CONRAD WEISER AREA SCHOOL DISTRICT
Robesonia, PA

2024-25

PROGRAM OF STUDIES

This is your Program of Studies for next year. Included are graduation requirements, suggestions to consider as you plan, course descriptions, and Career Pathways. You will also receive a scheduling registration form for your grade that will tell you what courses are required or optional for your grade. This form requires teacher signatures to assist you in choosing the best courses for your interests and ability. Please review this with your parents, study the suggestions, and determine which courses you would like to take. Then complete your registration form, turn it in to your homeroom teacher and register for the courses on Skyward.

During February, March or April students will have an appointment with a member of the counseling staff to review and finalize course selections. The counseling staff will notify you of your scheduling appointment.

Please take your time to review this information and plan thoroughly. The information is also available on the Conrad Weiser website conradweiser.org in the high school counseling section.

The Administration of Conrad Weiser High School

_____
Student Name

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General Information

Master Course Descriptions

COURSE PLANNING SHEET

Student Name _____

Career Interests _____

Cluster _____ Pathway _____ 5th Year _____

Grade 9	Grade 10	Grade 11	Grade 12
English	English	English	English
Math	Math	Math	Math or Science
Science	Science	Science	Career Elective
Social Studies	Social Studies	Social Studies	Social Studies
Physical Education/Health	Physical Education/Driver Ed.	Physical Education/Health	Physical Education/Senior Seminar or Music Seminar or Service Learning
Career Elective	Career Elective	Career Elective	Career Elective
Career Elective	Career Elective	Career Elective	Career Elective
Open Elective	Open Elective	Open Elective	Open Elective

For specific course suggestions, please see the Career Pathways information on pages 7 through 17.

SEMESTER BLOCK SCHEDULING

Conrad Weiser High School has semester block scheduling. Students take four (4) courses each semester or a total of eight (8) credits each year. Students do not have any study halls. Classes are 82 minutes in length.

Students select their courses for the entire year and receive a schedule in August for the entire year. Some examples of typical schedules are as follows:

GRADE 9 STUDENT (SAMPLE)			
		Fall	**Spring**
7:50 to 9:14 a.m.	Period 1	Algebra 1 CP	Technology Systems
9:18 to 10:38 a.m.	Period 2	Health and Physical Education	Earth Science CP
10:42 a.m. to 12:36 p.m.	Period 3	English 9 CP and lunch	U. S. History I and lunch
12:40 to 2:00 p.m.	Period 4	Spanish I	Principles of Business
2:04 to 2:35 p.m.	Period 5	PLT	

GRADE 10 CHORUS STUDENT (SAMPLE)			
		Fall	**Spring**
7:50 to 9:14 a.m.	Period 1	Chorus and Physical Education	Chorus and Driver Education
9:18 to 10:38 a.m.	Period 2	German II	English 10
10:42 a.m. to 12:36 p.m.	Period 3	U. S. History II CP and lunch	Biology and lunch
12:40 to 2:00 p.m.	Period 4	Geometry CP	2 D Design
2:04 to 2:35 p.m.	Period 5	PLT	

GRADE 11 PM CAREER TECH STUDENT (SAMPLE)			
		Fall	**Spring**
7:50 to 9:14 a.m.	Period 1	Chemistry CP	Physical Education and Health
9:18 to 10:38 a.m.	Period 2	Algebra 2 CP	English 11 CP
10:42 to 11:09 a.m.	Period 3	Lunch	Lunch
11:09 a.m. to 2:25 p.m.	Travel to Career Tech and classes at Career Tech Center		

GRADUATION REQUIREMENTS

- Students must complete 20 hours of community service.
- Students must earn the following credits:

English	4
Social Studies (Career Tech students need three Social Studies credits)	4
Math	3
Science	3
Math or Science (Career Tech students need zero additional credits in either Math, Science, or Social Studies)	1 additional
Phys. Ed.	1.5
Health	1
Arts and Humanities	2
Electives (Career Tech students need 9.5 electives)	7.5
Total	27

COMMUNITY SERVICE

All students must complete twenty hours of community service to graduate. Students may complete their community service requirement at a wide variety of community organizations beginning in the summer after grade 8. Each student will be given a packet of information and forms at a meeting explaining the program. Additional forms and information are available through the counseling office.

Students may work at several different organizations or at one organization. To receive credit for the hours, students must submit completed forms to the counseling office. Any questions about this can be addressed to the counseling office.

KEYSTONE EXAMS

The Keystone Exams are exams planned to be given by the Pennsylvania Department of Education as end of the course exams for students in Algebra 1, Literature, and Biology.

The exams will be given in the Algebra 1, Biology, and 10th grade English classes, but will not count toward the course grade.

Students who are not advanced or proficient when they take it may be required to re-test. The score will be posted on the student transcript.

ARTS & HUMANITIES

All students will have to take two credits from Arts and Humanities offerings as part of the requirements for graduation.

Arts and Humanities courses include the following:

Arts: Technology Education, Art, Family and Consumer Science

Humanities: Additional Language Arts elective, Foreign Language, Social Studies elective, Agriculture, Band, Chorus

Students who are enrolled in Tech Center courses in Grades 10-11-12 may have some courses previously taken be interpreted to meet the humanities requirement.

Since the list includes almost all electives, students will earn the two credits as part of earning the 27 credits needed for graduation.

PROMOTION REQUIREMENTS

Promotion will be governed by the following credit requirements:

6.00 credits for admission to 10th grade;
12.00 credits for admission to 11th grade;
19.00 credits for admission to 12th grade;
27.00 credits required for graduation.

GENERAL SCHEDULING NOTES

In making your selection of courses for the next term, keep in mind your plans for the future. Be sure to register for those courses which you must have to be admitted to schools and colleges you wish to attend.

The counselors will be happy to discuss with you the requirements of specific schools or vocations. Call (610) 693-8520 to speak to a counselor.

FAILED COURSES

If students fail a required course, they may retake it the following semester or year based on the course change policy. A student may make up a course in summer school if the grade at Conrad Weiser was at least a 55%. If the grade was below 55%, the student may not take the course at summer school but must retake the entire course.

GUIDELINES FOR COURSE CHANGES

Students may only drop a course under the following conditions:

1. A request to drop the class must be made before the start of the 6th class meeting. The student must turn in a parent signed Request to Drop a Class form to their counselor. The

principal may approve/not approve the request based on individual circumstances.

2. If a first semester course is failed that is a prerequisite for a second semester course (for example, German I is failed for the first semester and German II is scheduled in the second semester), a schedule change will be made.

3. If a required course is failed during the first semester, a student may choose to reschedule the course during the second semester and drop an elective depending on the following conditions:
a. Student and parent request.
b. Availability of space in course.
c. Teacher and counselor approval.
d. Students have the right to appeal to the principal if not approved.

4. Students in year-long classes may drop the class at semester break without earning any credit for the course. A "W" (Withdrawal) will be placed on the transcript along with the grade for the semester. For example, if a student drops a class with a current grade of "C", the transcript would reflect a "WC" for the class.

5. Any other schedule changes will require administrative approval and may result with a final grade of F.

PLACEMENT TESTING

Sharing a philosophy that all students can profit, contribute, and succeed…we believe that all students should develop the skills and knowledge to continue their education after schooling at Conrad Weiser High School. Therefore, we want to encourage our students to be appropriately prepared for the challenge of placement tests such as the SAT and ACT. We recommend the following course of study:

To achieve the best scores in Critical Reading:
Completing the most rigorous college preparatory and/or honors curriculum in English, Social Studies, Science and World Languages (maintaining at least a B average).

To achieve the best scores in Mathematics:
Three years of college preparatory or honors mathematics sequence through Algebra 2 (i.e. Algebra 1, Geometry, Algebra 2 maintaining at least a B average).

To achieve the best scores overall, several methods of test preparation can be utilized:
(1) All students will take the PSAT in the Fall of the Junior Year at the expense of the Conrad Weiser Area School District. Students will use the PSAT/NMSQT score report to focus on building skills in preparation for the SAT. (2) Plan to take the SAT Preparation Course offered at CWHS during the summer months.
(3) SAT *Question of the Day* and SAT Full Length Practice Tests can be found on-line at www.collegeboard.com.
(4) ACT test information and practice tests can be found on-line at www.act.org or www.actstudent.org.
(5) Students who are planning on applying to highly selective colleges should plan to take the SAT II Subject Tests in the spring of their junior year. Please see your counselor for additional information.

We want to encourage students to fulfill their educational goals and have the proper preparation to succeed. If you are not meeting these requirements, please see your counselor to discuss alternative options to achieve success after high school. Your counselor can help you to explore community college, technical/trade school, and transfer options.

ADVANCED PLACEMENT COURSES

Several courses are listed as Advanced Placement (AP) courses. The courses cover college level material and prepare students to take an Advanced Placement Exam. If the student scores high enough, the student will receive college credit or advanced standing at most colleges or universities. Most AP courses will be taken every other day for the entire year.

Students taking an AP course are required to take the exam in that subject or opt for college credit if available. The test will be given for Conrad Weiser High School at a site to be determined in May. Students are required to pay for the test, but arrangements can be made for any student with financial difficulties. All Advanced Placement Courses are weighted courses.
If a student refuses to take the exam, the student will not receive weight for the course, and will not receive a refund for the exam.

WEIGHTED COURSES

Certain courses have been given extra weight and count more in computing the GPA and the class rank. A list of those courses and an explanation of the impact of the extra weight is on page 67 of the *Program of Studies*.

To be a weighted course, the course must be considered college level curriculum. Therefore, only classes that are taken mainly by juniors and seniors will be considered as weighted courses.

COLLEGE OPTIONS

Some seniors may choose to take one or more courses at college in addition to or in place of attending at Conrad Weiser High School. Students who choose to do this need to work closely with the counselor to develop an appropriate schedule. Students would be responsible for their own transportation and fees.

PERSONAL PROJECT FEE

Students enrolled in any courses identified in the Master Course Description List as having a personal project fee will have to pay a project fee since one or more projects are needed to meet minimum course requirements. A personal project fee will be charged to each student, said fee to be determined by the material costs used to produce the project.

ARTICULATION

Conrad Weiser High School has signed articulation agreements with Reading Area Community College in certain curricular areas allowing students to gain advanced standing or college credits for courses a student has taken in high school.

Reading Area Community College

Students must complete the agreed upon vocational technical secondary coursework with a "C" or better, including the competencies described in the Tech Prep Articulation Agreement. Students must also complete the career-technical program learning outcomes. Students must meet the requirements for selective admission as outlined in the college catalog. For specific information, please see your counselor at the Berks County Career and Technology Center.

EARLY LEAVE PROCEDURE

Seniors who will finish their graduation requirements by the end of the first semester may apply to leave school at the end of the first semester. However, students who are not in school during the second semester may not participate in any extra-curricular activities such as athletics or clubs. They may participate in special senior functions such as the prom and graduation.

Students interested in early leave must fill out an application by May 15 of their junior year. Applications are available in the counseling office and require parent signature, approval of counseling and approval of the principal. Courses will then be scheduled only in the fall semester. Students attending Career Tech in their senior year may not take early leave.

NCAA REQUIREMENTS

Any student wanting to participate in college athletics at an NCAA Division I or II school as a freshman must meet specific academic criteria. Students need to choose the correct courses in high school and achieve the appropriate GPA in 16 NCAA approved core course units.

Listed below is an abbreviated description of the requirements. For more complete information, see your counselor or your coach, or research NCAA requirements in the Career Resource Center or on the Internet at NCAAclearinghouse.net.

Required Core Course Units

	Division I	Division II
English	4	3
Math	3 (Algebra I or above)	2 (Algebra I or above)
Science	2	2
Social Studies	2	2
Additional English, Math, or Science	1	3
Additional English, Math, Science, Social Studies, Foreign Lang. or other	4	4
Total	**16**	**16**
Required GPA in Core Courses	2.3	2.2

Division III: Each school sets their own admissions standards.

The following Conrad Weiser courses have been approved by NCAA to count as core courses:

English - Effective Communications; Language Arts Survey; English 9 CP; English 10 CP; English 11 CP; English 12 CP; Honors English 9, 10, 11 and 12; Journalism I; Writer's Guild; AP English, Shakespeare, AP English Language and Composition, AP English Literature

Math - Algebra I CP, Algebra II CP or H, Geometry CP or H, Algebra III/Trigonometry, Advanced Topics in Math, Pre-Calculus, Advanced Placement Calculus, Statistics and Probability, Calculus Honors, Computer Science 1, Keystone Algebra CP, Precalculus CP, College Algebra

Social Studies - US History I, US History I CP, US History 1 Honors, US History II, US History II CP, US History 2 Honors, AP US History, Global Studies CP, Global Studies Honors, Government and Politics, Government and Politics CP, Government and Politics Honors, AP Government, Western Civilization, Contemporary Issues, Sociology, Intro to Economics, AP World History, Anthropology, Military History, Psychology

Science - Earth Science, Earth Science CP, Earth Science Honors, Biology CP, Biology, Biology Honors, Chemistry, Chemistry CP, Chemistry Honors, Dual Enrollment Biology, Physics, Physics CP, AP Physics 1 & 2, AP Chemistry, AP Environmental Science, Experiments in Ag., Biotechnology, Intro to Ag Science, Innovative Science Research, Intro to Forensics

Other - German I-V, Spanish I-V, Latin I-V, Anatomy/Physiology I and II.

Berks County
Career Pathways
Framework

Developed by Career Ready Berks Alliance

5 Pathways:

- Art and Communications
- Business Finance and Information Technology
- Engineering and Industrial Technology
- Human Services
- Science and Health

CAREER PATHWAYS

		Technical	
	Professional	**At Conrad Weiser**	**At Berks Career and Technology Center**
Arts and Communications	**Related careers:** Technical Writing, Teacher - elementary and secondary, Editor, Publication Manager, Journalist/Writer, Illustrator, Documentation Designer, Artist, Musician, Critic, Interpreter, Foreign Services, Telecommunications, Performing Arts, Web Page Developer	**Related careers:** Photography, Print Production, Advertising, Multimedia Production, Broadcast Production, Painting/Decorating, Cabinet-making, Filmless Imaging, TV Production, Performing Arts, Commercial Art	**Related careers:** Photo Imaging Technology, Visual Imaging, Drafting Design Technology, Cabinet Making, Painting and Decorating, Graphic Imaging Technology, Communication Media Technology
Business Finance and Information Technology	**Related careers:** Accountant, Finance / Banking, Sports Management, Sales, Marketing, Stocks and Bonds, Law, Insurance, Hotel and Restaurant Management, Teacher, Economics, Business Administration	**Related careers:** Secretary, Receptionist, Finance-Teller, Credit Union, Investment and Brokerage Firm, Real Estate, Sales Associate, Retail Management, Telemarketing, Telecommunications, Legal Assistant, Court Reporting, Data Processing, Micro-computer Technology Specialist, Assistant Management	**Related careers:** Information Technology-Programming, Information Technology-Networking, Technology Based Entrepreneurship
Human Services	**Related careers:** Public Relations, Caseworker, Child Protective Services, Counselor, Law Enforcement, Justice Services, Lawyer, Criminal Justice Services, Teacher - elementary, secondary, Sociologist, Psychologist/Psychiatrist, Librarian, Anthropologist, Archeologist, Clergy	**Related careers:** Hospitality and Recreation, Travel Agent, Culinary Arts, Child Care - Child Care Management, Day Care - Worker, Operator, Houseparent, Nanny, Maintenance, Cosmetology, Firefighter, Corrections Officer, Teacher's Aide	**Related careers:** Culinary Arts, Service Occupations, Cosmetology, Occupational Child Development, Protective Services
Engineering and Industrial Technologies	**Related careers:** Aviation, Computer Aided Productions and System Design, Engineering, Electrical, Computer Information Systems Specialist, Systems Analyst, Mathematician, Teacher (secondary), Architect, Biological, Medical, Scientist-Chemist, Physicist, Meteorologist, Geologist	**Related careers:** Computer Information Systems, Manufacturing, Emission Technology, Avionics Technology, Engines, Fuels, Service Manager, Heavy Construction, Environmental Technology	**Related careers:** Electrical Occupations, Heavy Equipment Technology, Auto Collision Repair Technology, Robotics and Automation Technology, Auto Technology, Building Construction Occupations, Masonry, Electronic Technology, Welding Technology, Carpentry, Recreation and Power Equipment, Diesel Technology, Plumbing and Heating, Heating, Ventilation and Air Conditioning, Precision Machine Technology, Computerized Machining Technology, Mechatronics Engineering Technology
Science and Health	**Related careers:** Medicine - Physical Therapist, Audiologist, Dentist, Radiologist, Veterinarian, Pharmacist, Athletic Trainer, Biology, Marine Sciences, Teacher, Speech Pathologist, Registered Nurse, Doctor, Nutritionist	**Related careers:** Technician -Nuclear, X-ray, Imaging, Medical Assistant, Medical Secretary, Physical Therapy, LPN or Nurse's Aide, Dental Hygienist, Orderly, Funeral Director, Veterinary Attendant, Paramedic, Occupational Therapy, Florist, Landscape Designer, Environmental Technology, Forest Technology, Mill Manager, Surveyor	**Related careers:** Cosmetology, Dental Occupations, Health Occupations, Health Related Technology, Culinary Arts, Horticulture, Medical Health Professions Program

ARTS AND COMMUNICATIONS - PROFESSIONAL COURSE ALIGNMENT

Related careers:
Technical Writing, Teacher - elementary and secondary, Editor, Publication Manager, Journalist/Writer, Illustrator, Documentation Designer, Artist, Musician, Critic, Interpreter, Foreign Services, Telecommunications, Performing Arts

Grade 9	Grade 10	Grade 11	Grade 12	Kutztown University
1. English Honors College Prep	**1. English** Honors College Prep	**1. English** AP English Language Honors College Prep Elective Communication English Language Arts Survey	**1. English** AP English Literature College Prep Elective Communication English Language Arts Survey	**B.F.A. in Studio Art** FIRST SEMESTER - **Course Title - Credits** Drawing I - 3 Two-Dimensional Design - 3 Humanities course - 3 Natural Science / Math course - 3 Additional Elective - 3 SECOND SEMESTER - **Course Title - Credits** Drawing II - 3 Three-Dimensional Design 3 Natural Science/Math course - 3 English Composition - 3 Additional Elective – 3
2. Math Algebra 1 CP Geometry	**2. Math** Algebra 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP Pre-Calculus Honors	**2. Math or Science** Pre-Calculus CP Advanced Placement Biology Advanced Placement Calculus AB Calculus CP Physics CP Chemistry Honors AP Chemistry AP Physics 1 & 2 Statistics and Probability	
3. Science Introduction to Agriculture Science Earth Science CP Earth Science Honors	**3. Science** Biology - College Prep Biology Honors	**3. Science** Chemistry CP AP Chemistry Physics CP AP Physics 1 Dual Enrollment Biology	**3. Career Elective**	
4. Social Studies U.S. History I CP U.S. History I Honors	**4. Social Studies** U.S. History II CP U.S. History II Honors AP U.S. History	**4. Social Studies** Global Studies CP Global Studies Honors AP World History	4. **Social Studies** Government and Politics CP Government and Politics Honors AP Government and Politics	
5. Physical Education/ Health	**5. Physical Education/ Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Foreign Language	**6. Foreign Language**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives				
Geometry and Algebra II (minimum)	Music/Art Strand		Foreign Language Strand	Communications Strand	Digital Video & Film 1,2,3,4
Science – Chemistry – minimum	Computer Science 1	Foundations of Art, 2D Design.	Foreign Language (6 credits min)	Visual Communications I	Library Science Internship
	Visual Communications 1	Adv 2 D Design, 3D Design	Computer Science 1	Computer Science 1	Writer's Guild
	Visual Communications 2	Chorus	Western Civilization	Visual Communications II	Sociology
	Music Major	Band	Social Studies Internship	Journalism I and II	Principles of Business
	Microsoft Office Applications I	AP Studio Art	Writer's Guild		Effective Communication
	Music through Guitar	AP Art History	Military History	Microsoft Office Applications I	English Language Arts Survey
	Western Civilization	AP Music Theory		English Dept Internship	World of William Shakespeare
				Intro to Marketing	

ARTS AND COMMUNICATIONS - TECHNICAL COURSE ALIGNMENT

Related careers:
Photography, Print Production, Advertising, Multimedia Production, Broadcast Production, Painting/Decorating, Filmless Imaging, TV Production, Performing Arts, Commercial Art

Grade 9	Grade 10	Grade 11	Grade 12	Berks Career & Technology Center
1. English English 9 English College Prep	**1. English** English 10 English College Prep	**1. English** English 11 English College Prep Elective Communication English Language Arts Survey	**1. English** English 12 English College Prep Elective Communication English Language Arts Survey	Advertising Art & Design Technology Communication Media Technology Graphic Imaging Technology Photo Imaging Technology
2. Math Basic Algebra 1 Algebra 1 CP Geometry	**2. Math** Algebra 1 Concepts Algebra 1 CP, 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP	**2. Science or Math** Geo/ Algebra 2 Concepts Chemistry Physics Chemistry CP Physics CP *If at BCTC, student may choose a career elective	
3. Science Introduction to Agriculture Science Earth Science Earth Science CP	**3. Science** Biology Biology CP	**3. Science** Chemistry Physics Chemistry CP Physics CP	**3. Career Elective**	
4. Social Studies U.S. History I U.S. History I CP	**4. Social Studies** U.S. History II U.S. History II CP	**4. Social Studies** Global Studies Global Studies CP	4. **Social Studies** Government and Politics Government and Politics CP	
5. Physical Education/Health	**5. Physical Education/Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Principles of Business Technology Systems Carpentry and Welding Foreign Language	**6. Career Elective**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective or Principles of Business or Technology Systems or Carpentry and Welding or Foreign Language	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives				
Math: Concepts of Geometry or Algebra 1 CP	**Music/Art Strand** Foundations of Art, 2D Design,	Band/Chorus	**Available at Career & Technology**	**Communications Strand** Visual Communications I	Journalism I and II
Students should develop an area of	Adv 2 D Design, 3D Design	Visual Communications I	Drafting/Design Technology	Visual Communications II	Sociology
concentration based on career	Computer Science 1	Visual Communications II	Photo Imaging Technology	Digital Video & Film 1, 2, 3, 4	Writer's Guild
choices	Music Major	Intro to Marketing	Graphic Imaging Technology	Personal Economics	Library Science Internship
	Personal Economics	Manufacturing Systems	Painting and Decorating	Microsoft Office Applications I	World of William Shakespeare
	Manufacturing Systems II	AP Music Theory	Visual Imaging	English Dept Internship	
	Microsoft Office Applications I	AP Studio Art	Communications Media	Intro to Marketing	
	Western Civilization	AP Art History			
		Seminars in Music Technology			
		Music through the Guitar			

BUSINESS FINANCE & INFORMATION TECHNOLOGY - PROFESSIONAL COURSE ALIGNMENT

Related careers:
Accountant, Finance/Banking, Sports Management, Sales, Marketing, Stocks and Bonds, Law, Insurance, Hotel and Restaurant Management, Teacher, Economics, Business Administrator

Grade 9	Grade 10	Grade 11	Grade 12	Susquehanna University
1. English Honors College Prep	**1. English** Honors College Prep	**1. English** AP English Language Honors College Prep Elective Communication English Language Arts Survey	**1. English** AP English Literature College Prep Elective Communication English Language Arts Survey	**B.S. in Accounting**
2. Math Algebra 1 CP Geometry	**2. Math** Algebra 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP Pre-Calculus Honors	**2. Math** Pre-Calculus CP Advanced Placement Calculus AB Calculus CP Statistics and Probability	*Sample* Sequence of Courses and Activities for Accounting Majors
3. Science Introduction to Agriculture Science Earth Science CP Earth Science Honors	**3. Science** Biology CP Biology Honors	**3. Science** Chemistry CP Physics CP AP Chemistry AP Physics 1	3. **Science or Career Elective** Chemistry Physics Chemistry CP Physics CP AP Chemistry Dual Enrollment Biology AP Physics 1 & 2	**Fall -** MG: 101 Business Awareness Core: MA: 111 Calculus I Core: Writing Seminar Core: Using Computers Core: Foreign Language Core: College 101
4. Social Studies U.S. History I CP U.S. History I Honors	**4. Social Studies** U.S. History II CP U.S. History II Honors AP U.S. History	**4. Social Studies** Global Studies CP Global Studies Honors AP World History	**4. Social Studies** Government and Politics CP Government and Politics Honors AP Government and Politics	**Spring -** Core: History Core: Science and Technology Core: Values Core: Foreign Language Core: Fitness
5. Physical Education/ Health	**5. Physical Education/ Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Foreign Language I	**6. Foreign Language II**	**6. Principles of Accounting I**	**6. Business Law**	
7. Principles of Business	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives				
Principles of Business		**Business/Management Strand**		**Marketing Strand**	
Accounting I		Microsoft Office Applications I, II	World of William Shakespeare	Visual Communications I	
Business Law		Accounting II	Social Studies Internship	Visual Communications II	
Pre-Calculus CP		Intro to Economics		Intro to Economics	
Foreign Language – two year min		Computer Science 1 & 2		Foreign Language, years 3, 4, 5 or 2nd language	
		Personal Finance & Entrepreneurship		Manufacturing Systems	
Students should develop an area of		Intro to Marketing		Drawing, Design and Innovation	
Concentration based on career		Business Internship		Intro to Marketing	
choices		AP Calc BC			
		Calculus CP			
		Effective Communication			
		English Language Arts Survey			

BUSINESS FINANCE & INFORMATION TECHNOLOGY - TECHNICAL COURSE ALIGNMENT

Related careers:
Secretary, Receptionist, Finance - Teller, Credit Union, Investment and Brokerage Firm, Real Estate, Sales Associate, Retail Management, Telemarketing, Telecommunications, Legal Assistant, Court Reporting, Data Processing, Micro-computer Technology Specialist, Assistant Management

Grade 9	Grade 10	Grade 11	Grade 12	Berks Career & Technology Center
1. English English 9 College Prep	**1. English** English 10 College Prep	**1. English** English 11 College Prep Elective Communication English Language Arts Survey	**1. English** English 12 College Prep Elective Communication English Language Arts Survey	Business Management & Entrepreneurship* IT Networking* IT Programming* * These programs offer a Technical Academy in conjunction with Reading Area Community College
2. Math Basic Algebra 1 Algebra 1 CP Geometry	**2. Math** Algebra 1 Concepts Algebra 1 CP, 2 CP Geometry	**2. Math** Algebra 1 CP, 2 CP Accounting I	**2. Math or Science*** Algebra 1 CP, 2 CP Geometry/Algebra 2 Concepts Geometry CP Pre-Calculus CP Statistics and Probability Personal Economics Chemistry Chemistry CP Physics Physics CP	
3. Science Introduction to Ag Science Earth Science Earth Science CP	**3. Science** Biology Biology - College Prep	**3. Science** Chemistry Chemistry CP Physics Physics CP	3. **Career Elective**	
4. Social Studies U.S. History I U.S. History I CP	**4. Social Studies** U.S. History II U.S. History II CP	**4. Social Studies** Global Studies Global Studies CP	**4. Social Studies*** Government and Politics Government and Politics CP	
5. Physical Education/ Health	**5. Physical Education/ Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. General Business	**6. Career Elective**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective or Technology Systems or Carpentry and Welding	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement		Career Electives			
Principles of Business		Personal Economics		Technology Systems	
Algebra 1 CP		Microsoft Office Applications II		Visual Communications I	
Microsoft Office Applications I		Supervised Agricultural Experience		Visual Communications II	
		Accounting I, II		Manufacturing Systems I	
Available at Berks Career & Tech Center		Foreign Language		Manufacturing Systems II	
Information Technology-Programming		Effective Communication			
Technology Based Entrepreneurship		Business Internship			
Information Technology-Networking					
*BCTC Grade 12 can replace math, science or social studies with a career elective					
Students should develop an area of concentration based on career choices					

HUMAN SERVICES - PROFESSIONAL COURSE ALIGNMENT

Related careers:
Public Relations, Caseworker, Child Protective Services, Counselor, Law Enforcement, Justice Services, Lawyer, Criminal Justice Services, Teacher, Sociologist, Psychologist/Psychiatrist, Librarian, Anthropologist, Archeologist, Clergy

Grade 9	Grade 10	Grade 11	Grade 12	College Misericordia
1. English Honors College Prep	**1. English** Honors College Prep	**1. English** AP English Language Honors College Prep Elective Communication English Language Arts Survey	**1. English** AP English Literature College Prep Elective Communication English Language Arts Survey	**Psychology Major** **Industrial/Organizational Track** FRESHMAN -
2. Math Algebra 1 CP Geometry	**2. Math** Algebra 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP Pre-Calculus Honors	**2. Math or Science**	**Course Code - Course Title - Credits** BIO103 - General Biology - 3 ENG103 - English Composition - 3 HIS - Core Elective - 3
3. Science Introduction to Ag Science Earth Science CP Earth Science Honors	**3. Science** Biology CP Biology Honors	**3. Science** Chemistry CP Physics CP Dual Enrollment Biology AP Chemistry AP Physics 1	**3. Career Elective** Chemistry CP Physics CP AP Physics 1 & 2 AP Chemistry	SOC110 - Anthropology - 3 PSY123 - Intro to Psych - 3 PSY100 - Career Seminar I - 1 BIO104 - General Biology II - 3
4. Social Studies U.S. History I CP U.S. History I Honors	**4. Social Studies** U.S. History II CP U.S. History II Honors AP U.S. History	**4. Social Studies** Global Studies CP Global Studies Honors AP World History	**4. Social Studies** Government and Politics CP Government and Politics Honors AP Government and Politics	HIS - Core Elective - 3 POL100 - American Nat'l Government - 3 MTH - Math Bank I - 3 ENG112 - Speech Communication - 3
5. Physical Education/ Health	**5. Physical Education/ Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Foreign Language	**6. Foreign Language**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives				
Math-Pre-Calculus CP (minimum)	Accounting I	Sociology	Elective Maths	Elective Sciences	Elective Agriculture Science
Science-Chemistry (minimum)		Intro to Economics	Pre-Calculus	Chemistry CP	Current Topics in Ag Science
Foreign Language (2 year minimum)	Anatomy & Physiology I and II	Intro to Marketing	Computer Science 1,2	Dual Enrollment Biology	Experiments in Ag and Environmental Science 10, 11, 12
	Writer's Guild	Business Law	Advanced Topics of Mathematics	AP Physics	AP Environmental Science
Students should develop an area of	Independent Living	Digital Video & Film1, 2, 3, 4	Statistics & Probability	AP Physics 2	Independent Study in Science: Microbiology
concentration based on career choices	English Language Arts Survey	Journalism I and II	Advanced Topics in Comp Sci	Physics CP	
	Parenting & Child Development	Social Studies Internship	ACSL Conc & Programming		
	Microsoft Office Applications I	Personal Finance & Entrepreneurship	AP Computer Science A		
	Foreign Language, years 3, 4, 5 or 2nd language	World of William Shakespeare			
	Effective Communication	English Dept Internship			
	Western Civilization	Military History			
		AP US History			

HUMAN SERVICES - TECHNICAL COURSE ALIGNMENT

Related careers:
Hospitality and Recreation, Travel Agent, Culinary Arts, Child Care - Child Care Management, Day Care Worker, Operator, Houseparent, Nanny, Maintenance, Cosmetology, Firefighter, Corrections Officer, Teacher's Aide

Grade 9	Grade 10	Grade 11	Grade 12	Berks Career & Technology Center
1. English English 9 College Prep	**1. English** English 10 College Prep	**1. English** English 11 College Prep Elective Communication English Language Arts Survey	**1. English** English 12 College Prep Elective Communication English Language Arts Survey	Cosmetology Culinary Arts Early Childhood Education Horticulture Protective Services Criminal Justice Homeland Security Service Occupations
2. Math Basic Algebra 1 Algebra 1 CP Geometry	**2. Math** Algebra 1 Concepts Algebra 1 CP, 2 CP Geometry	**2. Math** Algebra 1 CP, 2 CP Geometry	**2. Math or Science** Personal Economics Algebra 1 CP, 2 CP Geometry/Algebra 2 Conc. Pre-Calculus CP Computer Science 1, 2 Statistics and Probability Chemistry Chemistry CP Physics Physics CP Adv. Topics in Computer Science ACSL Concepts & programming	
3. Science Introduction to Agriculture Science Earth Science Earth Science CP	**3. Science** Biology Biology CP	**3. Science** Chemistry Chemistry CP Physics Physics CP	**3. Career Elective**	
4. Social Studies U.S. History I U.S. History I CP	**4. Social Studies** U.S. History II U.S. History II CP	**4. Social Studies** Global Studies Global Studies CP	**4. Social Studies** Government and Politics Government and Politics CP	
5. Physical Education/Health	**5. Physical Education/Driver Education**	**5. Physical Education/Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Foreign Language, General Business, Technology Systems Carpentry and Welding	**6. Career Elective**	**6. Career Elective**	**6. Career Elective**	
7. Foreign Language, General Business, Technology Systems Carpentry and Welding or Career Elective	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives				
Concepts of Geometry or Algebra 1 CP	Culinary Science 1, 2	Sociology	Service Learning	Available at Berks Career & Technology Center	
Science (3-4 Years)	Accounting I	Principles of Business	Personal Finance & Entrepreneurship	Culinary Arts	
	Independent Living	Technology Systems		Occupational & Child Development	
	Agriculture Science 10	Foreign Language		Service Occupations	
	Microsoft Office Applications I	Intro to Marketing		Cosmetology	
	Anatomy and Physiology I and II			Protective Services	
	Parenting & Child Development				
	Effective Communication				

ENGINEERING AND INDUSTRIAL TECHNOLOGIES - PROFESSIONAL COURSE ALIGNMENT

Related careers:
Aviation, Computer Aided Productions and System Design, Engineering, Electrical, Computer Information Systems Specialist, Systems Analyst, Mathematician, Teacher, Architect, Biological, Medical, Scientist - Chemist, Physicist, Meteorologist, Geologist

Grade 9	Grade 10	Grade 11	Grade 12	Lehigh University
1. English English Honors English College Prep	**1. English** English Honors English College Prep	**1. English** AP English Language English Honors English College Prep Elective Communication English Language Arts Survey	**1. English** AP English Literature English College Prep Elective Communication English Language Arts Survey	**Materials Science and Engineering** FIRST SEMESTER - Freshman year (15-16 credits) **Course # - Course Title – Credits** Engl 1 - Composition and Literature - 3 Chm 21,22 - Introductory Chemical Principles and Laboratory - 5 or Phy 11,12 - Introductory Physics and Laboratory - 5 Math 21 - Analytic Geometry & Calculus I - 4 Engr 1/HSS - Engineering Computations - 3 or Humanities/Social Sciences elective - 3 to 4 and Engineering 2, Introduction to Engineering – 1 Freshman year, second semester (15-16 credits) **Course # - Course Title - Credits** Engl 2 - Composition and Literature: Fiction, Drama, Poetry - 3 Phy 11,12 - Introductory Physics and Laboratory - 5 or Chm 21,22 - Introductory Chemical Principles and Laboratory - 5 Math 22 - Analytic Geometry & AP Calculus BC - 4 Engr 1/HHS - Engineering Computations - 3 or Humanities/Social Sciences elective - 3 to 4 and Engineering 2, Introduction to Engineering – 1
2. Math Algebra 1 CP Geometry	**2. Math** Algebra 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP Pre-Calculus Honors Computer Science I	**2. Math** Pre-Calculus CP AP Calculus AB Calculus CP Statistics and Probability	
3. Science Introduction to Agriculture Science Earth Science CP Earth Science Honors	**3. Science** Biology CP	**3. Science** Chemistry CP Physics CP Dual Enrollment Biology AP Chemistry AP Physics 1	3. **Science** Chemistry CP Chemistry Honors AP Chemistry Physics CP AP Physic 1 & 2 Dual Enrollment Biology	
4. Social Studies U.S. History 1 CP U.S. History I Honors	**4. Social Studies** U.S. History II CP U.S. History II Honors AP U.S. History	**4. Social Studies** Global Studies CP Global Studies Honors AP World History	**4. Social Studies** Government and Politics CP Government and Politics Honors AP Government and Politics	
5. Physical Education/ Health	**5. Physical Education/ Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Foreign Language	**6. Foreign Language**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective	**7. Career Elective**	**7. Career Elective**	7. **Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives				
Pre-Calculus CP	Technology Systems		Visual Communications I	Physical Sciences Strand	Biological Strand
Computer Science 1	Computer Science 2		Architectural Design	Physics	Biotechnology
Foreign Language (2 year minimum)	Microsoft Office Applications I		AP Calculus BC	AP Physics 2	Chemistry
Available at Berks Career & Technology Ctr	Drawing, Design & Innovation		Personal Finance & Entrepreneurship	AP Calculus BC	Experiments in Ag and Environmental Sciences
Drafting Design Technology	Seminars in Music Technology		Effective Communication	Calculus Honors	DE Biology
Mechatronics Engineering Technology	Advanced Topics in Comp Sci				AP Environmental Science
Robotics and Automation Technology	ACSL Conc & Programming				Independent Study in Science: Microbiology
Electronic Technology					
Students should develop an area of concentration based on career choices					

ENGINEERING AND INDUSTRIAL TECHNOLOGIES - TECHNICAL COURSE ALIGNMENT

Related careers:
Computer Information Systems; Auto Technology - Body, Manufacturing, Emission Technology, Diesel, Avionics Technology, Engines, Fuels, Service Manager; Building Construction Trades - Plumbing, Masonry, Heavy Construction, CADD, Electronics Technology, Environmental Technology, Tool Making, Welding, Machinist, Robotics, HVAC, Carpentry, Recreational and Power Equipment and Repair, Cabinetmaker

Grade 9	Grade 10	Grade 11	Grade 12	Berks Career & Technology Center
1. English College Prep English 9	**1. English** College Prep English 10	**1. English** College Prep English 11 Elective Communication English Language Arts Survey	**1. English** College Prep English 12 Elective Communication English Language Arts Survey	Building Construction Occupations Cabinetry & Wood Technology Electrical Occupations HVAC/ Refrigeration Masonry Painting & Decorating Plumbing & Heating
2. Math Basic Algebra 1 Algebra 1 CP Geometry	**2. Math** Algebra 1 Conc. Algebra 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP	**2. Math or Science** Geometry/ Algebra 2 Conc. Algebra 2 CP Physics Physics CP	
3. Science Introduction to Agriculture Science Earth Science Earth Science CP	**3. Science** Biology Biology - College Prep	**3. Science** Chemistry Chemistry CP Physics Physics CP	**3. Career Elective**	
4. Social Studies U.S. History I U.S. History I CP	**4. Social Studies** U.S. History II U.S. History II CP	**4. Social Studies** Global Studies Global Studies CP	4. **Social Studies*** Government and Politics *or Career Elective if BCTC student	
5. Physical Education/Health	**5.** Physical Education/Driver Education	**5.** Physical Education/Health	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Technology Systems or Carpentry & Welding	**6. Career Elective**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Available at Berks Career & Technology Center		Career Electives		
Algebra 2 and Geometry	Auto Collision Repair Technology	Auto Technology	Foreign Language (2 years)	Manufacturing Systems	Statistics & Probability
Physics or Physics CP	Building Construction Occupations	Cabinet Making	Visual Communications I	Computer Science 1	Computer Science 1,2
Technology Systems	Carpentry	Diesel Technology	Manufacturing Systems II	Architectural Design	Personal Economics
	Drafting Design Technology	Electrical Occupations	Principles of Business	Effective Communication	Adv. Topics in Comp Science
	Electronic Technology	HVAC	Energy, Power & Transportation	Personal Finance & Entrepreneurship	ACSL Conc. & Programming
	Computerized Machining Technology	Masonry	Drawing, Design & Innovation		
	Precision machine Technology	Welding Technology	Microsoft Office Applications I		
	Plumbing & Heating	Heavy Equipment Technology	Seminars in Music Technology		
	Recreational & power Equipment Technology	Mechatronics Engineering Technology			
	Robotics & Automation Technology				

SCIENCE AND HEALTH RESOURCES - PROFESSIONAL COURSE ALIGNMENT

Related careers:
Medicine - Physical Therapist, Audiologist, Dentist; Radiologist, Veterinarian, Pharmacist, Athletic Trainer, Biology, Marine Sciences, Teacher, Agricultural Scientist, Speech Pathologist, Registered Nurse, Doctor, Food Science

Grade 9	Grade 10	Grade 11	Grade 12	Delaware Valley
1. English Honors College Prep	**1. English** Honors College Prep	**1. English** AP English Language Honors College Prep Elective Communication English Language Arts Survey	**1. English** AP English Literature College Prep Elective Communication English Language Arts Survey	**Agronomy and Environmental Science** FIRST SEMESTER - **Course Code - Course Title - Credits** AE 1120 - Urban/Rural Systems and the Environment - 3 EN 1101 - English I or EN 1111 - Advanced English I - 3 MP 1102 - College Algebra or MP 1203 - Elementary Functions - 3 BY 1116 - Biological Science I - 3 CH 1103 - General Chemistry I - 4 PE 1109 - Physical Education I - 1 SECOND SEMESTER - **Course Code - Course Title - Credits** AE 1206 - Agronomy & Environmental Science - 3 EN 1201 - English II or EN 1211 - Advanced English II - 3 MP 1203 - Elementary Functions or MP 1204 - Calculus I - 3 to 4 BY 1217 - Biological Science II - 3 CH 1203 - General Chemistry II - 4 PE 1209 - Physical Education II - 1
2. Math Algebra 1 CP Geometry	**2. Math** Algebra 2 CP Geometry	**2. Math** Algebra 2 CP Pre-Calculus CP Pre-Calculus Honors	**2. Math** Pre-Calculus CP Pre-Calculus Honors AP Calculus AB Calculus CP Statistics and Probability	
3. Science Introduction to Agriculture Science Earth Science CP Earth Science Honors	**3. Science** Biology CP Biology Honors	**3. Science** Chemistry CP Chemistry Honors Physics CP Dual Enrollment Biology AP Chemistry AP Physics 1	**3. Science** Physics CP AP Biology AP Chemistry AP Physics 1 & 2	
4. Social Studies U.S. History I CP U.S. History I Honors	**4. Social Studies** U.S. History II CP U.S. History II Honors AP U.S. History	**4. Social Studies** Global Studies CP Global Studies Honors AP World History	4. **Social Studies** Government and Politics CP Government and Politics Honors AP Government and Politics	
5. Physical Education/ Health	**5. Physical Education/ Driver Education**	**5. Physical Education/ Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Foreign Language	**6. Foreign Language**	**6. Career Elective**	**6. Career Elective**	
7. Career Elective	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	
8. Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Career Electives			
Math-Pre-Calculus CP (minimum)	Computer Science 1,2	**Health Strand**	Personal Finance & Entrepreneurship	**Natural Resources Strand**
Chemistry (minimum)	Adv. Topics in Comp. Sci	Dual Enrollment Biology		Current Topics in Ag Science
Foreign Language (2 year minimum)	AP Computer Science A	Biotechnology		AP Environmental Science
	ACSL Conc & Programming	Anatomy & Physiology I and II		Experiments in Ag and Environmental Sciences
	AP Calculus BC	Independent Study in Science: Microbiology		Chemistry
	Language 3,4,5 or other language	Innovative Science Research		Supervised Agricultural Experiment
Students should develop an area of	Sociology	Medical Health Professions Program (BCTC)		Independent Directed Explorations in Ag. Science
concentration based on career choices	Physics	Exercise Physiology 1 & 2		
	Effective Communication			
	English Language Arts Survey			

SCIENCE AND HEALTH RESOURCES - TECHNICAL COURSE ALIGNMENT

Related careers:
Technician: Nuclear, X-ray, Imaging; Medical Assistant, Medical Secretary, Physical Therapy, LPN or Nurse's Aide, Dental Hygienist, Orderly, Funeral Director, Veterinary Attendant, Occupational Therapy, Florist, Landscape Designer, Environmental Technology, Forest Technology, Mill Manager, Surveyor, Agricultural Scientist

Grade 9	Grade 10	Grade 11	Grade 12	Berks Career & Technology Center
1. English College Prep English 9	**1. English** College Prep English 10	**1. English** College Prep English 11 Elective Communication English Language Arts Survey	**1. English** College Prep English 12 Elective Communication English Language Arts Survey	Dental Occupations Health Occupations* Health Related Technology Medical Health Professions Sports Medicine & Rehabilitative Therapy
2. Math Basic Algebra 1 Algebra 1 CP Geometry	**2. Math** Algebra 1 Conc Algebra 1 CP, 2 CP Geometry	**2. Math** Algebra 2 CP Geometry	**2. Math or Science** Pre-Calculus CP Geometry CP Algebra 2 CP Chemistry CP Physics CP Statistics and Probability	
3. Science Introduction to Ag Science Earth Science Earth Science CP	**3. Science** Biology Biology CP	**3. Science** Chemistry Chemistry CP Physics Physics CP	**3. Career Elective**	
4. Social Studies U.S. History I U.S. History I CP	**4. Social Studies** U.S. History II U.S. History II CP	**4. Social Studies** Global Studies Global Studies II Adv	4. **Social Studies** Government and Politics Government and Politics CP	
5. Physical Education/Health	**5. Physical Education/ Driver Education**	**5. Physical Education/Health**	**5. Physical Education/ Senior Seminar or Music Seminar or Service Learning**	
6. Principles of Business or Technology Systems or Foreign Language or Carpentry and Welding	**6. Career Elective**	**6. Career Elective**	**6 .Career Elective**	
7. Career Elective or General Business Technology Systems or Foreign Language or Carpentry and Welding	**7. Career Elective**	**7. Career Elective**	**7. Career Elective**	* These programs offer a Technical Academy in conjunction with Reading Area Community College
8 Open Elective	**8. Open Elective**	**8. Open Elective**	**8. Open Elective**	

Pathways Requirement	Available at Berks Career & Technology		Career Electives		
Algebra 2 CP or Concepts of Geometry	Cosmetology		Culinary Science 1, 2	Parenting & Child Development	Foreign Language (2 years)
Chemistry	Dental Occupations		Independent Living	Personal Economics	Service Learning
	Health Occupations		Principles of Business & Personal Finance & Entrepreneurship	Current Topics in Ag Science	Manufacturing Systems
	Health Related Technology		Technology Systems	Effective Communication	Anatomy & Physiology I and II
	Horticulture		AP Environmental Science		Exercise Physiology 1 & 2
	Culinary Arts		Experiments in Ag and Environmental Sciences (11, 12)		
	Protective Service		Microsoft Office Applications I		

CONRAD WEISER AREA SCHOOL DISTRICT

MASTER COURSE DESCRIPTION LIST

NOTE: Courses that require prerequisites for admission will be reviewed by the administration upon student request for exceptions.

ENGLISH

Note: The following English courses are required for graduation - any level of English 9, English 10, English 11, and English 12 or AP English.

English Honors Courses:

1020 English Honors 9 – (weighted 1.1) – 1.00 Credit
1021 English Honors 10 – (weighted 1.1) – 1.00 Credit
1022 English Honors 11 – (weighted 1.1) – 1.00 Credit
1023 English Honors 12 – (weighted 1.1) – 1.00 Credit
1057 Advanced Placement English Language and Composition – (weighted 1.2) – 11 – 1.00 Credit
1058 Advanced Placement English Literature – (weighted 1.2) – 12 – 1.00 credit

Honors English is intended for students who, in addition to exhibiting the ability to handle more challenging English curriculum, are motivated to accept that challenge. These courses will require summer reading. Admission to this program will be determined by the following criteria:

1. Any student with an A average in the most recent college preparatory English class may register.

2. A student who receives a teacher recommendation in lieu of the required grade may also register.

3. All Honors English registrants must meet with their Honors English teacher prior to the summer break.
To stay in honors, a student must have a B final average in the course.

1001 English College Prep – 12 – 1.00 Credit

(Prerequisite - Successful completion of any 11th grade English course)
This academic English course is designed for the college-bound student. It emphasizes reading and response to literature; studying grammar; writing, especially narrative; and completing an MLA-style research paper.

1002 English – 12 – 1.00 Credit

(Prerequisite - Successful completion of any 11th grade English course)

This course will build on the skills developed in Applied English 11. Students will review grammar and mechanics throughout the year. A variety of writing assignments will be administered including a narrative and an MLA style research paper. Various types of literature will be used within the class and focus will be placed on the comprehension of a) the literature itself and b) the themes and details surrounding the pieces.

1004 English College Prep – 11 – 1.00 Credit

(Prerequisite - Successful completion of any 10th grade English course)

The focus of this course of study is American Literature. Students will read and analyze a variety of selections by American writers, including novels, short stories, and poems. Students will also complete formal and informal writing assignments with an emphasis on journal writing, and literary analysis. This course also provides students with opportunities to develop effective communication skills, and investigate potential career paths.

1005 English – 11 – 1.00 Credit

(Prerequisite - Successful completion of any 10th grade English course)

This course of study consists of interesting reading selections by American writers, including short stories, plays, and contemporary young adult novels. Students will also participate in a variety of writing experiences, and practice communication techniques that will enable them to effectively integrate into the work force. Students will also learn new vocabulary, and gain a better command of grammar usage.

1010 Effective Communication (Option A) – 11 and 12 – 1.00 Credit

(Prerequisite – Successful completion of any 10th grade non-elective English course)

Effective communication is required in virtually every career field in the world today, and this course will prepare students to meet that need. This course will help students to improve their technical writing and oral communication skills, to employ effective strategies in their writing as well as in debate. In addition, students will learn successful public relations strategies. Students will be required to write for a variety of purposes and audiences and will give speeches ranging from short impromptu talks to prepared presentations. In addition, students will read and transact with a wide assortment of texts including essays, novels, and plays. *This course is open to students of all career objectives and is an option that may count for major credit in place of any grade 11 or 12 English course or for elective credit when taken in addition to one of the major courses.*

1012 English Language Arts Survey (Option B) – 11 and 12 – 1.00 Credit

(Prerequisite – Successful completion of any 10th grade non-elective English course)

This course is designed for the student seeking a more eclectic approach to language arts study and is comprised of a diverse set of mini-units. These units include: Film History and Criticism; Comparative Literature Studies; Poetry; American Humor in Literature; Drama; and Faith, Philosophy, and Psychology in Literature. In addition to the teacher-led mini-courses, students will work in research teams to prepare and present a final term culminating project focused on an additional area of language arts studies. This course is open to students of all career objectives. *This course is open to students of all career objectives and is an option that may count for major credit in place of any grade 11 or 12 English course or for elective credit when taken in addition to one of the major courses.*

1015 English College Prep – 10 – 1.00 Credit

(Prerequisite - Successful completion of any 9th grade English course)

This academic English course stresses the comprehension and appreciation of literature by reading short stories, modern plays, Shakespeare, and novels. Writing will concentrate on development techniques, literary analysis, and personal writing. The research paper and skills needed to prepare it will be included. Vocabulary, grammar, and public speaking are aimed at improving oral and written expression.

1016 English – 10 – 1.00 Credit

(Prerequisite - Successful completion of any 9th grade English course)

Students in 10th Grade Applied English will read and analyze novels, short stories, and drama. In order for students to enhance their reading comprehension skills – to make personal, real-world and academic connections based on the themes found in these texts – a collaborative learning environment will be emphasized throughout the course. Writing will concentrate on developmental techniques – using the stages of the writing process. Students will apply the writing process to engage in a variety of performance tasks, including, but not limited to, a personal narrative, journal writing, descriptive essay, and research paper. Students will use research and technology to support both reading and writing. In order to enhance oral and written expression, there is an emphasis on vocabulary, grammar, and public speaking throughout the course.

1091 English – College Prep – 9 – 1.00 Credit

This is the first course in a four-year program designed to ensure that students will develop the high degree of personal literacy necessary to succeed in college. Each student is expected to build an extensive portfolio of self-initiated as well as teacher-assigned reading and writing. The study of assigned literature will be primarily by genre, but students will have ample opportunity for self-selected reading as well. Personal management skills are essential to success in this course as in college.

1092 English – 9 – 1.00 Credit

This course focuses on reading and writing. Students will read and discuss novels as well as short selections from diverse genres of literature. In addition, students will write for a variety of purposes and audiences and learn effective writing techniques. Vocabulary, grammar, and public speaking instruction will be used to supplement writing instruction.

1020 English Honors 9 – (weighted 1.1) – 9 – 1.00 Credit

This course builds upon the basic framework of the 9th Grade College Preparatory English course through the addition of ten titles of classic literature and by focusing on written analysis and evaluation of those works. Students taking Honors English 9 must be self-starters who welcome a demanding course load, which includes summer reading and writing assignments in addition to all of the requirements of the 9th Grade College Preparatory English course.

1021 English Honors 10 – (weighted 1.1) – 10 – 1.00 Credit

This course moves the advanced learner from the study of literature by genre to analysis based upon literary elements. An emphasis will be placed upon the development of critical thinking and writing skills. Literature will be studied in relationship to style, theme, and historical context. In addition to the 10th Grade College Preparatory English framework, extensive outside reading for the summer and throughout

the semester is required. Because of its demanding out-of-class workload, this course necessitates an educational commitment on the part of the student.

1022 English Honors 11 – (weighted 1.1) – 11 – 1.00 Credit

The 11th grade Honors English course includes many of the goals of the 11th Grade College Preparatory English course, such as the integration of writing, grammar, literature, and speech, to develop the effective communications skills necessary for success in college. However, this is an advanced course designed for the student who exhibits a special interest or proficiency in English and will require the honors student to complete more independent and cooperative work using analysis, synthesis, and evaluation. Supplementary texts are included for summer reading and writing assignments.

1023 English Honors 12 – (weighted 1.1) – 12 – 1.00 Credit

The 12th grade Honors English course is aimed at preparing the talented and motivated English student for advanced level language arts studies in college. Building upon the requirements of the College Preparatory English 12 course, this course adds the independent and collaborative reading and analysis of advanced level literary works, advanced writing assignments, and oral presentation. Because of the intensity of its coursework, this course demands that students can self-initiate and self-direct themselves in most of the requirements of the senior project.

1024 Journalism I – 10 through 12 – 1.00 Credit

This course is intended to teach the basics of print journalism with possible focus on other types of journalism. Students will develop reporting and interviewing skills and will focus on proofreading and layout procedures. Students will be responsible for the writing, layout, production and distribution of the school newspaper, *The Interpreter.*

1025 Journalism II – 11 and 12 – 1.00 Credit

(Prerequisite – Journalism I)

This course will build on the skills learned in Journalism I. Students will have added responsibility in the form of additional articles, editorial positions, more control over layout, and newspaper staff meetings regarding the progress of the newspaper. Students will continue to practice reporting and interviewing skills, often being asked to cover more in-depth topics than their Journalism I counterparts.

1026 The World of William Shakespeare – 9 through 12 – 1.00 Credit

Through active participation, performance, and hands-on activities, students in this course will immerse themselves in the comedies, tragedies, and historical world of William Shakespeare. At least six plays will be covered as a class, while others will be explored in small groups and independent work. Additionally, students will read many of Shakespeare's sonnets and longer poems, as well as works by several of his contemporaries. A key focus of the class will be to encourage students to make connections between Shakespeare's world and our world of today. The class is open to all students willing to participate actively in the literature, both in and out of class. NOTE: This class is offered only in school terms ending in an even year (2025-26, 2027-28).

1042 English Department Internship – 1.00 Credit
1043 English Department Internship – .50 Credit

(Prerequisite – Department Approval)

An English internship course is offered to select seniors who exhibit proficiency in the English field. This course is intended to give seniors hands-on experience in real world applications of English and communications. Students may be able to explore the fields of journalism, education, public speaking, public relations, or any related field based on the specific placement. Students will be required to submit a reflective essay per marking period as well as a research project based on this internship. Students must provide their own transportation to the site.

1050 Writers' Guild – 10 through 12 – 1.00 Credit

(Prerequisite – Successful completion of any 9th grade English course)

In this course, students will brainstorm, draft, polish, and publish their own writing working within the structure of various writers' groups. Daily writing, thoughtful response, and a serious commitment to producing and publishing excellent writing are required for success. While students will be encouraged to explore a writing genre of that is of personal interest, they will also be required to expand and refine their talents by writing extensively within specific, assigned modes, composing essays, articles, analyses, and persuasive works. Publication of produced works will be both traditional and electronic. Regular submissions to contests are required. Every semester, the Writers' Guild will work extensively on computers to produce an anthology that will be published and sold publicly via print-on-demand technology. This course will be offered only in school years ending in an odd number (2024-25, 2026-27).

1057 Advanced Placement English Language and Composition – (weighted 1.2) – 11 – 1.00 Credit

This course is for juniors who, through their past performances in high school English classes, have exhibited advanced skills in literature study and rhetorical writing and who intend to take the AP English Language and Composition Exam. Students are required to take the Advanced Placement English Language and Composition Exam (Note: There is a fee for this exam administered by The College Board.) The pace of this class is fast and rigorous, demanding a significant amount of out-of-class preparation time spent towards both the study or canonical and historical works of literature as well as the examination of one's own writing process through constructive and deconstructive techniques alike. Note: Final enrollment in this course is subject to departmental approval and based upon the student's prior performance in all high school English courses through Grade 10. Students are required to take the AP Exam.

1058 Advanced Placement English Literature (weighted 1.2) – 12 – 1.00 Credit

This course engages students in the careful reading and critical analysis of works of literary merit from various genres and time periods (16th Century to Contemporary). Through the close reading of selected texts, students will deepen their understanding of writer's use of language to provide both meaning and appreciation of the work for their readers. As they read, students consider a work's structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. This course is intended for seniors who will be taking the AP English Literature and Composition Exam (a requirement of this course). Note: There is a fee for this College Board exam. This course is fast-paced and rigorous, requiring good time management skills, as well as a significant amount of out-of-class time for reading and class assignments. Enrollment in this class is subject to department approval and will be based on past performance in high school English courses. Students are required either to take the AP exam or enroll in RACC's dual enrollment program.

Note: See page 61 for tuition fees for dual enrollment.

MATHEMATICS

Note: All students are required to have at least three math and three science credits to graduate. In addition, either a fourth math or a fourth science credit is required. Computer Science 1 counts as a math credit. Accounting 1 may count as the fourth math credit.

Math Honors Courses:

2022 Algebra 2 Honors – (weighted 1.1) – 1.00 Credit
2023 Geometry Honors – (weighted 1.1) – 1.00 Credit
2024 Pre-Calculus Honors – (weighted 1.2) – 1.00 Credit
2025 Advanced Placement Calculus AB – (weighted 1.2) – 1.00 Credit
2026 Advanced Placement Calculus BC – (weighted 1.2) – 1.00 Credit

Math Honors courses are designed for students who exhibit the ability to handle more challenging math curriculum and are motivated to accept that challenge. Admission to the program will be determined by the following criteria:

1. Any student with a final grade of A in the most recent college preparatory Math class may register with a teacher recommendation.

2. Any current Honors Math students must have at least a B- final grade in the course.

2004 Personal Economics – Grade 12 – 1.00 Credit

Budgeting concepts, banking options, investment instruments, loans and credit, and retirement planning will be investigated through reading, research, and problem solving. The focus of this course will be learning the mathematical processes for dealing with real world problem situations students will encounter as employees, taxpayers, customers, investors, and consumers. Students will work with their own scientific calculators and on-line resources to acquire consumer problem solving skills.

2005 Keystone Algebra 1 – 1.00 Credit

(Prerequisite - Algebra 1 Concepts)
This class is designed for students who passed Algebra 1 Concepts and have not taken the Keystone Algebra 1 exam yet. This course will cover all of the eligible content that is found on both modules of the Keystone exam. The topics covered in this course are real numbers, operations of polynomials, exponent rules, solving and graphing linear equations and inequalities, solving and graphing systems of linear equations and inequalities, probability, data analysis, and relations and functions. Students in this class will be preparing to take the Keystone Algebra 1 exam at the end of the course.

2006 Geometry/Algebra 2 Concepts – 1.00 Credit

(Prerequisite - Keystone Algebra 1 or Algebra 1 CP)
This class is designed for students who passed Keystone Algebra 1 or are recommended after Geometry CP. Geometry/Algebra 2 strengthens and expands upon concepts and skills taught in previous algebra courses, as well as introduces new concepts from both

geometry and algebra. Some of the topics covered will include writing and graphing linear equations, solving systems and factoring. Some new topics will include solving quadratic equations, imaginary numbers, and introductory trigonometry.

2007 Basic Algebra 1 – 1.00 Credit

This course is designed to provide a solid foundation of algebra concepts. Main topics include solving equations, graphing lines, and writing linear equations, as well as solving and graphing inequalities. This class is designed for students who took Algebra Readiness or struggled with Algebra 1A in 8th grade. After passing this class, students can continue on to take Algebra 1 Concepts.

2008 Algebra 1 Concepts – 1.00 Credit

This class is designed for students who passed Basic Algebra 1. It will build on students' current algebra skills to establish a strong algebra foundation. Main topics include writing and graphing linear equations, solving systems of equations, exponents and radicals, and an introduction to polynomials. After passing this class, students can continue on to take Keystone Algebra 1.

2011 Algebra 1 College Prep – 1.00 Credit

(Prerequisite - 8th grade Algebra 1A or an A in Algebra 1 Concepts with teacher approval)

Algebra 1 CP is a continuation of 8th grade Algebra. The course will quickly review operations with and properties of real numbers, and solving single variable equations. Students are expected to master writing and graphing linear equations, and solving systems of equations. The course will then cover topics including exponents, operations with polynomials, an introduction to factoring and solving quadratic equations, as well as basic statistics and probability. Students in this class will be preparing to take the Keystone Algebra 1 exam at the end of the course.

2012 Algebra 2 College Prep – 1.00 Credit

(Prerequisite - Geometry CP)

Algebra 2 strengthens and expands upon concepts, skills, and topics introduced in Algebra I. Some of the topics covered will include the solving and graphing of quadratic, polynomial, rational, radical, exponential, and logarithmic functions. All students planning to attend college should complete this course prior to graduation.

2013 Geometry College Prep – 1.00 Credit

(Prerequisite - Algebra 1 CP or an A in Keystone Algebra 1 with teacher approval)

Geometry deals primarily with lines, angles, planes, polygons, and circles. Much of the course involves plane (two-dimensional) figures, with some study of solid (three-dimensional) figures and coordinate geometry (geometry done on a rectangular coordinate system.) Concepts from Algebra 1 are regularly used throughout the course.

2014 Pre-Calculus College Prep – (weighted 1.2) – 1.00 Credit

(Prerequisite - Algebra 2 CP)

This is a college prep level class for students that have completed Algebra 2. The course will review and extend Algebra 2 including factoring, solving equations, and graphing functions including polynomial, rational, exponential, and logarithmic. This course will also cover trigonometric functions, trigonometric identities, and applications of trigonometry.

Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

2020 College Algebra – (weighted 1.2) – Grade 12 – 1.00 Credit

(Prerequisite - Algebra 2 CP with teacher approval)

College Algebra is a college prep level class for students who have completed Algebra 1, Geometry, and Algebra 2. The course is designed to prepare students for SATs and college admission exams. It is also intended to help students be more successful in future college math classes.

Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

2022 Algebra 2 Honors – (weighted 1.1) – 1.00 Credit

(Prerequisite - at least a B- in Honors Geometry or an A in Geometry CP with teacher approval)

The basic objectives of this course encompass a review of the properties of sets, the axiom system, open sentences, simultaneous linear equations and inequalities, multiplication of polynomials, factoring polynomials, quadratic equations, functions and relations, and a well-defined system of graphing.

2023 Geometry Honors – (weighted 1.1) – 1.00 Credit

(Prerequisite - at least a B- in 8th grade Algebra 1 or an A in Algebra 1 CP with teacher approval)

Geometry deals primarily with lines, angles, planes, polygons, and circles. Much of the course involves plane (two-dimensional) figures, with some study of solid (three-dimensional) figures and coordinate geometry (geometry done on a rectangular coordinate system). The concepts of congruence and similarity are emphasized. Students are expected to write and understand formal proofs including 2-column proofs and analytic geometry proofs.

2024 Pre-Calculus Honors – (weighted 1.2) – 1.00 Credit

(Prerequisite - at least a B- in Algebra 2 Honors or an A in Algebra 2 CP with teacher approval)

The major topics include trigonometry, functions, logarithms, and graphing. The goal is to prepare students for Calculus and higher math courses. This course will benefit those students who are highly motivated, enjoy math, and whose career goals include higher level math. A TI-Nspire calculator will be provided for students to use throughout the semester.

Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

2025 Advanced Placement Calculus AB – (weighted 1.2) – 1.00 Credit

(Prerequisite - at least a B- in Pre-Calculus Honors or an A in Pre-Calculus CP with teacher approval)

This course provides a systematic introduction to aspects of differential and integral calculus. The topics covered in this course include limits, derivatives, integrals, summation, volume and applications of these concepts. Material covered in this class is found in all first semester college Calculus classes. Students will be assigned a TI-Nspire graphing calculator to use for the semester. All students in this class are required to take the AP Calculus AB exam in May.

Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

2026 Advanced Placement Calculus BC – (weighted 1.2) – 1.00 Credit

(*Prerequisite - AP Calculus AB)*

This class is a second semester continuation of what was begun in AP Calculus AB. Topics covered in this course include Improper Integrals, Infinite Series, Conic Sections, Parametric Equations and Vectors. In addition to new material that is learned, prior concepts will

be strengthened. Students will be assigned a TI-Nspire graphing calculator to be used for the semester. All students in this class are required to take the AP Calculus BC exam in May.

2028 Calculus College Prep – (weighted 1.2) – 1.00 Credit

(Prerequisite - Pre-Calculus CP)

This course is an introduction to topics in calculus. These topics include limits, derivatives and their applications, and integrals and their applications. Students will be assigned a TI-Nspire graphing calculator to use for the semester. This course will not cover all the topics, nor be as in depth as AP Calculus, thus students in this course will not be prepared to take the AP exam.

Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

2050 Statistics and Probability – (weighted 1.2) – Grades 11 and 12 – 1.00 Credit

(Prerequisite - Algebra 2 CP)

Various methods of analyzing data will be studied including graphing, calculating measures of central tendency and spread, use of standardized scores, and linear regression. Probability topics include the fundamental counting principle, conditional probability, and binomial probability. Sampling methods, design of experiments, and hypothesis testing are also included.

Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

2058 Keystone Algebra 1 CP – 2.00 Credits (students enrolled in this course need 4 math credits to graduate)

(Prerequisite - 8th grade Algebra 1A or 8th grade Algebra Readiness with teacher approval)

Keystone Algebra 1 CP is a year-long class created to help students build a better foundation of algebra skills prior to taking the Keystone Exam. The course will review previously learned algebra skills before teaching new content, and then finally transition into Keystone Exam prep. Students will take the Keystone Exam for Algebra at the conclusion of the course. This is essentially a year-long version of Algebra 1 CP.

Note: Students will be placed in this course based on state testing data and teacher recommendation. It runs daily for the full school year.

SOCIAL STUDIES

Note: The following Social Studies courses are required for graduation: U.S. History I; U.S. History II; Global Studies or AP World History; and Government and Politics. All other Social Studies courses are offered as electives.

The Social Studies Department believes the academic needs of our students would be best met with a curriculum aligned with their reading comprehension and writing level. All core courses have three levels. Each covers the same material but to a different degree of enrichment and immersion. Students will be assigned to levels based upon their reading comprehension and writing skills. Students are encouraged to choose the level best suited to their academic needs.

Social Studies Honors Courses:

3092 U.S. History I Honors – (weighted 1.1) – 9 – 1.00 Credit
3102 U.S. History II Honors – (weighed 1.1) – 10 – 1.00 Credit
3108 Advanced Placement U.S. History – (weighted 1.2) – 10 through 12 – 1.00 Credit
3112 Global Studies Honors – (weighted 1.1) – 11 – 1.00 Credit
3116 Western Civilization – (weighted 1.1) – 11 and 12 – 1.00 Credit
3123 Government and Politics Honors – (weighted 1.1) – 12 – 1.00 Credit
3124 Advanced Placement Government and Politics – (weighted 1.2) – 12 – 1.00 Credit
3125 Intro to Economics – (weighted 1.1) – 11 and 12 – 1.00 Credit
3126 Sociology – (weighted 1.1) – 11 and 12 – 1.00 Credit
3128 Advanced Placement World History Modern – (weighted 1.2) – 11 and 12 – 1.00 Credit

Honors Program

Honors Social Studies is an opportunity for the truly dedicated Social Studies student to explore, interpret, analyze, and evaluate key themes and issues in the Social Studies curriculum. Courses will require additional and more challenging reading, writing, and historical research, including summer reading assignments, to prepare our students for a more competitive educational environment and job market.

Students will be selected for the honors program based on their achievement of an "A" average in Social Studies and a reading comprehension/writing assessment. The honors student must maintain B averages in Social Studies and passing grades in all other courses to remain in the honors program. The Social Studies Department will make recommendations yearly during the course selection process.

3090 U.S. History I – 9 – 1.00 Credit

The purpose of U.S. History I is to study our nation's history from the French and Indian War (1754) to the end of the Gilded Age (1900). Students will learn to recognize and appreciate different interpretations of American heritage. The course will include the inquiry approach to the study of history. Basic study skills will also be reinforced. The student, upon completion of the course, shall have a greater understanding of American History and its complexities.

3091 U.S. History I College Prep – 9 – 1.00 Credit

The purpose of U. S. History I CP is to study our nation's history from the French and Indian War (1754) to the end of the Gilded Age (1900). Students will learn to recognize and appreciate different interpretations of American heritage. By mastering basic study skills and using analytic skills of inquiry and critical thinking, the student will become aware of the intellectual, social, political and economic changes within history. Library and research skills will be examined and the writing of essays and research papers will challenge the student preparing for college.

3092 U.S. History I Honors – (weighted 1.1) – 9 – 1.00 Credit

Honors United States History I is an opportunity for the truly dedicated Social Studies student to explore, interpret, critically review, analyze, and evaluate key topics, events, themes, and issues in the Social Studies curriculum. Students will study our nation's history from the French and Indian War (1754) to the end of the Gilded Age (1900). The student will critically review and analyze themes and issues, using primary sources as well as professional articles, covering the political, social, economic, geographical, and intellectual ideas of the time periods. The course will require additional and more challenging reading, writing, and historical research, including summer reading assignments, to prepare the student for a more competitive environment and job market. Students will be selected for United States History I Honors based on their achievement of an "A" average in Social Studies and a reading comprehension/writing assessment. The honors student must maintain a "B" average U.S. History I Honors and passing grades in all other courses to remain in the honors program. The Social Studies Department will make recommendations yearly during the course selection process.

3100 U.S. History II – 10 – 1.00 Credit

The purpose of U. S. History II is to study our nation's history from the Progressive Era (1900) to present day. Students will learn to recognize and appreciate different interpretations of recent American history. Economic, social, and political issues will be a constant theme, as will the problems of a dynamic society in an increasingly complex and technology-oriented world. Basic study skills will also be reinforced. The student, upon completion of the course, shall have a greater understanding of recent American History and how it impacts the America of today.

3101 U.S. History II College Prep – 10 – 1.00 Credit

The purpose of U. S. History II CP is to study our nation's history from the Progressive Era (1900) to present day. Students will learn to recognize and appreciate different interpretations of recent American history. Economic, social, and political issues will be a constant theme and explored in depth, as will the problems of a dynamic society in an increasingly complex and technology-oriented world. Emphasis is placed upon the development of historical and critical thinking skills. The student, upon completion of the course, shall have a greater understanding of recent American History and how it impacts the America of today.

3102 U.S. History II Honors – (weighted 1.1) – 10 – 1.00 Credit

United States History II Honors is an opportunity for the truly dedicated Social Studies student to explore, interpret, critically review, analyze, and evaluate key topics, events, themes, and issues to study our nation's history from the Progressive Era (1900) to present day. The student will critically review and analyze themes and issues using primary sources as well as professional articles, covering the political, social, economic, geographical, and intellectual ideas of the time periods. The course will require additional and more challenging reading, writing, and historical research, including reading of two historical non-fiction works of the student's choice, and an oral history project.

Students will be selected for United States History II Honors based on their achievement of an "A" average in Social Studies and a reading comprehension/writing assessment. The honors student must maintain a "B" average in Social Studies and passing grades in all other courses to remain in the honors program. The Social Studies Department will make recommendations yearly during the course selection process.

3108 Advanced Placement U.S. History – (weighted 1.2) – 10 through 12 – 1.00 Credit

The purpose of the Advanced Placement U.S. History course is to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. Students will learn to assess historical materials and weigh evidence and interpretations presented in historical scholarship based on reoccurring themes in U.S. history. The AP U.S. History course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and present reasons and evidence clearly and persuasively.

This course is offered as an elective for qualifying 11th and 12th grade students who have maintained an "A" average in a previous social studies honors course. Eligible 10th grade students may be admitted if the student previously took U.S. I Honors and received an "A". Any 10th grade student must also have written consent of the social studies chairperson/AP U.S. History teacher to be admitted into the class. Exceptions to the above criteria may be made on a case-by-case basis by the social studies department/administration. All students in the AP U.S. History class will be required to take the College Board AP Exam.

3110 Global Studies – 11 – 1.00 Credit

The purpose of Global Studies is to help the student understand the cultural, political, economic, geographical and historical forces which help to shape and influence their lives and the lives of other people around the world. Students will realize that differences in culture are the result of these forces which vary from country to country.

3111 Global Studies College Prep – 11 – 1.00 Credit

The purpose of Global Studies is to help the student understand the cultural, political, economic, geographical and historical forces which help to shape and influence the lives of other people around the world. Students will realize that the differences in culture are a result of these forces which vary from region to region. This course will include more in depth and varied supplemental readings on topics relevant to the cultures being studies and to issues of global concern. Research activities and critical thinking skills will be emphasized in the study of non-Western cultures.

3112 Global Studies Honors – (weighted 1.1) – 11 – 1.00 Credit

Honors Global Studies is an opportunity for the truly dedicated Social Studies student to explore, interpret, critically review, analyze, and evaluate key topics, events, themes, and issues in the Social Studies curriculum. Students will examine non-Western cultures, with a major emphasis on East Asia, the Middle East, and Eastern Europe. The student will critically review and analyze themes and issues, using primary sources as well as professional articles, covering the political, social, economic, geographical, and intellectual ideas of the time periods. Students will relate historical events and concepts to today. The course will require additional and more challenging reading, writing, and historical research, including summer reading assignments, to prepare the student for a more competitive environment and job market. Students will be selected for Global Studies Honors based on their achievement of an "A" average in Social Studies and a reading comprehension/writing assessment. The honors student must maintain a "B" average in Social Studies and passing grades in all

other courses to remain in the honors program. The Social Studies Department will make recommendations yearly during the course selection process.

3116 Western Civilization – (weighted 1.1) – 11 and 12 – 1.00 Credit

This course in an elective designed to understand the development of Western Civilization, from its origins to modern Western society. Foundations in Greek and Roman empires will stretch through to the feudal Europe and the Middle Ages, the Renaissance and Reformation, exploration and Enlightenment, nationalism and imperialism, to the new Western world. Both a thematic and chronological approach will be taken to discuss the major periods of development, as well as individual country case studies. Political, economic, philosophical and social approaches to history will be employed as well to gain a better perspective into the influences of Western society on the world. Social studies teacher signature required for admittance.

3120 Government and Politics – 12 – 1.00 Credit

The basic purpose of this course is to analyze the social, political, and economic problems of the United States. Particular emphasis is given to the political system and its operation, as well as the correlating of current events into the curriculum. Upon completion of this course, students should have a sense and knowledge of their rights and responsibilities as citizens in a democratic society.

3121 Government and Politics College Prep – 12 – 1.00 Credit

The purpose of this course is to analyze the social, political, and economic problems of the United States in greater detail than Government and Politics. Particular emphasis will be placed on library research skills and supplementary readings to produce a research paper on contemporary issues. Upon completion of this course students should have a sense and knowledge of their rights and responsibilities as citizens in a democratic society.

3123 Government and Politics Honors – (weighted 1.2) – 12 – 1.00 Credit

Students will examine topics including, “The American System, Opinions, Interests, and Organizations, Institutions of Government, The Politics of Public Policy, and The Nature of American Democracy”. The reading and study of the Constitution, and additional primary and secondary source readings will help the student critically review and analyze themes, issues, and policies pertinent to the understanding of government and politics. Students will relate historical events and concepts to current events and concepts. The course will require additional and more challenging reading, writing, and historical research to prepare our students for a more competitive educational environment and job market. Upon completion of this course students should have a sense and knowledge of their rights and responsibilities as citizens in a democratic society.

3124 Advanced Placement Government and Politics – (weighted 1.2) – 12 – 1.00 Credit

“Advanced Placement United States Government and Politics is the study of general concepts used to interpret United States politics, and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute United States politics. The topics to be covered include: Constitutional Underpinnings of United States History; Political Beliefs and Behaviors; Political Parties, Interest Groups, and Mass Media; Institutions of National Government; Public Policy; and Civil Rights and Civil Liberties.” (College Board)

Acceptance into this course will be limited to those students who have maintained an “A” in Global Studies Honors or an “A” or “B” in AP World History. The student must also have the written consent of the social studies chairperson/AP Government teacher.
Exceptions to the above criteria may be made on a case-by-case basis by the social studies department/administration.
The course is weighted and has a college level curriculum. All students in the AP Government and Politics class will be required to take the College Board AP exam.

3125 Intro to Economics – (weighted 1.1) – 11 and 12 – 1.00 Credit

The purpose of this course is to give students a thorough understanding of the basic principles of economics, more specifically as it applies to microeconomics and macroeconomics. The course covers: how individual decision makers affect markets, how and why economies within the world system make certain choices and decisions, and basic concepts applicable to both Microeconomics and Macroeconomics. Students will learn how to think like an economist, and will become literate in the current events and issues in the field of economics. This course is weighted and has a college level curriculum. Student needs written approval from their most recent social studies teacher to enroll in this course.

3126 Sociology (weighted 1.1) – 11 and 12 – 1.00 Credit

Sociology is the study of individuals, groups, organizations, cultures, and societies and their inter-relationships. The concentration of the course will be in the discussion and analysis of culture and social structure, socialization, political sociology, stratification, social inequality, race and ethnicity, the development of society and institutions, and social change.

Acceptance into this course will be limited to those students who have maintained an "A" average in social studies. The student must also have the written consent of the social studies chairperson/sociology teacher. Exceptions to the above criteria may be made on a case-by-case basis by the social studies department/administration. The course is weighted and has an academic college level curriculum.

3128 Advanced Placement World History Modern – (weighted 1.2) – 11 and 12 – 1.00 Credit

AP World History Modern is an introductory college-level history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Students will also utilize and develop reasoning about contextualization, causation, continuity, and change over time. Acceptance into this course will be limited to those students who have maintained an “A” in U.S. History II Honors or an “A” or “B” in AP U.S. History. Exceptions to the above criteria may be made on a case-by-case basis by the social studies department/administration. All students in AP World History Modern will be required to take the College Board AP Exam.

3136 Intro to Psychology – 12 – 1.00 Credit

Psychology is the study of the mind and behavior. This course will help students understand the behaviors, cognitive processes, and cultural influences that impact the human mind. It will also help develop abilities that will help understand human behavior, analyze and interpret relevant data, as well as apply psychology to your everyday life.

3137 Military History – 10 through 12 – 1.00 Credit

This course is designed to educate and inform students about our Military history. It will take a brief look at important battles that shaped the world. We will start with modern advances during the Greek and Roman empires. It will then take a more in-depth look at America's military role throughout the process of becoming the United States of America that we know today. We will focus on the background and set-up for conflict, tactics, military personnel, technological advances, and government's role in military. Acceptance in this course will be limited to those students who have maintained a "B-" average in Social Studies. The student must also have the written consent of a Social Studies teacher or Military History teacher. Exceptions to the above criteria may be made on a case-by-case basis by the social studies department/administration.

3138 Street Law – 9 and 10 – 1.00 Credit

"Street Law" is a law-related education course that will focus on our national, state and local legal systems. The content will be conveyed in a practical format to allow students to gain the knowledge necessary to survive in our law-saturated society. Students will engage in the study of criminal, civil, contract and family law and how it impacts you in real life. A strong emphasis will be placed on written work, debate, and discussion in the form of case studies.

3139 Explorations Across Europe: A 'Mini' Trip Across England, France and Germany – 9 and 10 – 1.00 Credit

This mini-course elective is designed to understand the history of three European nations, including England, France and Germany, from their historical beginnings, throughout major world events, to their modern political states. Political, economic, philosophical and social approaches to history will be employed as well to gain a better perspective into their development and current world role. One marking period will be dedicated to each independent country.

3135 Anthropology – 9 and 10 – 1.00 Credit

This course covers the broad study of humankind, focusing on the cultural, social, and physical development of humans. The course will introduce the four fields of anthropology: (1) Physical – Looking at human variations, adaptations, and evolution over time; (2) Linguistics – Looking at origin, distribution, and cultural aspects of language; (3) Cultural – Development and comparison of cultures world-wide; (4) Archaeology – How we gather and interpret past human behavior. The class will discuss current and past historical topics, the relationship to other social sciences, as well as why some cultures change and some end.

3141 Pop Culture and History – 11 and 12 – 1.00 Credit

This course will have students critically analyze periods in history while examining the culture of the time. Students will move through eras in American History while studying how society reacted to events through popular culture and how movies, fads, music, and culture impacted the lives of Americans. We will define what pop culture is, why people care about it, and show how it reflects the values of society.

3142 Social Studies Internship – 12 – .50 Credit
3143 Social Studies Internship – 12 – 1.00 Credit

(Prerequisite – Approved by Lead Learner)

A Social Studies internship course is offered to any senior as an alternative to service learning. This "independent" course is intended to give seniors hands-on experience in the civic arena. Internships are the bridge between academia and the professional world and present an opportunity for the development of effective citizens and the potential for future employment. Internships may be found in government

offices, social service agencies, and on the staff of elected officials. The goal is to be involved working with a community organization that is related to the Social Studies field. The emphasis is on community outreach and learning about the application of Social Studies content. Students will be required to submit a project proposal (prior to the semester), a timesheet of activities, a reflection paper each marking period and a 'focus' grade on the social studies internship process itself. A student is also required to complete a culminating research project in a particular social studies subject area that is of interest to the intern (e.g. Organizing a symposium on the Peace Corps or World War II Re-enactment Day). If traveling off-site, the student must provide their own transportation.

SCIENCE AND AGRICULTURE

Note: All students are required to complete the following courses to fulfill the credits of science needed for graduation: Earth Science, Earth Science CP, Earth Science Honors or Introduction to Agricultural Science; Biology, Biology CP or Biology Honors; and one additional credit of Chemistry or Physics. Earth Science and Introduction to Agriculture Science cannot both be used for science credit. All other Science and Agriculture courses can fulfill a fourth science credit.

Science Honors Courses:

4200 Earth Science Honors – (weighted 1.1) – 9 – 1.00 Credit
4201 Biology Honors – (weighted 1.1) – 9 and 10 – 1.00 Credit
4114 Dual Enrollment Biology – (weighted 1.2) –11 and 12 – 1.00 Credit
4202 Chemistry Honors – (weighted 1.1) – 10 through 12 – 1.00 Credit
4108 Advanced Placement Chemistry – (weighted 1.2) – 10 through 12 – 1.00 Credit
4120 Advanced Placement Physics 1 – (weighted 1.2) – 10 through 12 – 1.00 Credit
4121 Advanced Placement Physics 2 – (weighted 1.2) – 11 and 12 – 1.00 Credit
4153 Innovative Science Research – (weighted 1.2) – 9 through 12 – 1.00 Credit
4164 Advanced Placement Environmental Science – (weighted 1.2) – 11 and 12 – 1.00 Credit
4165 Biotechnology – (weighted 1.2) – 11 and 12 – 1.00 Credit

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4090 Earth Science – Grade 9 – 1.00 Credit

This course engages students in the study of the Earth and its place in space. Earth Science introduces students to our universe, our planet earth and the processes and changes that continually occur in the natural world. Students are exposed to concepts in astronomy, geology, meteorology and physical oceanography.

4091 Earth Science College Prep – Grade 9 – 1.00 Credit

This course engages students in the study of the Earth and the universe around it. Earth Science CP provides a detailed look at the universe, our planet earth and the processes and changes that continually occur in the natural world. Students investigate concepts in astronomy, geology, meteorology and physical oceanography.

4200 Earth Science Honors – (weighted 1.1) – Grade 9 – 1.00 Credit

Earth Science Honors is intended for the motivated science student to study Earth Science topics at a faster pace and more in depth. Students will study additional topics beyond the CP curriculum as they explore the universe, our planet earth and the processes and changes that continually occur in the natural world. Students investigate concepts in astronomy, geology, meteorology and physical oceanography. Honors students will be required to complete additional readings, additional writing and projects.

4100 Biology – Grade 10 – 1.00 Credit

(Prerequisite - Earth Science or Introduction to Agriculture)

This course presents Biology as it relates to everyday life. Using the State Keystone Standards as a guide the major topics covered include Scientific Method, Ecology, Cells and Cellular Function, Photosynthesis, Genetics, both Mendelian and Molecular, and Evolution. This course is designed to guide students to successful completion of the Keystone exam in Biology which is required for graduation.

4101 Biology College Prep – 9 and 10 – 1.00 Credit

(Prerequisite - Earth Science CP or Introduction to Agriculture)

The college prep Biology course stresses scientific skills and writing as well as the content of a typical Biology course. Major topics covered include Scientific Method, Ecology, Cells and Cellular Function, Photosynthesis, Genetics, both Mendelian and Molecular, and Evolution. Successful completion of the Keystone Exam at the end of the course is required for graduation.

4201 Biology Honors – (weighted 1.1) – 9 and 10 – 1.00 Credit

(Prerequisite - Earth Science Honors or Earth Science CP with teacher recommendation or Introduction to Agriculture Science)

The Biology Honors course features academic rigor and more in-depth coverage of Biological concepts. Laboratory exercises will be more inquiry based and student driven. Students will be required to complete outside reading as well as attend scientific seminars. Major topics covered include Scientific Method, Ecology, Cells and Cellular Function, Photosynthesis, Genetics, both Mendelian and Molecular, and Evolution. Successful completion of the Keystone Exam at the end of the course is required for graduation.

4114 Dual Enrollment Biology – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite - Biology Honors; completion of or concurrent enrollment in Chemistry Honors recommended; may be taken as dual enrollment at Reading Area Community College)

This rigorous course is equivalent to a four-credit introductory college biology course. Students will begin by exploring the major themes of biology and the chemicals of life. The course then shifts to focus on the underlying cellular structures and processes shared by all living things on Earth. The course ends with a detailed look at the tools and techniques used to study molecular biology and genetics. Content is learned through a combination of lecture and laboratory exercises. The course mirrors the BIO150 lecture course and corresponding laboratory course offered at Reading Area Community College in Reading, PA. Upon successful completion of the course, students will earn four (4) credits from Reading Area Community College.

Note: Please see page 61 for tuition costs.

4109 Chemistry – 10 through 12 – 1.00 Credit

(Prerequisite - Biology)

The Chemistry course is intended to provide students the beginning understanding of Chemical concepts using more of a conceptual approach. The fundamental principles and theories will be presented with the emphasis on the following major topics: measurement, classification of matter, atomic theories, electron configuration, elements, periodic table, ionic and covalent bonding, chemical reactions, mole concepts, stoichiometry, states of matter, mixtures and solutions. Laboratory work is included in this course to correlate with the above topics and to develop basic laboratory skills. Projects will be completed to develop a deeper understanding of the above topics. Students will need to have a scientific calculator.

4110 Chemistry College Prep – 10 through 12 – 1.00 Credit

(Prerequisite - Biology CP and Algebra 1; can be taken concurrently with Algebra 2)

The College Preparatory Chemistry course is intended to prepare the student for a first-year college chemistry class. The fundamental principles and theories of chemistry will be presented with the emphasis on the following major topics: measurement, classification of matter, atomic theories, electron configuration, elements, periodic table, ionic and covalent bonding, chemical reactions, mole concepts, stoichiometry, states of matter, mixtures and solutions. Laboratory work is included in this course to correlate with the above topics and to develop basic laboratory skills. Projects will be completed to develop a deeper understanding of the above topics. A strong background in mathematics, especially algebra, is recommended. Students will need to have a scientific calculator.

4202 Chemistry Honors – (weighted 1.1) – 10 through 12 – 1.00 Credit

(Prerequisite - Biology CP or Honors and Algebra 1; can be taken concurrently with Algebra 2)

Chemistry Honors is designed for college-bound students who are interested in a science related major to prepare them for a first year College Chemistry course. The fundamental principles and theories of chemistry will be presented with the emphasis on the following major topics: measurement, classification of matter, atomic theories, electron configuration, elements, periodic table, ionic and covalent bonding, chemical reactions, mole concepts, stoichiometry, states of matter, mixtures and solutions. Laboratory work is included in this course to correlate with the above topics and to develop basic laboratory skills. Projects will be completed to develop a deeper understanding of the above topics. Students will be required to read a Chemistry related book to enhance Chemistry knowledge. A strong background in mathematics, especially algebra, is recommended. Students will need to have a scientific calculator.

4108 Advanced Placement Chemistry – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite - Chemistry Honors or Chemistry CP with teacher recommendation; can be taken concurrently with Algebra 2)

The AP Chemistry course is intended to prepare the dedicated science student for the first year College Chemistry course. The fundamental principles and theories of chemistry will be presented with the emphasis on the following major topics: measurement, classification of matter, atomic theories, electron configuration, elements, periodic table, ionic and covalent bonding, chemical reactions, mole concepts, stoichiometry, states of matter, mixtures and solutions. Laboratory work is included in this course to correlate with the above topics and to develop basic laboratory skills. Projects will be completed to develop a deeper understanding of the above topics. Students will be required to read a Chemistry related book to enhance Chemical knowledge. A strong background in mathematics, especially algebra, is recommended. Students will be required to take the AP Chemistry Exam. Students will need to have a scientific calculator.

4123 Physics – 11 and 12 – 1.00 Credit

This is a conceptual physics course in which only basic math and some simple algebra is utilized. The course focuses on basic physics concepts through the examination of myths explored by the popular TV show *Myth Busters*. Course topics include Newtonian mechanics, heat, vibrations, sound and waves, electricity and magnetism. Proportional reasoning, estimating, and graphing skills are emphasized throughout the course. Overall goals of this course include students' gaining an appreciation for the physical world, improved critical thinking and reasoning skills, and improved scientific literacy for a better-informed individual/citizen.

4122 Physics College Prep – 11 and 12 – 1.00 Credit

This course is designed for the college-bound student. The course uses the concepts of physics to examine superheroes in comic books and in movies. Physics is the study of how our universe works; these same concepts can also be applied to the fantastical universe of

comic book superheroes. Students will learn about various concepts in physics (matter, energy, and force). We will examine gravity, electricity, magnetism, optics, relativity, and quantum physics and see how they apply to the universe of superheroes. Comic books apply actual physics that range from the Kryptonian world of Superman to the superhuman speed of Flash here on Earth. We will explore these fundamental principles of physics and use them to separate fact from fiction in the world of your favorite comic book characters. A grade of C or better in Algebra II and Geometry CP is recommended. Students will need to have a basic scientific calculator.

4120 Advanced Placement Physics 1 – (weighted 1.2) – 11 and 12 – 1.00 Credit

Prerequisite – (Geometry and Algebra II; may be taken as dual enrollment at RACC)

AP Physics 1 is an algebra-based introductory college-level physics course that explores topics such as Newtonian mechanics, rotational motion, work and energy, vibrations, waves and sound, and fluid mechanics. Students will cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they develop scientific critical thinking and reasoning skills. No prior course work in physics is necessary. Students will be required to take the AP Physics 1 Exam unless dual enrolled through RACC.

Note: Please see page 61 for tuition costs.

4121 Advanced Placement Physics 2 – (weighted 1.2) – 11 and 12 – 1.00 Credit

Prerequisite – (AP Physics 1 and Pre-Calculus)

AP Physics 2 is an algebra-based introductory college-level physics course that explores topics such as thermodynamics, kinetic theory, electrostatics, electrical circuits with capacitors, magnetic fields, electromagnetism, physical and geometric optics, and quantum, atomic, and nuclear physics. Students will cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they develop scientific critical thinking and reasoning skills. Students should have taken AP Physics 1 as well as taken, or be concurrently taking, pre-calculus or an equivalent course. Students will be required to take the AP Physics 2 Exam.

4133 Independent Study in Science: Microbiology – 12 – .50 Credit

(Prerequisite – Consent of Instructor)

Offered as a Senior Seminar, *ISS: Microbiology* is an independent study designed for a detailed look at the invisible empire of microbes. Students will be required to read college materials and take on-line tests, conduct investigations, demonstrate mastery of technical writing and make professional contacts. This is an excellent option for a senior who is considering a career in medicine or Ag. Science. FFA membership is open to any student in this class.

4134 Microbiology – 11 and 12 – 1.00 Credit

(Prerequisite – Consent of Instructor)

Microbiology is designed for a detailed look at the invisible empire of microbes. Students will be required to read college materials and take on-line tests, conduct investigations, demonstrate mastery of technical writing and make professional contacts. This is an excellent option for a junior or senior who is considering a career in medicine or Ag. Science. FFA membership is open to any student in this class.

4205 Astronomy – 10 through 12 – 1.00 Credit

This course provides an opportunity to develop knowledge and understanding about the solar system, galaxy and universe in which we live. Focus will be on the tools used, both past and present, to obtain what we know about the universe. Specific topics of study will include planets and our solar system, stellar astronomy and how stars change over time, galaxies, deep space objects and astrobiology.

4150 Anatomy and Physiology I – (weighted 1.2) – 10 through 12– 1.00 Credit

May be taken as dual enrollment at RACC)

This course is designed for students who plan to enter careers that require extensive knowledge of human anatomy and physiology. Focus will be centered upon the orientation and organization of the human body, the support and movement of the human body, regulation and maintenance of the human body, and the integration and control systems of the human body. This course will include labs to physically demonstrate the mechanical properties, histological examination of tissues and dissection to emphasize structural relationships. This course is available for dual enrollment college credit through the Reading Area Community College.

Note: Please see page 61 for tuition costs.

4151 Anatomy and Physiology II – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite – Anatomy and Physiology I, may be taken as dual enrollment at RACC)

Building on the knowledge acquired in Anatomy and Physiology I, this course focuses on the studies of systems involved with integration, control, absorption, excretion and metabolism. Students will be engaged in laboratory experiences to emphasize structural and functional relationships and the systematic nature of medicine. This course is available for dual enrollment college credit through the Reading Area Community College.

Note: Please see page 61 for tuition costs.

4153 Innovative Science Research – (weighted 1.2) – 9 through 12 – 1.00 Credit

(This course can be taken more than one time.)

This course is an introduction to the principles of scientific research with an emphasis on critical analysis of the current literature. The course provides an overview of experimental design, laboratory technology, statistical analysis, and publication preparation. The course is specifically designed to improve student presentation skills and potential for collaborative work in research. Students will learn how to design and write a realistic research proposal and will gain a general understanding of how different techniques can be used to address a wide range of scientific research questions. This experience provides students with inquiry-based learning opportunities in a field of their choice. FFA membership is open to any student in this class.

4215 Introduction to Forensics – (9 through 12) – 1.00 Credit

(Prerequisite - Earth Science, Earth Science CP, Earth Science Honors or Introduction to Agriculture Science)

This introductory course explores key topics in forensic science through the application of scientific disciplines. The key topics explored but not limited to include Forensic Analysis and Investigation of Fictional Crime Scenes, Physical and Trace Evidence Identification, Blood Stain Analysis, Entomology, Anthropology, Odontology and Documentation in the Legal System. Students will learn to utilize forensic tools and technical resources, form and test hypotheses, perform proper data collection and support responsible conclusions.

4162 Introduction to Agriculture Science – 9 and 10 – 1.00 Credit

This course will introduce the student to the broad discipline of Agriculture Science, which has careers tied to the food, fiber, energy and natural resource industries. Topics investigated will include an introduction to animal and plant science, integrated pest management (IPM), soil science, microbiology, and agriculture and the environment. Leadership development and public speaking skills are taught to increase self-confidence and sharpen communication skills needed for success in a competitive society. Laboratory skills are developed through a series of investigations. FFA membership is open to any student in this class. This class is available to students in 9th &10th grades.

4163 Current Topics in Agriculture Science – 10 and 11 – 1.00 Credit

This course offers comprehensive units in contemporary ideas in animal science, food science, tissue culture, aseptic laboratory technique, soil science & apiculture. Laboratory activities are included in each of the units of instruction. Dissection units include fetal pig and reproductive systems of bovine, porcine, ovine and avian species. The course places an emphasis on career skills including interview and resume preparation. FFA membership is open to any student in this class. This class is available to students in 10th & 11th grades.

4164 Advanced Placement Environmental Science – (weighted 1.2) – 11 and 12 – 1.00 Credit

AP Environmental Science is designed to bring the student to the equivalent of a college introductory semester course. After qualifying on the AP examination, students as college freshmen are granted three or more credits at cooperating colleges. Because of the nature of the course, taking of the AP exam is required. *The assigned reading for the course is rigorous and diverse.* Environmental science is an interdisciplinary study, combining ideas and information from natural sciences (biology, chemistry and geology) and social sciences (economics, politics and ethics) to present a general idea of how nature works and how things are interconnected. Topics taught include matter and energy resources, ecosystems and how they work, human population dynamics, major global problems, resources and pollution, sustaining biodiversity and ecological integrity, and environment and society. This course serves as excellent preparation for the AP Biology course and examination. FFA membership is open to any student in this class.

4169 Independent Directed Explorations in Ag. Science (IDEA) – 12 – 1.00 Credit – Pass/Fail

(Prerequisite – Consent of Instructor)

IDEA is a course designed for a student who wishes to investigate a topic in Ag. Science but is not a candidate for SAE. Study is conducted on an independent basis under the direction of a mentor (usually an Ag. Science instructor). Each student is required to complete a contracted exploration which includes: advanced reading, investigation, professional contacts, experiences, technical writing, public speaking and presentations, organization and leadership. IDEA is not scheduled during a block; it is completed outside of regularly scheduled school time. The student may, however, use school activities and assignments to complete the contract. FFA membership is open to any student in IDEA.

4168 Experiments in the Agricultural and Environmental Sciences – (weighted 1.2) – 11 and 12 – 1.00 Credit

Experiments in agricultural and environmental sciences introduces students to the foundation of science: experimentation. Students will work in small groups to acquire proficiency in problem solving, statistical analysis, experimental design, literature search, in-depth reading, technical writing and oral presentation. As skills are mastered throughout the course, students will explore scientific topics of their choosing through extensive reading, development of experiments, and construction of a research presentation. FFA membership is open to any student in this class.

4165 Biotechnology – (weighted 1.2) – 11 and 12 – 1.00 Credit

Biotechnology is the science of using living cells, their components, and their enzymes to produce useful commercial products. Students will conduct advanced laboratory protocols as they work with DNA fingerprinting and barcoding, genetic modification of bacteria and plants, plant tissue culture, and analysis of immunological proteins. Additionally, students will consider the ethical and economic consequences of these technologies as their use in agricultural and medical fields expands. FFA membership is open to any student in this class.

4166 Seminars in Agricultural Sciences – 12 – 1.00 Credit
4170 Seminars in Ag. Science – .50 Credit

A student needs approval from an agricultural science teacher to take this course. It is designed to accommodate a Teaching/Laboratory Assistant (TLA). The course requirements include managing a laboratory area and conducting demonstrations in an area of agricultural science specialty. This course is designed to allow a student to be an attractive candidate for a "lab assistant" job at the university level. FFA membership is open to any student in this class.

8160 Supervised Agriculture Experience (SAE) – 9 – 1.00 Credit
8162 Supervised Agriculture Experience (SAE) – 10 – 1.00 Credit
8164 Supervised Agriculture Experience (SAE) – 11 – 1.00 Credit
8166 Supervised Agriculture Experience (SAE) – 12 – 1.00 Credit

The SAE courses are available to any student who is taking an agriculture course in grades 9-12. Each student is required to conduct a project that involves reading in scientific journals, conducting experiments of a scientific nature, raising plants or animals or involving work experiences in an area of agriculture/agribusiness. A detailed record book must be kept. A minimum of 120 hours of work outside class time is mandatory. Supervisory visits will be made by agriculture teachers who involve parents/employers in the student projects as needed. Students are encouraged to invest their own money, learn first-hand how to keep records, buy and sell and to make real life decisions that affect the project. The student's career plans and educational interests are an important part of the SAE topic selection and development. These courses will be graded A-F on a straight % basis.

Students must sign up in the Agriculture Department for this course.

FFA membership is open to any student in these classes.

COMPUTER SCIENCE

2031 Computer Science 1 – 1.00 Credit

(Prerequisite - Algebra 1 CP or 8th grade Algebra 1)

This course is designed to provide an overview of several topics in the field of computer science. The main focus will be programming, as the languages of Python and JavaScript will be introduced. Concepts such as control structures, looping, and functions will be used to solve a variety of problems. In addition, there will be assignments relating to the history of computers and current events in technology.
Note: This course will count as a mathematics credit.

2032 Computer Science 2 – (weighted 1.1) – 1.00 Credit

(Prerequisite - Computer Science 1)

This continuation of Computer Science 1 covers more programming topics in both Python and JavaScript. Additionally, current and classic computer science topics as provided by the American Computer Science League (ACSL) are included in the curriculum. These topics, such as number systems, recursive functions, and Boolean Algebra provide a link between math and computer science.

2046 Advanced Topics in Computer Science – (weighted 1.2) – 1.00 Credit

(Prerequisite - Computer Science 2 and teacher approval)

This course will provide students the opportunity to continue their study of computer science and programming topics. There will be some core topics that will be covered, such as sorting algorithms, classes, and data structures. In addition to this, each student will have the opportunity to choose some of their own topics and problems to work on. There will be a great emphasis placed on independent study, so students must be motivated, responsible, and able to take initiative.
Note: This class can run either as a semester-long course, meeting every day or as a year-long course, meeting every other day.

2047 ACSL Concepts and Programing – (weighted 1.2) – 1.00 Credit

(Prerequisite - Advanced Topics of Computer Science; can be taken concurrently)

This course will focus on writing programs to solve problems as they would be asked in various computer science programming contests. Through these programs, students will be able to improve their problem solving skills and logical reasoning. Also, the ACSL topics introduced in previous classes will be expanded to include concepts such as graph theory and digital electronics. There will be a great emphasis placed on independent study, so students must be motivated, responsible, and able to take initiative.
Note: This class will run as year-long course, meeting every other day.

2048 Advanced Placement Computer Science A – (weighted 1.2) – 1.00 Credit

(Prerequisite - Advanced Topics of Computer Science; can be taken concurrently)

This course will be used as a preparation for students to take the AP Computer Science Exam. Programming will be done in Java. There will be a great emphasis placed on independent study, so students must be motivated, responsible, and able to take initiative.
Note: This class will run as a year-long course, meeting every other day.

WORLD LANGUAGES

5001 Latin I – 9 through 12 – 1.00 Credit

The following are areas of study for Latin I: the grammar, vocabulary, and translation of the Latin language, English derivatives, root words, prefixes, and suffixes. Students will become familiar with Roman daily life and culture - family life, dress, the Roman house, slaves, transportation, Pompeii, and Herculaneum - and with the major gods/goddesses of the Greek and Roman world. Students are encouraged to attend the Latin Banquet and to participate in the Junior Classical League.

5002 Latin II – 9 through 12 – 1.00 Credit

(Prerequisite - Latin I)

A more comprehensive study of the forms and syntax of the Latin language, the various aspects of Roman life - travel and transportation, funerals, the Forum, Colosseum, and Circum Maximus, housing in Rome, hazards of city life, meals and dining customs - and the study and translation of the stories of Hercules, Ulysses, Jason & the Argonauts, and other myths comprise the Latin II curriculum. Students are encouraged to attend the Latin Banquet and to participate in the Junior Classical League.

5003 Latin III – 10 through 12 – 1.00 Credit

(Prerequisite - Latin II)

Latin III is a continuation of the basic concepts mastered in Latin I and II with a greater concentration on the daily life (education, Roman baths, marriage, family life, entertainment), mythology (Ovid's *Metamorphoses* and Homer's *Iliad*), legends (Rome's founding and the monarchy), history and public life, architecture and art, and literature of the Greco-Roman world. Students will come to realize that the ancient world during the Roman Republic and Empire was a microcosm of the world today - a multi-ethnic, multi-cultural, multi-lingual world. Students play a major role at the annual Latin festival and at JCL conventions.

5004 Latin IV – (weighted 1.1) – 11 and 12 – 1.00 Credit

(Prerequisite - Latin III)

The Latin IV curriculum integrates the study of Roman history, culture, philosophy, and mythology with the reading of a variety of different types of literature in the original Latin language. Authors to be studied include Plautus (comedy), Cicero (speeches, letters, and essays), Vergil (*Aeneid)*, and Catullus (poetry). The student is encouraged to make comparisons with modern-day life and thus develop insight into his own language and culture. Students play a major role at the annual Latin festival and at JCL conventions.

5005 Latin V – (weighted 1.2) – 12 – 1.00 Credit

(Prerequisite - Latin IV)

The Latin - Vergil course will prepare the student to read, understand, analyze, and interpret Vergil's epic poem, the *Aeneid,* and to discuss particular motifs or general themes relevant to the poem. The student will learn how to identify and analyze characteristic features of Vergil's mode of expression, including his use of word choice and placement, imagery, figures of speech, sound and metrical effects. The student will become familiar with pertinent Roman cultural, social, and political history and mythology as it applies to the *Aeneid.* Students will be required to take the AP Latin (Vergil) exam in the spring.

5017 Advanced Topics in Ancient Greek and Roman Mythology – 11 and 12 – 1.00 Credit

Students will examine how stories both teach and shape the values of a society through the relationships between the Greeks and Romans and their myths. Students must be prepared to deal with a range of serious topics including gender, sexuality, domestic violence, and death. The myths will be pulled from authors including the tragic playwright Euripides, Vergil, Homer, Ovid, Shakespeare, Hesiod, and more. This is a reading and writing intensive course.

5021 Spanish I – 9 through 12 – 1.00 Credit

Spanish I is a course designed to introduce the student to the Spanish speaking world. Emphasis will be placed upon the acquisition of correct Spanish pronunciation, conversational phrases, basic vocabulary and grammar. Culture lessons on Spain, Puerto Rico, Texas, Costa Rica and Chile are part of the course content.

5022 Spanish II – 9 through 12 – 1.00 Credit

(Prerequisite - Spanish I)

Spanish II is a continuation of the basic concepts mastered in Spanish I with a greater concentration on vocabulary, grammatical structures and translation. The culture lessons include Mexico, Argentina, Florida, the Dominican Republic and Peru.

5023 Spanish III – 10 through 12 – 1.00 Credit

(Prerequisite - Spanish II)

Spanish III emphasizes conversation and oral exercises. The same format used in previous courses is followed to enhance the four basic skills: listening, speaking, reading and writing. Major cities in the Hispanic world comprise the culture lessons for this course.

5024 Spanish IV – (weighted 1.1) – 10 through 12 – 1.00 Credit

(Prerequisite - Spanish III)

Spanish IV integrates the four basic skills with increased emphasis on conversation and composition, literature and a unit on Spain, which includes history, economy, government and culture from the beginning of the Iberian Peninsula to modern times. Students will study the works of major Spanish artists.

5025 Spanish V – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite - Spanish IV)

Spanish V places greater emphasis on advanced grammar skills, situational vocabulary, and oral proficiency. Study includes Cervantes and excerpts from Don Quixote. Students will learn about the bullfight in Spain and places of interest for tourists in South America.

5031 German I – 9 through 12 – 1.00 Credit

German I introduces students to basic conversational German, integrating listening, speaking, reading, and writing skill development. It stresses everyday vocabulary, grammatical concepts, oral proficiency, and geographical and cultural awareness of the German-speaking countries.

5032 German II – 9 through 12 – 1.00 Credit

(Prerequisite - German I)

German II is a sequel to German I with a continued emphasis on everyday vocabulary. Additional grammatical concepts are introduced, as students are further acquainted with the culture of Germany and the German-speaking countries of Liechtenstein, Switzerland, and Austria.

5033 German III – 10 through 12 – 1.00 Credit

(Prerequisite - German II)

German III emphasizes oral proficiency, written expression, listening and reading comprehension, vocabulary expansion, and further understanding of German culture and literature.

5034 German IV – (weighted 1.1) – 10 through 12 – 1.00 Credit

(Prerequisite - German III)

German IV completes the introduction of grammar and emphasizes the improvement of all language skills. Students continue to explore German culture, experiencing more complex literary selections.

5035 German V – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite - German IV)

German V continues an emphasis on the improvement of all language skills and cultural awareness, including German history and government. Students review newspaper and magazine articles and explore various literary genres.

BUSINESS AND COMPUTER EDUCATION

6090 Introduction to Business – 9 and 10 – 1.00 Credit

Are you interested in learning about the fascinating world of business? This fun and exciting course incorporates many activities, projects and the use of multi-media to teach students the structure of businesses, an overview of business careers, and a working knowledge of business terminology. Students will explore many other facets of business such as ownership, management, production, marketing, human resources, computers, economics, the stock market, ethics and social responsibility.

6095 Personal Finance and Entrepreneurship – 11 and 12 – 1.00 Credit

This course is designed to teach students about banking services, income taxes, college financial aid, car ownership and loans, insurances, use and abuse of credit, renting and buying and many other skills needed to successfully manage your personal finances. In addition to personal finance this course will also cover advanced topics in business including how to start a business, marketing products and services, managing employees and finding/acquiring financial support critical for entrepreneurship. You will complete an industry SWOT analysis and explore challenges of competition. As an entrepreneur you will choose a business you want to start and learn to complete your first business plan.

6097 Entrepreneurship – 11 and 12 – .50 Credit

This course will cover advanced topics in business including how to start a business, marketing products and services, managing employees and finding/acquiring financial support critical for entrepreneurship. You will complete an industry SWOT analysis and explore challenges of competition. As an entrepreneur you will choose a business you want to start and learn to complete your first business plan.

6098 Personal Finance – 11 and 12 – .50 Credit

This course is designed to teach students about banking services, income taxes, college financial aid, car ownership and loans, insurances, use and abuse of credit, renting and buying and many other skills needed to successfully manage your personal finances.

6100 Microsoft Office Applications I – 9 through 12 – 1.00 Credit

Proper keyboard techniques and the "Touch-Keying" method will be taught and reinforced throughout this course. Mastery of the keyboard along with improvement in Words per Minute is the goal. In addition, this course covers the fundamentals of the Microsoft Office Suite, including Word, Excel, and PowerPoint. Students will learn how to manage all written communication, to use formulas and functions to build worksheets to complete calculations, and to create professional multimedia presentations which include graphics and tables.

6110 Microsoft Office Applications II – 10 through 12 – 1.00 Credit

(Prerequisite-Microsoft Office Applications I)

The focus of this course is the mastery of Microsoft Office Suite, including Word, Excel, PowerPoint, Access, and Outlook. Students will learn advanced concepts in word processing, spreadsheet development, creating presentations, and database management. A variety of real world activities will keep students engaged. Keyboarding technique and improvement of accuracy and words per minute will also be emphasized.

6111 Accounting I – 10 through 12 – 1.00 Credit

Are you interested in owning your own business? Are you looking forward to a career in business? Or do you just want to learn practical skills for your own personal use? This first-year accounting course is intended for students who have a variety of career objectives. It is designed to give the student a thorough background of basic accounting concepts. Real-world, simulated financial records for a small business are maintained and manual and computerized accounting methods are utilized. Accounting Principles will qualify as the fourth math credit required for graduation.

6121 Accounting II – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite - Accounting I, may be taken as dual enrollment at RACC)

This advanced accounting course is designed to enhance the student's knowledge of basic accounting concepts. The accounting procedures presented will serve as a background for studying business courses in college. Computers will be utilized to complete automated, real-world accounting simulations for a corporation.

This course is available for dual enrollment college credit through the Reading Area Community College. More information will be given to the students during the first marking period regarding earning college credits through RACC.

Note: Please see page 61 for tuition costs.

6123 Accounting III – Independent Study – (weighted 1.2) – 12 – 1.00 Credit

(Prerequisite – Accounting II and teacher recommendation)

Accounting III is an independent study of advanced accounting concepts and procedures. This course is designed for students with an interest in pursuing a career in accounting. Students will be introduced to accounting topics which will be covered in college including financial analysis and reporting; cost accounting; and accounting for partnerships and not-for-profit organizations.

6130 Business Law – 11 and 12 – 1.00 Credit

A current and comprehensive understanding of law and legal proceedings is important to succeeding in college and after high school. This class studies a broad variety of concepts such as criminal and civil law, sales, contract law, ethics and law related careers. This information can be applied to many real life situations. Everyone buys or rents a house, enters into contracts, and loans money. Learn your rights and how to protect yourself against legal action. We will learn this information using a multitude of learning styles including several guest speakers, presentations, mock trials, video and hands on activities. In addition, the class will take a field trip to the Court House to observe real life proceedings.

6132 Introduction to Marketing – 10 through 12 – 1.00 Credit

This is an introductory level course that will cover a broad variety of marketing concepts. Real world examples and case studies will be used in areas such as sports, entertainment, and retail, to apply the various topics that will be covered throughout the course. Creative thinking and the ability to think outside of the box to form solutions to real world marketing problems will be necessary. Course topics will include: Marketing Process, retail management, market research, consumer behavior, product creation and life cycle, virtual and online marketing, advertising and design. This course will be open to 10-12 grades, and successful completion of Principles of Business is recommended but not required.

6135 Emerging Entrepreneurs Intern (Summer Experience) – (weighted 1.1) – 11 and 12 – 1.00 Credit

This summer program is designed to help high school juniors and seniors experience what it's like to start and operate a small business. The program runs for six weeks; three weeks in the classroom and three weeks of on-sight experience with a local business owner. This hands-on, interactive, real-life learning, delivered by local business partners, is a unique opportunity for Berks County students.

8358 Fiber Art and Textile Design – 9 through 12 – 1.00 Credit

Are you looking for a fun new class, hobby, or have interest in fashion or textiles? Would you like to learn how to start your own business? Fiber Art & Textile Design is a fun course that will take you on a journey and teach you how to process a variety of natural fiber such as alpaca, wool, and cotton into a finished product. We will learn about the plants and animals that produce these fibers and how to prepare them for processing. Hands on portions of this course include: spinning yarn, weaving, knitting, crochet, and other types of fiber art. We are also in the age of the micro business, learn how to go from hobbyist to entrepreneur. Learn the essential business skills you will need to start your own business. Possible field trips include visiting a local alpaca farm, and Red Stone Glenn, a world-famous weaving school! A personal project fee is required for this class.

6140 Digital and Social Media Marketing – 9 through 12 – 1.00 Credit

This course introduces students to the world of digital and social media marketing. Students will explore principles, strategies, tools and tactics related to consumers, branding, advertising and promotions. Students will explore the different social media platforms (Facebook,

X [formerly Twitter], Snapchat, Instagram, Pinterest, YouTube, and LinkedIn), their history and how businesses use them for their success. Students will gain foundational knowledge and skills for marketing in a digital age.

6201 Career Intern – 11 and 12 – 1.00 or 2.00 Credits per semester possible

Students will have the opportunity to experience an industry first-hand developing the skills needed to pursue a path toward the future. The hands-on experience is designed to help the student learn more about a field of interest as well as bolster a college or job application. Students interested in the program should apply in the counseling office and give the application to the internship coordinator.

SAFETY EDUCATION

7000 Driver Ed. – Classroom – 10 – .50 Credit

Driver Education will teach to the PA Driver Manual. Students will learn about licensing and license procedures. Class will explore the safety problems of residential, country, small town, interstate and metropolitan driving. We will cover signs, signals pavement markings, car care, insurance, and buying a car.

PHYSICAL EDUCATION & HEALTH

Note: Health 9 and Health 11-12 are required for graduation. It is mandatory for Physical Education to be passed both freshman and sophomore years. Students only need to take one semester during their junior or senior year. A total of 1.5 credits are required for graduation.

7006 Health 9 – Grade 9 – .50 Credit

Ninth grade health is a required course for all ninth-grade students. The units that we teach are: Personal Health, Personal/Mental Health Skills, Conflict Resolution, Nutrition & Fitness, Substance Abuse, Body Systems, Human Sexuality.

7007 Health 11/12 – Grade 11 and 12 – .50 Credit

Eleventh-Twelfth grade health is a required course for all students. The major units that will be covered during the year are: First Aid and CPR, Relationships and Human Sexuality, and Mental Health and Well Being. Students will have the option to be certified in First Aid/CPR/AED through the Red Cross.

7008 Introduction to Physical Education – Grade 9 – .50 Credit

This course is required for all 9th grade students. During this course, students will learn the procedures, guidelines, and expectations of the Conrad Weiser High School Physical Education Department. Activities will focus on addressing movement concepts, game strategies,

and improving personal physical fitness. Students will be assessed in three domains; psychomotor, affective, and cognitive throughout this course.

7009 Physical Education – Grade 10 – .50 Credit

This course is required for all 10th grade students. The class will focus on improving fitness-related components as well as three main units, Lifetime Activities (which include net games, floor games and field games), Fitness, and Team and cooperative activities. The emphasis within these three units will be on physical activity while learning concepts, principles, and strategies of movement. Students will be assessed in three domains; psychomotor, affective, and cognitive throughout this course.

7020 11/12 Fitness and Wellness – Grade 11 and 12 – .50 Credit

This Physical Education class offered to juniors and seniors will provide a wide variety of fitness and wellness activities for students. Students will participate in various methods of exercise to improve their fitness levels in cardio vascular endurance, muscular strength, muscular endurance, flexibility, and body composition. Students may also have the opportunity to design their own individually specific exercise routines. Students will participate in many different activities in a group setting as well that include but are not limited to; traditional team and individual sports, lifetime sports, outdoor activities, and group fitness classes. Students will have individual choice over these activities, determining what is offered for each specific class. Students will be assessed in three domains; psychomotor, affective, and cognitive throughout this course.

7028 Group Fitness – 11 and 12 – 1.00 Credit

In addition to improving fitness related components, this course is designed for students that want to focus specifically on group/aerobic fitness activities. Activities may include but are not limited to kickboxing, yoga, body pump, step aerobics, circuit training, strength training, and dance. This course will progress from basic instruction into more vigorous variations. This class meets every day.

Group Fitness only counts toward an elective credit. You must have an "O" in the most recent or current Physical Education course to take this class. If student does not have an "O" the most recent or current Physical Education teacher must sign for approval.

7029 Group Fitness – 11 and 12 – .50 Credit

This course will run simultaneously with the 1.0 credit course and meets every other day. Students can opt to have Group Fitness instead of PE 11/12. This .5 credit will count as a PE credit toward graduation.

7030 Exercise Physiology I – 10 through 12 – 1.00 Credit

This course is designed to provide the basic fundamentals of strength training through a variety of training techniques. Students will improve their overall strength while gaining an understanding of our body's basic physiological response to exercise, specifically strength training. The course is broken into six week cycles corresponding to each marking period. Students are evaluated on their effort/participation, cognitive recall, and muscular strength in proportion to their body composition. Students will be physically active each day. It is recommended that athletes take the course in the semester opposite their athletic sport.

*Lab Fee – Field trip opportunities are available for each student introducing alternative physical fitness activities. This total fee is typically around $25 for the semester.

Exercise Physiology only counts as an elective credit. You must have an "O" in the most recent or current Physical Education course to take this class. If student does not have an "O" in the most recent or current Physical Education class, that teacher must sign for approval.

7032 Exercise Physiology II – 11 and 12 – 1.00 Credit

(Prerequisite – Exercise Physiology I)

This course is designed to build on prior knowledge acquired in Exercise Physiology I. Students will participate in a variety of different exercise/training techniques to improve their overall fitness levels. Students will also complete 3 primary projects throughout the semester (approx. 1 per marking period) on individual fitness, nutrition, and personal training.. Students will be evaluated on their participation/effort, cognitive recall, workout development and overall physical fitness. Exercise Physiology II requires students to have received a "B" in Exercise Physiology I.

*Lab Fee – Field trip opportunities are available for each student introducing alternative physical fitness activities. This total fee is typically around $25 for the semester.

Exercise Physiology II counts as Physical Education credit in the senior year.

7044 Introduction to Human Nutrition – (weighted 1.2) – 11 and 12 – 1.00 Credit

This course will cover an overview of the scientific principles of nutrition and their applications to humans throughout the lifecycle. Topics include classification and function of the six major nutrients, review of current nutrition standards, safety of the food supply, and nutrition misinformation. This is a dual enrollment class through the University of Pittsburgh for 3.0 college credits.
Note: Dual enrollment is available in this course. See page 61 for more dual enrollment information.

ART

7106 Art Across Cultures – 9 through 12 – 1.00 Credit

Art Across Cultures is an elective course for students interested in exploring art from a cultural perspective. The curriculum is based on art and crafts from around the world taken from different time periods in human history. The course is heavily influenced by art history and exploring human cultures, both modern and ancient. Projects will be two dimensional and three dimensional and will include drawing, painting, constructing and sculpting with various materials. Studio work will be accompanied by research using the internet and books.

7120 Foundations of Art – 9 through 12 – 1.00 Credit

This is an elective course that provides a basic understanding of art through the exploration of the elements and principles of design. The curriculum is built around the exploration of the expressive properties of art media through drawing, painting and sculptural techniques. This course also contains components of art history, art criticism and art-related careers.

7121 2D Design – 10 through 12 – 1.00 Credit

(Prerequisite – Foundations of Art)

2D Design is a course designed for students interested in expanding their knowledge of art through drawing, painting and design techniques. The curriculum is centered on exploring mark making through the use of basic drawing and painting media while considering the use of value, color theory, concept, composition and expression. Emphasis will also be placed on components of art history, art criticism and art-related careers.

7122 Advanced 2D Design – 11 and 12 – 1.00 Credit

(Prerequisite – 2D Design and teacher recommendation)

Advanced 2D Design is a course designed for art students interested in continuing the exploration of art through advanced drawing, painting, and design techniques. The curriculum is centered on design considerations such as composition, personal storytelling, and conceptual ideation. Emphasis will also be placed on components of art history, art criticism and art-related careers.

7123 3D Design – 10 through 12 – 1.00 Credit

(Prerequisite – Foundations of Art)

3D Design is a course designed for art students interested in expanding their knowledge of art through the use of sculptural material. The curriculum is centered on exploring the basic components of 3D design such as form, positive and negative space, and the manipulation of materials. Emphasis will also be placed on components of art history, art criticism and art-related careers.

7124 Advanced 3D Design – 11 and 12 – 1.00 Credit

(Prerequisite – 3D Design and teacher recommendation)

3D Design 2 is a course designed for art students interested in continuing their exploration of art through advanced sculptural techniques. The curriculum is based on the use of a variety of materials to achieve personal style in the manipulation of materials, composition, installation art, and conceptual ideation. Emphasis will also be placed on components of art history, art criticism and art-related careers.

7110 Advanced Placement Studio Art (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite – Advanced 2D Design or Advanced 3D Design with teacher recommendation)

AP Studio Art is a studio course designed for artists preparing a portfolio for entrance into an art college. The class is equivalent to a level one design/drawing course. The class content will consist of the requirements set up by the AP studio committee. Due to the nature of the course, taking the AP exam is required (fee set by Educational Testing Service). If a satisfactory score is attained on the exam, students

will be granted three humanities credits at many colleges. There is a great emphasis given to producing work in this course. Also, an attitude of self-guided creativity is important to the success of this course.

7112 Advanced Placement Art History – (weighted 1.2) – 11 and 12 – 1.00 Credit

AP Art History is a non-studio course designed for the college-bound student. It is equivalent to a college Art History course. All activities in class are in preparation for the AP examination. Because of the nature of the course, taking the AP exam is required (fee is set by Educational Testing Service). If a satisfactory score is attained on the exam, students will be granted three humanities credits at many colleges. There is a heavy emphasis on writing and lecture in this course. Several non-school-day field trips will be required.

7131 Intro to the Art of Photography – 9 through 12 – 1.00 Credit

This course aims at providing an understanding of digital photography through the use of both digital cameras and phones to create the highest quality images. Students will learn how to use manual settings on digital cameras, as well as how to use natural light for the best possible photographs. As the course progresses, students will utilize Adobe Photoshop to learn both the basics of photo editing as well as how to create original works of art. Students will have the opportunity to take photographs outside of the classroom, as well as sign out digital cameras to complete assignments.

7132 Art of Photography Level II – 9 through 12 – 1.00 Credit

(Prerequisite: Intro to the Art of Photography (Art Dept.) or Digital Photography (Tech. Ed. Dept.)

This course will cover operations and functions of digital cameras from an artistic viewpoint. Students will continue learning about the elements of composition and different types of lighting as well as innovative technologies in the field of photography through the study of contemporary photographers. Students will learn advanced image techniques and digital manipulation through Adobe Photoshop. Students will have the opportunity to explore their own interests and develop an individual style, and will explore the significance of photography while learning about the different applications it has in today's world.

7133 Art of Photography Level III – 10 through 12 – 1.00 Credit

(Prerequisite: Art of Photography Level II)

In this advanced course, students will explore technical, artistic, and commercial aspects of photography. This course will include advanced digital camera operations and creative digital darkroom techniques, while working with Adobe Photoshop. Class time will enable students to work on individual and cooperative explorations. Students will prepare a digital portfolio of their work to exhibit at the completion of this course. Students will also produce a web platform for their photography work and learn ways to market their photography.

MUSIC

Honors Band and Honors Chorus Program

In order to recognize the higher levels of achievement, as well as to recognize the students who are already going above and beyond course expectations, the music department offers its honors program. Registration for the honors program does not guarantee award of weighted credit.

Components
In a given semester, students will take private lessons or prepare audition materials for festivals and/or college auditions, will write program notes for winter and spring concerts, and will attend (either live or virtually) a college or community concert/recital and write a review of the performance and repertoire.

Registration
Students register for honors band and/or chorus at the time that courses are selected in spring. Weighted credit for the student's ensemble (1.1) will be awarded to students who complete the honors program throughout the school year.

7491 Band – 9 through 12 – 1.00 Credit

Students who are placed in the band class will meet every other day for the entire year. This class is based on a performance-related curriculum, exposing students to various styles of music. The majority of the work involves mastering the skills necessary to play the individual band instruments as chosen by the students. Small group instruction is given to all students through a rotating lesson schedule. Teacher signature is required.

7492 Chorus – 9 through 12 – 1.00 Credit

Students who are placed in the chorus class will meet every other day for the entire year. This class is based on a performance-related curriculum, exposing students to various styles of music. Small group instruction is given to all students through a rotating lesson schedule. Note: Band and Chorus are courses that include performances and rehearsals beyond the school day.

7495 Band and Chorus – 9 through 12 – 1.00 Credit

Students who would like to be in both band and chorus should sign up for this course. The choral and band directors will share the students. Signatures from the band and chorus teachers will be required.

7497 Advanced Placement Music Theory – (weighted 1.2) – 11 and 12 – 1.00 Credit

(Prerequisite - Music Theory 1)
Advanced Placement Music Theory is an intense course where all activities in class are in preparation for the AP exam (fee is set by the Educational Testing Service). Major areas of study include melody, harmony, rhythm, part writing, ear training, listening analysis, and dictation. This course may be offered as independent study. Teacher approval is required.

7498 Music Theory 1 – 9 through 12 – 1.00 Credit

This course is for the high school music student who wants more than the regular performance-based classes of band and/or chorus. Subjects covered will include sight singing, ear training, dictation, and music theory. The Music Theory 1 course offering will be held every other day of the cycle and will go throughout the entire year.

7505 Seminars in Music Technology – 11 and 12 – 1.00 Credit

The purpose of this course is twofold: to allow highly motivated students to begin to explore the available music technologies and to provide assistance to the music and theater departments in these areas. Some background in music and technology will be necessary. Students' time will be distributed between set-up and design in real life applications and the development of personal projects. Students will be expected to assist with the music technology needs of the district (e.g. concerts, plays, assemblies, etc.), and this work will be part of the grading process. Instructor approval is required.

7507 Foundations of Music Through the Guitar and Keyboard – 9 through 12 – 1.00 Credit

This course is intended for students who wish to advance their knowledge in various aspects of music through study of the guitar and keyboard. Beginning, intermediate, and advanced guitar players are welcome to take the course. All students will learn music notation (standard and TAB), theory and analysis. Students are welcome to bring their own guitar, or one will be provided for them. Keyboards will be provided for school use.

7519 Bach to Rock: A Survey of Music History – 9 through 12 – 1.00 Credit

This course focuses on music listening, appreciation, and history. There will not be a performance component. Curriculum will focus on facets of American music, to include Rock, Pop, Rap and Hip Hop, and will also be informed by a study of classical music history. There is no prerequisite for this course, but a strong interest in music is encouraged.

7523 Beginner Band Instruction – 9 through 11 – 1.00 Credit
7523A Beginner Band Instruction – 12 – .50 Credit

This course is designed for the student who wants to begin learning an instrument, or who has not played their instrument for several years but wants to eventually join band. Class time will be divided between direct instruction on the instrument and independent practice. There will be a great emphasis placed on independent study, so students must be motivated, responsible, and able to take initiative.

7524 Music for Stage and Screen – 9 through 12 – 1.00 Credit

This course focuses on music listening, appreciation, and history. There will not be a performance component. Curriculum will focus on all facets of music pertaining to motion pictures, Broadway musicals, and even video games. Students will dive into both the history and the current trends of all of these areas. There is no prerequisite for this course, but a strong interest in music is encouraged.

7525 Independent Study in Music – 11 and 12 – 1.00 Credit

(Prerequisite – Music Theory 1 or Music Technology)

Independent Study in Music is a student-directed course, designed to allow the independent musician to dive deeper into advanced topics in music. This time could be used for audition preparation, composition, advanced music technology projects, learning a secondary

instrument, etc. Instructor approval for this course also will be based upon the student's proposal for their semester of work. There will be a great emphasis placed on independent study, so students must be motivated, responsible, and able to take initiative.

7900 Music Seminar – 12 – .50 Credit

This course is intended for the serious student of music to help them study concepts of music theory, history or performance more in depth than is possible in the larger ensembles. This is a self-designed independent study based on individual interests and goals which have to be approved by the teacher. Activities might include composition or arranging, study of solo literature (especially materials for festivals and college auditions) or introductions to new instruments. Teacher approval is required.

TECHNOLOGY EDUCATION

8290 Technology Systems – 9 – 1.00 Credit

Technology Systems is an introductory course in technology education for all students in grade 9. This hands-on course provides an overview of the four system areas of communication, construction, manufacturing, and transportation technology. Students will build a foundation for technological literacy by developing, producing, testing and assessing solutions to technological problems. Also, the impacts of technology will be analyzed (projects include CO2 cars, balsa wood structures, woodworking projects and flight simulator). A personal project fee is required.

8205 Digital Photography – 9 through 12 – 1.00 Credit

This introductory level course deals primarily with the use of digital cameras, scanners and computers to create digital imaging projects. Students will learn how to make the best out of every digital image. Students will learn how to create, repair, and manipulate digital images within Adobe Photoshop software to achieve the best possible digital images. Students will spend time outside of the classroom to take photos and be able to sign out digital cameras to complete assignments.

8202 Drawing, Design, and Innovation – 9 through 12 – 1.00 Credit

Students will learn and utilize 21st century real world skills through the design process with students being given specifications: time, materials, limitations, size utilizing basic learning in—science, technological, engineering and mathematical practices to solve real world design problems. Basic and Intermediate technical sketching, conventional drafting and computer-aided drawing software is utilized. Experiences, geometric constructions, multi-view projection, dimensioning, sectioning and pictorial representation are learned with students exposed to real world 3-D applications with the utilization of a 3-D printer to harvest their designs into real world products.

8153 Architectural Drawing and Design – 10 through 12 – 1.00 Credit

(Prerequisite – Drawing, Design and Innovation)

Architectural Drawing and Design is a course for all students who have successfully completed Drawing Design and Innovation. Architectural Drawing and Design is for those students who are interested in architecture including residential design, commercial design, and construction techniques. Students will develop drawings and use computer aided drawing software in the

construction of architectural design. Students will also develop skills in applications as they relate to architectural drafting and design including a scale model of their “dream” house.

8203 Manufacturing Systems – 10 through 12 – 1.00 Credit

This course is structured for students of all skill levels. After an introduction to and use of all tools and machinery, several projects will be made from wood using various machines in the lab. (Examples of past projects are storage units, jewelry boxes and tables.) Students will take part in the aspects of research, development, and problem solving as they identify, design and produce projects in a manufacturing lab. Safe and proper use of all tools and machinery is both vital and mandatory. *A personal project fee is required for materials used.*

8212 Manufacturing Systems II – 11 and 12 – 1.00 Credit

(Prerequisite - Manufacturing Systems)

This is an advanced course that expands upon the skill set established during Manufacturing Systems, especially as it relates to the tools and equipment used in the manufacturing lab. Students will build a major project of their choice during the semester. Safe and proper use of all tools and machinery is both vital and mandatory. *A personal project fee is required for materials used.*

8230 Visual Communications I – 9 through 12 – 1.00 Credit

Students will experience individualized and group laboratory activities in the areas of graphic reproduction, website design, desktop publishing and silk screen printing. Students will design and produce several hands on projects including printed t-shirts and business cards using graphic software Adobe Photoshop, Illustrator and In Design. *A personal project fee is required*.

8231 Visual Communications II – 10 through 12 – 1.00 Credit

(Prerequisite – Visual Communications I)

Students will expand on the skills learned in the Visual Communications I course by developing a greater understanding of visual communication throughout the real world. Students will design and produce several hands on projects including multi colored printed t-shirts, desktop publishing projects using graphic software Adobe Photoshop, Illustrator and In Design. *A personal project fee is required*.

8292 Energy, Power and Transportation – 10 through 12 – 1.00 Credit

During this class (EPT), students will develop an understanding of how energy, power and transportation function, as well as the role they play in our technological world, both independently and in combination. (Past projects have included solar cookers, electrical wiring, catapults, and small-engine assembly/operation) Safe and proper use of all tools and machinery is both vital and mandatory. *A personal project fee is required for materials used.*

8293 Aviation and Aerospace - 9 through 11 – 1.00 Credit

The course will provide the foundation for advanced exploration in the areas of flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem solving, and the innovations and technological developments that have made todays aviation and aerospace industries possible. Students will also learn about the wide variety of exciting and rewarding aeronautic careers and opportunities available to them. The course will inspire students by laying the foundation for continued study in the world of aerospace, aerospace engineering, aviation and exploration.

8294 Advanced Topics of Aviation – 11 and 12 – 1.00 Credit

(Prerequisite: Aviation and Aerospace)

This course will provide the advancement of aviation education regarding the attributes and skills of aviation and its impact on society. This includes a specific focus on aviation engineering, airport development technical development, navigation and communication, the impact of aviation within our daily lives, and vocational and career possibilities related to aviation. Students will be inspired to conceptualize thoughts and ideas based on a higher level based on the foundational ideas learned in previous classes while taking a more refined approach to specific topics of study within aeronautics, aviation, and aerospace engineering fields.

FAMILY AND CONSUMER SCIENCE

8340 Independent Living – 9 and 10 – 1.00 Credit

Independent Living 9-10 introduces the skills students need to cope with the realities of life in a changing society. This course focuses on helping the students become more self-sufficient by giving them the tools for intelligent decision making. Topics of discussion include personality, family structures, successful relationships, the effect of values, needs and goals on the decision-making process, staying safe in a virtual world, basic personal care needs, career exploration, and getting your first job.

8342 Independent Living – 11 and 12 – 1.00 Credit

Independent Living 11-12 introduces the skills students need to cope with the realities of life in a changing society. This course focuses on helping students move towards independence by studying various areas of everyday adult life. Topics of discussion include investing in yourself, your future career, money management (including but not limited to budgets, buying a car, renting vs. buying a home, credit and fraud), coping with stress and relationships. This course will include a long-term budgeting project.

8353 Parenting and Child Development – 9 through 12 – 1.00 Credit

Families are an important aspect of today's society. In this course positive interpersonal and family relationships and a realistic understanding of the stages of the human life cycle will be taught. Specific emphasis will be on the responsibilities of parenting and the developing child. The connections among the individual, the family, and the world of work will be experienced through many special presenters, trips to area agencies and centers, and family research. A goal of the course is for the students to realize their individual potential in their present and future family, the community, and their future careers.

8354 Sewing and Fashion Design – 9 through 12 – 1.00 Credit

This course will explore the world of clothing from the cultivation of natural fibers to the marketing of apparel. We will learn about influential people and designers in the fashion world and careers available within the industry. Students will plan, select, repair and construct clothing and other textile products. *Students will be required to purchase materials for individual projects.*

8356 Clothing Construction – 10 through 12 – 1.00 Credit

(Prerequisite: Sewing and Fashion Design and teacher approval)

This course is for those students who have successfully completed Sewing and Fashion Design and wish to increase their knowledge and skills in clothing construction. We will learn advanced construction and garment alteration techniques and beginning pattern making skills. *Students will be required to purchase materials for individual projects.*

8359 Culinary Science I – 10 through 12 – 1.00 Credit

This course emphasizes valuable skills and techniques for basic food preparation. Students develop the ability to make nutritionally sound food choices. Special attention is given to basic food preparation skills, reading recipes, kitchen safety, kitchen sanitation, and food safety. Nutrition, meal planning, table settings, and manners are also included. Assignments requiring preparing foods at home are a part of this course. Careers in the fields of culinary arts will be explored. A class trip to a food related industry is taken. This course requires a **personal project fee** per student for food supplies. Food labs may include common food allergens. Students with food allergies should confer with the teacher before choosing this class.

8365 Culinary Science II – 11 through 12 – 1.00 Credit

(Prerequisite- passing grade in Culinary Science I)

This course is designed to enhance the student's knowledge of the valuable skills and techniques for basic food preparation. Students are offered the opportunity to further their basic skills of food preparation as they prepare a wide variety of foods including but not limited to fruits, vegetables, vegetarian, meats, poultry and foods from different cultures. This course will help the student to develop an expertise in planning and preparing meals. Assignments requiring preparing foods at home are a part of this course. Careers in the fields of culinary arts will be explored. A class trip to a food related industry is taken. This course requires a **personal project fee** per student for food supplies. Food labs may include common food allergens. Students with food allergies should confer with the teacher before choosing this class.

8366 Community Foods – 11 and 12 – 1.00 Credit

(Prerequisite: Passing grade in Culinary Science I and teacher approval)

In this course students will be introduced to the preparation, cooking, and presentation of food for school and community events. Emphasis will be placed on the planning and executing of cooking services for large occasions. Basic food preparation skills learned in Culinary Science I will be showcased, by preparing weekly or biweekly meals in class and for staff members. A small project fee may be required.

LIBRARY SCIENCE

8500 Intro to Librarianship – 11 and 12 – 1.00 Credit
8510 Intro to Librarianship – 11 and 12 – .50 Credit

(Prerequisite - juniors or seniors and consent of the Library Media Specialist)

This course offers practical experience in the customer service, administration, and teaching functions of the Library Media Center. Students will be involved in the planning of functions in the library media center, design of displays focused on reading, and assisting in the overall operation of the LMC.

TV PRODUCTION

8551 Digital Video and Film I (CWTV) – 9 through 12 – 1.00 Credit

Basic Digital Video and Film is an introductory course designed to introduce the students to the world of video and the basics of media production. Through a variety of projects the students will learn the three phases of the production process, script writing, effective camera shooting techniques, video editing techniques as well as how to add music, titles and narration to their video using Final Cut Pro X. Students enrolled in Digital Video and Film I will also study the basics of studio production, basic interviewing, field production, and broadcast journalism culminating in several live news broadcasts. This course serves as a prerequisite for all other Digital Video and Film courses.

8552 Digital Video and Film II (CWTV) – 10 through 12 – 1.00 Credit

(Prerequisite - Digital Video and Film I)

Digital Video and Film II will provide students interested in more advanced video production the opportunity to expand and develop beyond the first level course. It is designed for students who have already taken Digital Video and Film I and received instructor approval for the advanced level. In this course students will continue to build on the fundamental processes previously learned in beginning digital video and expand their editing, filming, and production techniques. Students enrolled in Digital Video and Film II write, film and produce numerous professional pieces for submission to various student film festivals and competitions. Students need instructor permission to take this course.

8553 Digital Video and Film III (CWTV) (Advanced) – 11 and 12 – 1.00 Credit

(Prerequisite - Digital Video and Film II and teacher approval)

In this advanced course, students will receive advanced instruction in television and video production. Students enrolled in Digital Video and Film III will have the opportunity to brainstorm ideas, film and edit video segments, and meet deadlines in the creation of a weekly news magazine broadcast. In addition, these students will focus on the creation of an individual online website portfolio showcasing their digital media skills. Digital Video and Film III students take part in the annual spring 10-Day film festival, work for a client, and are also responsible for the creation of the senior video content that makes up the Senior Class DVD. Only students who exhibit superior abilities and work ethic will be eligible to enroll in this course and will be admitted by instructor appointment only.

8554 Digital Video and Film IV (CWTV) (Advanced) – 12 – 1.00 Credit

(Prerequisite - Digital Video and Film III and teacher approval)

In this advanced course, students will receive advanced instruction in television and video production. Students enrolled in Digital Video and Film IV will have the opportunity to brainstorm ideas, film and edit video segments, and meet deadlines in the creation of a weekly news magazine broadcast. In addition, these students will focus on the creation of an individual online website portfolio showcasing their digital media skills. Digital Video and Film IV students take part in the annual spring 10-Day film festival, work for a client, and are also responsible for the creation of the senior video content that makes up the Senior Class DVD. Only students who exhibit superior abilities and work ethic will be eligible to enroll in this course and will be admitted by instructor appointment only.

8561 Broadcast Journalism (CWTV) – 10 through 12 – 1.00 Credit

Broadcast Journalism will introduce students to all aspects of broadcast journalism, from live studio production to feature news reporting. The primary focus of this course is non-fiction storytelling. Students in Broadcast Journalism will learn the techniques of live studio production and apply this knowledge in the daily morning announcements broadcast. Students will research, write, interview, film and edit weekly news feature packages and apply their study of documentary filmmaking through participation in student film documentary competitions like CSPAN StudentCam and National History Day. In addition, focusing on digital literacy, Broadcast Journalism students will maintain a CWTV website to create an on-line news media presence for their stories and special segments about our school.

GIFTED EDUCATION

8600 Innovations – 10 through 12 – 1.00 Credit
8601 Innovations – 12 – .50 Credit

Innovations is a course intended for gifted students in 10-12 grade. The course will be project based with an emphasis on thinking critically and creatively to construct meaning or gain understanding, planning and conducting a study or investigation, proposing solutions to real-world problems, planning and producing communication in various forms, collaborating to solve a problem, and integrating, synthesizing, and making cross-curricular connections. Students will be required to complete at least one Massive Online Open Course (MOOC) in this course on a student selected topic. Instructor approval is required.

COLLEGE EXPERIENCE

8998 College Experience – 11 and 12 – 0 Credits

This course is designed for the student who wishes to take an Early Admissions course at one of the local colleges. Students will need to complete the required application and meet admissions criteria for the college in order to participate. Once the student has provided proof of college course registration, they will be excused from one elective course at Conrad Weiser, if they choose.

8990 College Experience – (weight 1.2) – 11 and 12 – 1.00 Credit

This course is designed for the student who wishes to take an Early Admissions course at one of the local colleges. Students will need to complete the required application and meet admissions criteria for the college in order to participate. Once the student has provided proof of college course registration, they will be excused from one elective course. Students must provide an official transcript at the conclusion of the course in order to be awarded credit and course weight.

TEACHER ASSISTANT PROGRAM

7800 Teacher Assistant Program – 12 – 1.00 or .50 Credit

Students who select the Teacher Assistant Program help a teacher within the Conrad Weiser Area School District. Students will be graded by their placement teacher each marking period based on the help they provide. This is a pass/fail course. If the student is helping a teacher at another building in CWASD, students must provide their own transportation to the site. Students selecting the Teacher Assistant Program for 1.00 credits must have the approval of the teacher they intend to help. This course is meant for those without an interest in becoming an educator. Students interested in becoming educators should select the course 6201 - Career Intern for a more rigorous curriculum.

DUAL ENROLLMENT

These courses are available for dual enrollment college credit though the Reading Area Community College at a cost of $99 per credit.

CW Course Name	CW Course #	RACC Course Equivalency	College Credit
Pre-Calculus CP	2014	MAT165	3
Pre-Calculus Honors	2024	MAT180	3
Calculus CP	2028	MAT220	4
AP Calculus AB	2025	MAT220	4
College Algebra	2020	MAT160	3
Statistics & Probability	2050	MAT210	3
Dual Enrollment Biology	4114	BIO150	4
Anatomy & Physiology I	4150	BIO250	4
Anatomy & Physiology II	4151	BIO255	4
Accounting II	6121	ACC105	3
AP Government & Politics	3124	POS130	3
Government & Politics Honors	3123	POS130	3
AP Physics 1	4120	PHY240	4
AP English Literature	1058	ENG125	3

These courses are available for dual enrollment college credit though the University of Pittsburgh at a cost of $79 per credit.

CW Course Name	CW Course #	University of Pittsburgh Course Equivalency	College Credit
Introduction to Human Nutrition	7044	NUTR 1006	3

OUR MISSION is to prepare all students for successful careers and higher education through a highly acclaimed, integrated academic and technical education experience.

BCTC

is a premier career & technical education center with state-of-the-art learning labs.

teachers are experienced professionals with practical experience.

programs are reviewed and updated annually by local business and industry advisors.

Why BCTC?

BCTC prepares YOU for:

- Two or four-year college
- Technical or trade school
- Apprenticeship programs
- Military service
- Direct entry into the workforce

BCTC also offers students the opportunity to be involved in career and technical student organizations such the National Technical Honor Society. Such organizations provide personal growth, leadership and networking opportunities.

Berks Career & Technology Center consists of two campuses:
East Campus | 3307 Friedensburg Road | Oley, PA 19547 | 610-987-6201
West Campus| 1057 County Road | Leesport, PA 19533 | 610-374-4073
Visit us online at www.berkscareer.com

Seven Career Pathways

Thirty-Seven Career and Technical Education Programs

Five Technical Academics with Reading Area Community College.

Business & Information Technology
*Business Management & Entrepreneurship (W)
*IT Networking (E)
*IT Programming (W)

Communications
Advertising Art & Design Technology (W)
Communication Media Technology (W)
Graphic Imaging Technology (W)
Photo Imaging Technology (W)

Construction
Building Construction Occupations (B)
Cabinetry & Wood Technology (E)
Carpentry (E)
Electrical Occupations (B)
HVAC / Refrigeration (E)
Masonry (E)
Painting & Decorating (W)
Plumbing & Heating (E)

Engineering & Manufacturing Technology
Engineering Technology Career Pathways
• Electronic Engineering Technology (W)
• *Mechatronics Engineering Technology (W)
• Robotics & Automation Technology (W)
Drafting Design Technology (W)
Precision/Computerized Machining Technology (W)
Welding Technology (W)

Healthcare
Dental Occupations (E
*Health Occupations (W)
Health-Related Technology (E)
Medical Health Professions (W)
Sports Medicine & Rehabilitative Therapy (E)

Services
Cosmetology (B)
Culinary Arts (B)
Early Childhood Education (B)
Horticulture (E)
Protective Services (E)
Service Occupations (E)

Transportation
Automotive Collision Repair Technology (B)
Automotive Technology (B)
Diesel Technology (E)
Heavy Equipment Technology (E)
Recreational & Power Equipment Technology (W)

Note:
(B) - *indicates the program is offered at both campuses.*
(E) - *indicates the program is offered only at the East Campus in Oley.*
(W) - *indicates the program is offered only at the West Campus in Leesport.*

***Technical Academy Associates Degree Program with Reading Area Community College (RACC).**

RACC articulation with Bloomsburg University BAS degree in Technical Leadership.

BERKS CAREER AND TECHNOLOGY CENTER

(www.berkscareer.com)

The Berks Career and Technology Center (BCTC) offers programs in 35 different career areas to students from 16 area school districts. Two campuses serve students in Berks County. The East campus is located in Oley and the West campus is located in Leesport. Students electing BCTC attend on a half-day basis, taking required academic courses at their high school while attending the BCTC for their technical program. Programs are designed for three years in length beginning in the 10th grade; however, 11th and 12th grade students may also begin a program. All programs are available to all students regardless of district location.

Laboratories equipped with computers, industrial machinery, and other state-of-the-art equipment provide hands-on training for students in addition to the academic component of each course of study. All curriculum is competency based, allowing students to proceed at a rate that is best for them and tailored to meet their own career objectives.

There are many opportunities available for students enrolled in a BCTC program. All programs prepare students for immediate employment or higher education. Senior students who demonstrate a high level of competency in their program can participate in a supervised work-based learning experience. In addition, articulation agreements with the following post-secondary schools provide advanced credits or advanced placement: Antonelli Institute of Art and Photography, Automotive Training Center, Baran Institute of Technology, Berks Technical Institute, Central Pennsylvania College, Information Computer Systems Institute, Johnson and Wales University, Lehigh Carbon Community College, Lehigh Valley College, Lincoln Technical Institute, Montgomery County Community College, Nashville Auto Diesel College, Northampton Community College, Ohio Technical College, Pennsylvania College of Technology, Pennsylvania College of Art & Design, Reading Area Community College, Schuylkill Institute of Business & Technology, Thaddeus Stevens College of Technology, Thompson Institute, Universal Technical Institute, University of Northwestern Ohio, and Welder Training and Technical Institute. Currently, 33 BCTC programs have articulation agreements to offer students advanced credit at the post-secondary level to pursue a certificate, associate, or baccalaureate degree.

APPLICATION PROCESS

Students apply for enrollment at BCTC through their counselor. All student applications are sent to the BCTC where candidates from throughout the county are chosen. For the application and any further information, please contact the counseling office.

MASTER COURSE SELECTION LIST

Code/Subject (E = East Center; W = West Center)	Grade(s) Offered			Credit
0001 - Diesel Technology (E)	10	11	12	4.00/yr.
0002 - Heating, Ventilation and Air Conditioning (W)	10	11	12	4.00/yr.
0003 - Cabinet Making (E)	10	11	12	4.00/yr.

0004 - Auto Collision Repair Technology (W)	10	11	12	4.00/yr.
0005 - Auto Technology (W)	10	11	12	4.00/yr.
0006 - Drafting Design Technology (E)	10	11	12	4.00/yr.
0007 - Advertising Art and Design Technology	10	11	12	4.00/yr.
0008 - Carpentry (W)	10	11	12	4.00/yr.
Code/Subject (E = East Center; W = West Center	**Grade(s) Offered**			**Credit**
0009 - Health Related Technology (E)	10	11	12	4.00/yr.
0010 - Photo Imaging Technology (W)	10	11	12	4.00/yr.
0011 - Cosmetology (W)	10	11	12	4.00/yr.
0012 - Information Technology-Programming (W)	10	11	12	4.00/yr.
0013 - Dental Occupations (E)	10	11	12	4.00/yr.
0014 - Electrical Occupations (W)	10	11	12	4.00/yr.
0015 - Electronic Technology (W)	10	11	12	4.00/yr.
0016 - Culinary Arts (W)	10	11	12	4.00/yr.
0017 - Recreation and Power Equipment (W)	10	11	12	4.00/yr.
0018 - Health Occupations (W)	10	11	12	4.00/yr.
0019 - Horticulture (E)	10	11	12	4.00/yr.
0020 - Precision Machine Technology (W)	10	11	12	4.00/yr.
0021 - Building Construction Occupations (E)	10	11	12	4.00/yr.
0022 - Masonry (E)	10	11	12	4.00/yr.
0023 - Robotics and Automation Technology (W)	10	11	12	4.00/yr.
0024 – Early Childhood Education (W)	10	11	12	4.00/yr.
0025 - Painting and Decorating (W)	10	11	12	4.00/yr.
0026 - Plumbing and Heating (E)	10	11	12	4.00/yr.
0027 - Graphic Imaging Technology (W)	10	11	12	4.00/yr.
0028 - Welding Technology (W)	10	11	12	4.00/yr.
0029 – Business Management & Entrepreneurship	10	11	12	4.00/yr.
0049 - Service Occupations (E)	10	11	12	4.00/yr.
0050 - Pre-Vocational Career Exploration (E)	10	11	12	4.00/yr.
0052 - Protective Services (W)	10	11	12	4.00/yr.
0053 - Information Technology-Networking (E)	10	11	12	4.00/yr.
0054 - Heavy Equipment Technology (E)	10	11	12	4.00/yr.
0056 - Medical Health Professions Program			12	4.00/yr.
0057 - Communications Media Technology (W)	10	11	12	4.00/yr.
0058 - Computerized Machining Technology (W)	10	11	12	4.00/yr.
0059 – Mechatronics Engineering Technology (W)	10	11	12	4.00/yr.

GRADING SYSTEM

Letter Grade	*Numerical Equivalent*	*Grade Point Equivalent on a 4.0 Scale*
A	93-100	4.00
A-	90-92	3.67
B+	87-89	3.33
B	83-86	3.00
B-	80-82	2.67
C+	77-79	2.33
C	73-76	2.00
C-	70-72	1.67
F1	55-70	0 (failed but eligible for summer school)
F	Below 55	0

Note: No “D” will be given in a Conrad Weiser High School course. Students who attend Career Tech and receive a “D” will receive a “D” at Conrad Weiser. However, no courses at Conrad Weiser will award a “D”.

GRADE POINT AVERAGE

Starting at the end of grade 9, each student's grade point average is calculated using final averages for all graded courses. The Grade Point Average is calculated by multiplying the Grade Point Equivalent by the number of credits for each course. The sum is then divided by the number of credits (see examples on Page 68).

CLASS RANK

Students will be ranked by a Latin Honors system based upon their weighted cumulative GPA as follows:

4.00	Summa Cum Laude
3.75-3.999	Magna Cum Laude
3.50-3.749	Cum Laude

WEIGHTED COURSES

Weighted courses are based on the difficulty and work required in the course. Taking weighted courses will increase a student's grade point average.

Approved Weighted Courses (at 1.1 level)

1020 English Honors 9
1021 English Honors 10
1022 English Honors 11
1023 English Honors 12
2023 Geometry Honors
2022 Algebra 2 Honors
2032 Computer Science 2
3092 US History 1 Honors
3102 US History 2 Honors
4200 Earth Science Honors
4201 Biology Honors
4202 Chemistry Honors
3118 The World of Conrad Weiser
3116 Western Civilization
3112 Global Studies Honors
3125 Intro to Economics
3126 Sociology
5004 Latin IV
5024 Spanish IV
5034 German IV

Approved Weighted Courses (at 1.2 level)

NOTE: All college dual enrollment classes/BCTC Medical Health Occupations and Berks Technical Academy classes are 1.2 weight.

1057	AP English Lang & Composition
1058	AP English Literature
2014	Pre-Calculus College Prep
2020	College Algebra
2024	Pre-Calculus Honors
2025	AP Calculus AB
2026	AP Calculus BC
2028	Calculus CP
2046	Advanced Topics in Computer Science
2047	ACSL Concepts and Programming
2048	AP Computer Science A
2050	Statistics & Probability
3108	AP US History
3123	Government & Politics Honors
3124	AP Government & Politics
3128	AP World History
4108	AP Chemistry
4114	Dual Enrollment Biology
4120	AP Physics 1
4121	AP Physics 2
4150	Anatomy & Physiology I
4151	Anatomy and Physiology II
4153	Innovative Science Research
4164	AP Environmental Science
4168	Experiments in Agricultural and Environmental Sciences
4165	Biotechnology
5005	Latin V
5025	Spanish 5
5035	German V
6121	Accounting II
6122	Accounting III
7044	Intro to Human Nutrition
7110	AP Studio Art
7112	AP Art History
7497	AP Music Theory
8990	College Experience (1.00 credit)

Notes Regarding Weighted Courses

- To determine weighted grade point, a weighted course credit is multiplied by 1.2 or 1.1. The specific class weightings appear on page 67.
- Counseling office has grade point average (GPA) and weighted grade point average (WGPA).
- Class rank is determined by weighted grade point average (WGPA).
- Transcripts will list the weighted grade point average (WGPA).
- Honor roll is not affected by weighted courses. GPA, not WGPA, is used to determine honor roll.

Example

Student A

	Grade	GPE	x	CC	=	GP	x	CW	=	WGP
AP English	A-	3.67		1.00		3.67		1.20		4.404
AP Calculus AB	B+	3.33		1.00		3.33		1.20		3.996
Government and Politics CP	A	4.00		1.00		4.00		1.00		4.000
Physics CP	B	3.00		1.00		3.00		1.00		3.000
Advanced Topics in Computer Science	B	3.00		1.00		3.00		1.20		3.600
Health	A	4.00		0.50		2.00		1.00		2.000
				6.50		22.67				25.404

22.67 / 6.50 = 3.488 GPA 25.404 / 6.50 = 3.908 WGPA

Student B

	Grade	GPE	x	CC	=	GP	x	CW	=	WGP
English 12 (CP)	A	4.00		1.00		4.00		1.00		4.00
Personal Economics	B+	3.33		1.00		3.33		1.00		3.33
Government and Politics CP	A	4.00		1.00		4.00		1.00		4.00
Physics	B	3.00		1.00		3.00		1.00		3.00
3D Design	B+	3.33		1.00		3.33		1.00		3.33
Micr Off Appl 1	A	4.00		1.00		4.00		1.00		4.00
Health	A	4.00		0.50		2.00		1.00		2.00
				6.50		23.66				23.66

23.66 / 6.50 = 3.64 GPA 23.66 / 6.50 = 3.64 WGPA

GPA = grade point average
GPE = grade point equivalent
CW = course weight
CC = course credit
WGPA = weighted grade point average
GP = grade points earned for a completed course

Student A would have a GPA of 3.488 and Student B a GPA of 3.64. Therefore, for honor roll, Student B would rank higher. However, the weighted grade point average for Student A is 3.908 and for Student B is 3.64. So Student A would have a higher rank in class than Student B.

"The Conrad Weiser Area School District is an equal opportunity educational institution and will not discriminate on the basis of race, color, national origin, sex, and handicap in its activities, programs, and employment practices as required by Title VI, Title IX, and Section 504". For information regarding services, activities, and facilities that are accessible to and useable by handicapped persons, contact Amy Light, Director of Business at (610) 693-8542. For information regarding civil rights or grievance procedures, contact Amy Light, Compliance Officer for Title VI and Title IX, or Dr. Stephen V. Burnham, Compliance Officer for Section 504, at 44 Big Spring Road, Robesonia, PA 19551 at (610) 693-8542.