maintain a business's image. Show your innovation and creativity but using state-of-the-art graphic technology. Use on-line design and business simulations both in the classroom and virtually. Work with local companies to create new ideas, designs and products. Students will start and market several businesses, run and market a school store, create and market a yearbook, visit several innovative businesses, and be members of DECA, FBLA, and Skills USA. Students can also earn Microsoft Specialist Certification and ASK Institute Certification while in enrolled in the program.

Health Care Careers

The Health Care Career Program is designed to allow students the ability to gain a preparatory understanding of the health care environment. Through career exploration, students are able to make an informed career decision prior to postsecondary education. The course focuses on anatomy, physiology, and medical terminology. Certifications include American Heart Health Care Provider (CPR/AED, American Heart First Aide, and American Heart Pediatric First Aide, and PA Nurse Aide Registration) with clinical experience at nursing facilities.

Innovation and Design

Participate in Mercer County's only Fab Lab. Whether looking to enter the workforce or to pursue engineering at the post-secondary level, students will design, build and test solutions to practical problems in business and industry. Students will be trained using CAD/CAM and Solidworks software. The latest technology will be used to view and scrutinize designs in 3D. Multiple materials 3D printers will be used to create prototypes using different colors of plastics and rubber. Students will also explore mechanical and electromechanical processes currently used in today's hi-tech manufacturing work. While in this program students can earn National Institute for Metalworking Skills (NIMS) certification in Industrial Maintenance or Manufacturing Skill Standards Council (MSSC) Certified Production Technician certification.

Precision Production Metals

This course is designed for students to gain knowledge and skills with an emphasis in machining, welding, sheet metal fabrication, hydraulics and pneumatics. Areas are taught through hands-on assignments to develop technical skills. Through a variety of projects, students will be able to plan, setup, operate machines, as well as to manufacture and assemble metals. National Institute for Metalworking Skills (NIMS) certification is available to those enrolled in Precision Production Metals.

Protective Services

Learn about the exciting field of public safety and homeland security. You may also earn credits at post-secondary institutions. You can earn several certifications, including Healthcare Provider, First Aid, and National Incident Management Systems (NIMS). You may also become certified as an Emergency Medical Responder. Investigate crime scenes, practice police patrol, and learn emergency communications. Some of the career opportunities available to you are Police, Conservation Officer, Security Officer, Firefighter, and the armed services.

Welding

The welding program focuses on the instruction of many industry-specific types of welding, brazing, and soldering techniques. Students will learn Arc, Mig, Tig, Flux-core, and Oxy-fuel Welding. Also students will receive instruction in Plasma and Oxy-Fuel cutting of metals. Blue-print reading will be taught so students can learn to produce real-world products and parts. American Welding Society standards are integrated into this welding curriculum

For further information on Mercer County Career Center programs and services, please visit our web-site www.mercerccc.org.

NCAA INITIAL ELIGIBILITY AND CLEARINGHOUSE

Division I – 16 Core Courses

*Athletics aid, practice, and competition

If you plan to enter college, you will need to present 16 core courses in the following breakdown:

16 Core Courses

Ten (10) core courses completed before the start of seventh semester.

Seven (7) of the 10 must be in English, math, or natural/physical science.

“Locked in” for core-course GPA calculation.

Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B.

Graduate from high school.

Division II – 14 Core Courses

If you plan to enter a Division II college you must have 14 core courses to be eligible to practice, play and receive financial aid.

14 Core Courses

4 years of English (Academic)

2 years of mathematics -Algebra I or higher

Algebra IA and IB are considered only 1 year/credit

2 years of natural/physical science

1 year of lab if offered by high school

1 year of additional English, mathematics or natural/physical science (Academic)

2 years of social science

3 years of additional courses (from any area above or foreign language, but not doctrinal religion/philosophy or computer science)

More information on the NCAA Clearinghouse and student-athlete eligibility can be found online at https://www.ncaaclearinghouse.net/ncaa/NCAA/student/index_student.html.

PLAN AHEAD SHEET

Use the chart below to help you look over your entire four years in high school. Consider the required credits for graduation and then decide which courses you will choose and when you will take them. Write in your course titles in the spaces on the chart. Check the number of credits you have earned and plan to earn. Will you have the 26 credits required for graduation? Your counselor will gladly assist you in planning ahead for courses and careers. Your parents or guardians should also be well aware of your thoughts and interests as you go through this planning process. Make sure you involve them early rather than late.

Note: All courses are open to all students who meet the pre-requisite requirements.

SUBJECT FIELD	9 TH	10 TH	11 TH	12 TH	REQUIRED CREDITS
English					4.5
Social Studies					4.0
Mathematics					4.5
Science					3.5
Elective (Required Minimum)					6.5
Elective (Additional)					
Family & Consumer Science					0.5
Computer Studies					0.5
Intro to Mat. Processing					0.5
Phys. Ed.					1.5
Health					0.5
Total					26