

UNION CITY AREA HIGH SCHOOL 2018-19 COURSE SELECTION GUIDE

The following information has been prepared to assist students in the selection of courses for grades 9 through 12.

Since students are given an opportunity to select many of the courses they will pursue in high school, it is necessary to form a plan or sequence of courses they will study. This educational plan should be formulated carefully and should take into account such factors as the student's interests, abilities, educational and vocational goals. It is the goal of the Guidance Department to assist students with the career development process which will ultimately better prepare students for productive employment and success in life. Students will become more familiar with career pathways and the courses that will provide the foundation to prepare them for employment or post-secondary training.

It is suggested that both parents and students read this booklet thoroughly and work together to complete the course selections on the Power School Website. Parents must sign a printed copy of the course requests and have the student return it to the Guidance Office as soon as possible.

Personalized Learning

On February 9, 2017, the Union City Area School District Board of Directors approved a resolution to begin implementation of Personalized Learning in the 2017-2018 school year. Personalized Learning is a system based programmatic change that embodies proficiency-based learning utilizing a blended and integrative approach. A personalized learning plan is tailored to students' interests, career pathways, and needs.

Block Scheduling

On February 8, 1999, the Union City Area School District Board of Directors approved a change to block scheduling which began with the 1999-2000 school year. The type of intensive schedule that Union City has implemented is called a 4 X 4 Block. In the 4 X 4 Block schedule students have four classes during the first semester and four different classes the second semester. Each class period is eighty-four minutes long. One benefit of this form of Block Scheduling is to reduce the number of courses that students have at one time, which should allow for greater concentration of study for each course. The extra time in classes also allows students to take a more active role in their learning as well as have more time for lab work, greater use of technology, and more available time for guided practice and clarification of homework assignments.

- GENERAL INSTRUCTIONS -

Scheduling Process

Students will meet with the Guidance Counselor in groups to review this booklet and initiate the course selection process.

Every student must complete their course selections via the computer. Included in the students scheduling requests should be courses the student needs to meet graduation requirements plus career pathway and other electives. **Students are expected to obtain a parent signature on the Course Request Form in order to ensure approval of the student's course selections. Parents with questions or concerns should call Mrs. Dawson, the HS Guidance Counselor, at 438-7673 ext 5413, or email her at kdawson@ucasd.org.**

Students are to return their Course Request Forms to the High School Guidance Office. The Counselor will review course selections and meet individually with students as needed. ***Changes to students' schedules must be made no later than 5 school days after the start of the course. Students withdrawing from a course after this time may receive a failing grade for that marking period.**

GRADUATION REQUIREMENTS

1. Graduation will be based on the completion of sufficient courses in grades 9 to 12.
2. Students must schedule courses to fill 8 class periods per year.
3. Minimum credits in grades 9 through 12 must be earned as follows:

Requirements Beginning in the 2017-18 School Year

English	4	Credits
Social Studies	3	Credits
Science	4	Credits
Mathematics	4	Credits
Phys. Ed.	.50	Cr(CPR/First Aid)
Health	1	Credit
Computer	1	Credit
STEM Courses	1	Credit
Family/Consumer Science	.5	Credit
Electives	9	Credits (Career Pathway=6; General=3)

Total 28 Credits

All students are also required to complete a research paper and graduation project. Students must also complete junior & senior requirements for job shadowing and college visits. All students must meet state standards and/or achieve proficiency on the Keystone Exams or the UCASD local assessments. *Up to 1 Credit of Computer Science/Information Technology can fulfill 1 Credit of Mathematics. +Students can fulfill physical education requirements by participating in 2-sports per year. *Some Graduation Requirements can be adjusted for Technical Education Students based upon their schedule. +In some instances the UCASD may allow specific courses completed in 8th grade to be counted toward meeting High School Graduation Requirements.

REQUIRED HIGH SCHOOL COURSES *Some course sequences may vary

<u>9th Grade</u>	<u>Yearly Credits</u>	<u>10th Grade</u>	<u>Yearly Credits</u>
English 9	1	English 10	1
World History & Cultures	1	Science	1
Science	1	Math	1
Math	1	Health 10	.50
Physical Education	.50	STEM Course	.50
Comp Appl I/Career	.50	Electives-Career & General	4
Family/Consumer Science	.50	Drivers Education elective	.50
Electives-Career Pathway	2.5		

<u>11th Grade</u>	<u>Yearly Credits</u>	<u>12th Grade</u>	<u>Yearly Credits</u>
English 11	1	English 12	1
US Government/Civics	.50	Economics	.5
Science	1	Science	1
Math	1	Math	1
Health 11	.50	Computer App II /Futures	.5
Electives-Career & General	4	Electives & STEM Courses	4

COMMENCEMENT PARTICIPATION

Any student who has not successfully completed all required credits, attendance, and proficiency testing for graduation will not be permitted to participate in commencement.

PROMOTION REQUIREMENTS

All required core subjects failed in any grade must be passed before being promoted to the next grade. Some required subjects failed in certain grades may be made up during the next school year if enough electives have been passed and scheduling permits. Otherwise, failed subjects must be passed utilizing approved online courses, or by a certified teacher prior to the next school year. **All required subjects failed in grades 9 through 11 and the Keystone Assessments or UCASD test must be passed before a student can be promoted to grade 12.**

REQUIRED AND ELECTIVE COURSES OFFERINGS

(all courses are one credit except where noted)

Indicates- * weighted course; > STEM elective course; + PL course options

MATHEMATICS

Integrated Math I A & B - 9 (1M+1EI cr)
Algebra I - 9-10
Algebra II - 10-12
Integrated Math 1/2 -10-11(.5 EI cr)
Consumer Math -12
Geometry - 9-12
Accounting I - 11-12
*Algebra II/III - 10
*Algebra III/Pre-Calc(No Trig) - 11-12
*Trigonometry - 11-12 (.5 cr.)
*Pre-Calculus/Trigonometry - 11
*Calculus - 12
+S.A.T. Math Preparation - 11 (.25 EI cr)
Math Fundamentals 9-12 (IEP)

SCIENCE

Physical Science A/B – 9
Applied Biology – 10
Biology - 9 -10
Applied Chemistry - 11-12
Chemistry - 10-12
Human Biology- 12
*Physics - 11-12
*Anatomy & Physiology - 12
*Advanced Chemistry - 11-12
*Advanced Physics - 12
Intro to Archaeology - 10-12 (.5 EI cr)
>Intro Anatomy/Sports 9-12 (.5cr)
>+Physics of Power Technology- 9-12 (.5cr)
>+Physics in the Design World 10-12 (.5cr)
>Forensic Biology -10-12 (.5cr)
>Intro to Biomedical Science -9-12 (.5cr)
>Medical Interventions 10-12 (.5cr)
>Physics of Nanotechnology 10-12 (.5cr)
>+Environmental Conservation 9-12 (.5cr)
>+STEM Senior Capstone 11-12 (.5cr)

ENGLISH

Applied English 9
English - 9
Advanced English - 9
Applied English -10
English - 10
*Advanced English – 10
Applied English 11
English - 11
*Advanced Junior English - 11
English - 12
*Advanced Senior English - 12
Reading Enrichment- 9-12(.5 EI cr)
+Reading for Success 9-12 (.5 EI cr)
Media Production I & II- 9-12 (.5 EI cr.)
Creative Writing- 9-12(.5 EI cr)
Intro to Theater – 9-12 (.5 EI cr)
Musical Theater Production - 9-12(.5 EI cr)
+S.A.T. Verbal Preparation - 11 (.25 EI cr)
English Enrichment -11 (.5 EI cr)
Language Arts Fundamentals 9-12(IEP)
Reading Fundamentals 9-12 (IEP.5-1. EI cr)

SOCIAL STUDIES

World History & Cultures – 9 (1 cr)
U.S. Government/Civics – 11 (.50cr)
Economics or Adv. Economics - 12 (.5cr)
Intro to Psychology - 10-12 (.5 EI cr)
Intro to Sociology - 10-12 (.5 EI cr)
Intro to Criminal Justice -10-12 (.5 EI cr)
Intro to Child Dev. Psych. - 10-12 (.5 EI cr)

FOREIGN LANGUAGE

Spanish I - 9-12

Spanish II - 10-12

*Spanish III - 11-12

*Spanish IV - 11-12

+Online World Languages – 9-12

HEALTH & PHYSICAL EDUC. (.5 cr.)

Boys/Girls Physical Education - 9

Physical Fitness 9-12

Recreational Activities 9-12

Team Sports 9-12

Aquatics/Water Sports -- 9-12

Health 10

>Intro to Public Health (.5cr)

Contemporary Health Issues (.50)

2 -Sport PE -- 9-12

+Drivers Education – 10-12

ECTS Health/PE 10, ECTS Physical Ed. 11

FAMILY & CONSUMER SCIENCES

Modern Living I - 9-10 (.5cr)

Mod. Liv. II/Peer Ed.- 10-12 (.5cr)

Culinary Essentials I & II- 10-12 (.5cr)

VOCATIONAL AGRICULTURE (1cr)

>Intro to Agricultural Science I - 9-12

>Environmental Science 11-12

>Principles of Agricultural Science –Plant 10-12

>Principles of Agricultural Science –Animal 10-12

>Horticulture 11-12

>Animal & Plant Biotechnology 11-12(.50cr)

>Agriculture Hydroponics 10-12(.50cr) Offered at Erie County Technical School 10-12(3yr)

>Agriculture Power & Technology 10-12(.50cr)

>Agricultural Marketing 11-12(.50cr)

Supervised Agricultural Experience I/II/III (SAE)10-12

BUSINESS / TECHNOLOGY

+ Computer Appl. I Career Study// 9-10 (.5 cr.)

+Computer App II/Futures 11-12 (.5cr.)

>Web Design/Futures 11-12 (.5cr)

>Computer Program/Coding - 10-12 (.5cr)

Yearbook- 9-12 (.5cr)

Accounting I & II (1cr)

>+Design, Market & Sell – 10-12(.5cr)

>+Cyber Security & Technology- 9-12

+Stock Market Fundamentals 10-12

+Marketing & Event Planning 10-12

+Community Service -.50 credit(Doc 60hrs)

Internship: Community Service, Work Exp. 12 (1, .5cr)

Elementary Intern/Mentorship -12(1, .5cr)

*RCI/Dual Enrolment Electives – 11-12

ART (.5 cr)

Drawing & Painting - 9-12

Arts & Crafts - 9-12

Ceramics - 9-12

Weaving & Fibers- 9-12

Stain Glass Design- 10-12

Jewelry Fabrication - 10-12

Graphic Design I & II 9-12

Digital Photography 10-12

+Conservation Photography 10-12

MUSIC (.5 cr.)

Marching Band - 9-12

Concert Band - 9-12

Guitar or Percussion Ensemble- 9-12

Jazz Band- 9-12

High School Chorus - 10-12

Musical Theater Production---9-12(Odd Years)

Music Composition & Performance-9-12

TECHNOLOGY & ENGINEERING

Home Maintenance/Repair- 9-12(.5 cr)

Manufacturing Tech 9-12 (.5 or 1cr)

Design Engineering I & II – 9-12(.5cr)

>Technology & Society - 9-12 (.5 cr.)

>Technological Design - 9-12 (.5 cr.)

>Advanced Design Applications 11-12 (.5 cr)

>+Design, Market & Sell – 10-12(.5cr)

>+Robotics I & II- 9-12(.50cr)

TECHNICAL TRAINING PROGRAMS (4cr)

ECTS Art & Design for Business

ECTS Auto Body Repair

ECTS Automotive Technology

ECTS Computer Programming

ECTS Construction Trades

ECTS Cosmetology

ECTS Culinary Arts & Foods Service

ECTS Drafting & Design

ECTS Early Childhood Education

ECTS Electrical Engineering

ECTS Electronics

ECTS Facility Maintenance Technologies

ECTS Graphic Communications

ECTS Health Assistant

ECTS Metal Fabrication

ECTS Precision Machining

ECTS Computer Networking 11-12(2yr)

ECTS Tourism-Hospitality Management 11-12(2yr)

ECTS Work Transition 10 – 12 (IEP)

UCHS Grading Structure

Grade	Percentage	Quality Points Regular Scale	QPA Weighted Scale
A+	98-100%	4.0	5.0
A	93-97%	3.75	4.75
A-	90-92%	3.50	4.50
B+	88-89%	3.25	4.25
B	83-87%	3.0	4.0
B-	80-82%	2.75	3.75
C+	78-79%	2.25	3.25
C	73-77%	2.0	3.0
C-	70-72%	1.75	2.75
D+	68-69%	1.25	2.25
D	63-67%	1.0	2.0
D-	60-62%	.75	1.75
F	59% & Below		

ADVANCED CLASSES AND WEIGHTED COURSES

The term “Advanced” is used to identify upper-level course offerings. Advanced course contents are especially demanding, requiring higher level thinking and greater homework. The following courses are weighted: **Physics, Anatomy & Physiology, Advanced Chemistry, Advanced Physics, Advanced English 10, Advanced Junior English, Advanced Senior English, Adv. Algebra II/III, Algebra III/Pre-Calculus, Pre-Calculus/Trigonometry, Trigonometry, Calculus, Spanish III & IV and RCI College/Dual Enrolment Courses.** The grading scale for these courses is based on **the 5 point weighted scale.** Enrolment in these courses requires an “A or B” grade for the prerequisite course or a recommendation made by the subject area teacher. Student enrolment into weighted courses is not limited, although guidelines must be met for admission into courses. However, **no more than twelve weighted courses taken at Union City High School and four RCI/Dual Enrollment courses (sixteen total classes) will be used to compute a student’s cumulative GPA using the weighted grading scale.**

Regional Choice Initiative (RCI)/Dual Enrollment Courses

Eligible students in grade 11, with Cum GPA of 3.5, and grade 12, with Cum GPA of 3.25, enrolled in College Prep Courses will have the opportunity to take *RCI/Dual Enrollment College Course Offerings. The college courses are recorded as 1.0 credit on the UCHS weighted scale and count as elective credit only. Course offerings vary each semester and are available through the High School Guidance Office to students meeting the eligibility requirements. **Students are required to pay reduced college tuition fees per course (approx \$400) and textbook costs for these courses.**

UCHS STEM ACADEMY

This rigorous academic program is designed to cultivate students’ interest, awareness, and abilities in the Science, Technology, Engineering & Mathematics areas. Students must meet specific eligibility requirements and submit an application for the Academy during the 4th quarter of Grades 8 or 9. Accepted students will be required to maintain a cumulative 3.40 GPA and complete a specific number of STEM courses based upon their career choice. Academy students who successfully complete this program will receive a STEM certificate and be recognized at graduation with a medallion.

COLLEGE VISITS AND JOB SHADOWING

As part of UCHS graduation requirements all students in grades 11 &12 must visit and document at least 2 colleges and/or college-career fairs. Students must also complete a job shadowing experience prior to graduation. Visits are excusable from school with documentation.

COLLEGE ENTRANCE REQUIREMENTS (Grades 9 - 12)

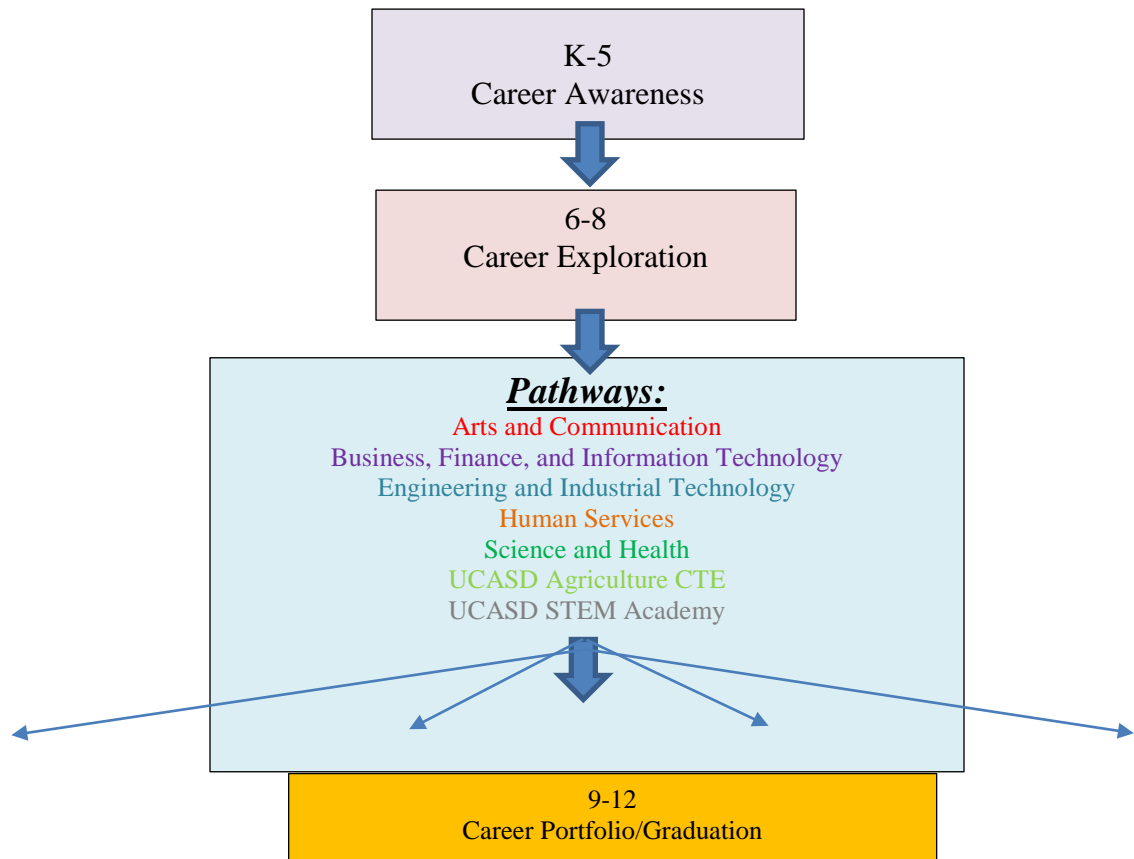
Graduation from high school does not necessarily qualify a student for admission to a college or professional school. Each student desiring admission to a college, university or professional school must select those subjects which meet the admission requirements of the school of their choice. Post-secondary schools have minimum GPA requirements and do not accept any courses with grades below 70%.

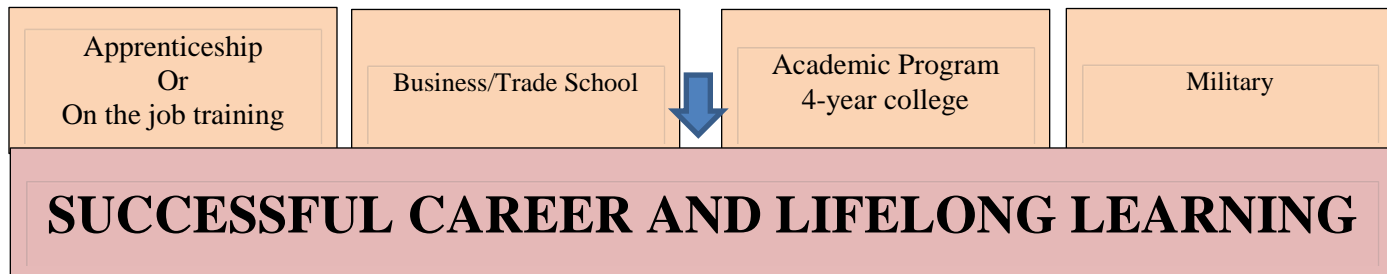
Although college entrance requirements vary among the different colleges and professional schools, a majority of schools require: English - 4 credits; Mathematics - 3 credits (Algebra I & II, and Geometry); Foreign Languages - 2 credits; (required in about fifty percent of the schools--recommended in three or four-year sequence); Social Studies - 3 credits; Science- 3 credits (includes biology and chemistry with lab). Elective subjects vary with different schools and the major course of study. Specific information can be obtained by reviewing the college or university catalogues or by consulting the guidance counselor. **Students should also complete 1-4 college entrance examinations, such as the SAT's (www.collegeboard.com) or ACT's (www.actstudent.org), during the spring of their junior year.** Registration information for these exams is also available in the high school guidance office.

CAREER PATHWAYS/RECOMMENDED COURSE SEQUENCE'S

Each career pathway or area of concentrated study identifies a sequence of courses that will prepare high school graduates for either post-secondary training or employment. Students will explore their interests and gather information about jobs and post-secondary training opportunities during several of their HS courses including Career & Futures Computer Courses, English 11 & 12, and in meetings with the Guidance Counselor. Students at UCHS are asked to select a career cluster pathway that is related to their interests. In each cluster area students will also have a choice of post-secondary track. **Once a student has identified a career pathway they must review the recommended courses and develop an individualized career plan (ICP) with their parents & counselors.**

CAREER PATHWAYS- UNION CITY AREA SCHOOL DISTRICT





Connecting Careers, Curriculum, and Character Education

What are Career Pathways?

Each pathway is a broad grouping of careers that share similar characteristics and whose employment requirements call for many common interests, strengths, and competencies. A chosen Pathway focuses on a student’s elective courses toward preparing for a specific goal area. Career pathways provide opportunities for students to explore similarly grouped career options. They also serve as an organizing tool for schools to help focus curriculum and bring relevance into the classroom.

Why should I choose a career pathway?

- To help focus on a career area that matches interests
- To help set goals and align classes necessary to achieve those goals
- To create career awareness
- To encourage planning for workforce or postsecondary education opportunities
- To provide knowledge that relates the high school experience to the world after graduation

How do I choose a career pathway?

- You will research various career fields in middle school
- You will take a Career Explorations course in tenth grade to help guide your decision-making process
- Your counselors, parents and teachers will assist you
- You will utilize various software tools to explore and research various careers



Career Readiness Indicator for the Future Ready PA Index and ESSA

Accountability: Guidelines for Evidence Collection, Monitoring, and Reporting

Pennsylvania Career Education and Work (CEW) Standards – In 2006, the Pennsylvania State Board of Education promulgated regulations (22 Pa. Code Chapter 4)16 establishing the state Academic Standards for Career Education and Work (CEW standards). These standards describe what students should know and be able to do at four grade levels (3, 5, 8 and 11) in four areas:

• Career Awareness and Preparation (Section 13.1); • Career Acquisition (Getting a Job) (Section 13.2); • Career Retention and Advancement (Section 13.3); and • Entrepreneurship (Section 13.4).¹⁷

The CEW standards are required education for all students enrolled in Pennsylvania public school entities. Through a comprehensive approach, the CEW standards complement all disciplines and other academic standards by identifying skills and competencies students need to become “career ready.” These skills are identified in the standards.

In designing the Career Readiness Indicator, the Department prioritized simplicity, opting for a “yes/no” collection method that captures whether a student has successfully completed standards-aligned activities by grades 5, 8, and 11. As a grade span measure, the Career Readiness Indicator is meant to evaluate how students are engaging in activities and tasks, aligned to CEW standards, which will create a strong foundation of skills, knowledge, and experiences that position them for postsecondary success. Recognizing that career awareness, exploration, and preparation activities should be developed and sustained throughout the continuum of a student’s K-12 education, the Department recommends that school entities consider students’ annual progress towards meeting the grade-level benchmarks for grades 5, 8, and 11, as described below.

Initial implementation of this new measure will take place in 2017-18, with full implementation to follow in 2018-19. This means that during the first year of implementation, school entities will be expected to demonstrate that students who are identified as meeting criteria have at least two pieces of evidence accumulated as of that year. In the second year of implementation and beyond, school entities must demonstrate that students have fully met the criteria defined for each grade span.

School entities should use the following criteria when identifying which students meet the grade-level benchmarks aligned to the CEW standards. Examples of evidence are listed in the appendices. It is important to note that not all students must have the same pieces of evidence; instead, the evidence should be individualized to meet the needs of students’ interests and Career Readiness Indicator for the Future Ready PA Index and ESSA Accountability: Guidelines for Evidence Collection, Monitoring, and Reporting to Pennsylvania Department of Education

- By the end of grade 5, the student has produced six or more pieces of evidence, or at least two pieces of evidence accumulated by the end of grade 3, and at least two pieces of evidence each year in grade 4 and grade 5. Evidence shall be collected in a manner that validates that all four strands of the CEW standards have been meaningfully addressed.

- By the end grade 8, the student has a career portfolio containing the K-5 grade band evidence and an additional six pieces of evidence, or at least two pieces of additional evidence in each of the following: grade 6, grade 7, grade 8. Evidence shall be collected in a manner that validates that all four strands of the CEW standards have been meaningfully addressed. One of the pieces of evidence for the 6-8 grade band must be the student’s individualized career plan

- By the end of grade 11, the student has a career portfolio containing both the K-5 and 6-8 grade band evidence, and an additional eight pieces of evidence, or at least two pieces of evidence each year, collected in the 9-11 grade band that validates all four strands of the CEW standards have been meaningfully addressed. At least two of these pieces of evidence for the 9-11 grade band must demonstrate implementation of the student’s individualized career plan

School entities are expected to implement and evaluate all activities counted towards the Career Readiness Indicator with fidelity and rigor, as demonstrated by alignment to CEW standards, demonstration of meaningful engagement in activities that will increase the likelihood of postsecondary success, and/or connection to a student’s broader interests, skills, and goals (i.e., personalized learning). Recognizing that these activities should also be aligned to opportunities and needs of communities and regions, and tailored to a student’s personal interests and goals, the Department encourages school entities to provide a variety of standards-aligned programs and activities for students to promote career awareness, preparation, readiness, and entrepreneurship.

The Department also strongly encourages school entities to partner with their local workforce development boards, chambers of commerce, advisory councils, business and industry, postsecondary institutions, and other community partners in providing these personalized experiences that are connected to local, regional, and state workforce needs. These efforts should also be informed by an analysis of regional and statewide workforce data, including current and future projected openings and skills needs.

As a federal accountability measure, the Career Readiness Indicator is factored into determinations for annual meaningful differentiation of schools. The Department will use Career Readiness Indicator data collected during the 2017-18 school year as part of calculations for annual meaningful differentiation; identification of schools for Comprehensive Support and Improvement (CSI) will take place in fall 2018, and every three years following. Further identification of schools in need of Targeted Support and Improvement (TSI) will take place in fall 2019 based on subgroup performance. (For more information regarding Pennsylvania’s proposed system of statewide accountability under ESSA, please see Pennsylvania’s Consolidated State Plan, available on PDE’s ESSA webpage.)

THE 5 PATHWAY OPTIONS
STUDENTS ARE ASKED TO SELECT ONE CAREER PATHWAY:



ARTS AND COMMUNICATIONS (AC)

Designed to cultivate students' awareness, interpretation, application and production of visual, verbal and written work.

Cluster Areas:

- **Performing Arts (PA)**
- **Visual Arts (VA)**
- **Publishing Arts (PU)**



BUSINESS, FINANCE AND INFORMATION TECHNOLOGY (BFIT) *Designed to prepare students for careers in the world of business, finance and information services.*

Cluster Areas:

- **Marketing, Sales and Service (MS)**
- **Finance (F)**
- **Business Management (BM)**



ENGINEERING AND INDUSTRIAL TECHNOLOGY (EIT)

Designed to cultivate students' interests, awareness and application to areas related to technologies necessary to design, develop, install or maintain physical systems.

Cluster Areas:

- **Construction and Architecture (CA)**
- **Manufacturing (M)**
- **Engineering and Engineering Technology (ET)**
- **Transportation, Distribution and Logistics (TDL)**



HUMAN SERVICES (HS)

Designed to cultivate students' interests, skills and experience for employment in careers related to familiar and human needs.

Cluster Areas:

- **Counseling and Personal Care (CPC)**
- **Education (E)**
- **Law, Public Safety and Government (PU)**
- **Hospitality and Tourism (HT)**



SCIENCE AND HEALTH (SH)

Designed to cultivate students' interests in the life, physical and behavioral sciences. In addition, the planning, managing and providing of therapeutic services, diagnostic services, health information and biochemistry research development.

Cluster Areas:

- **Health Science (HS)**
- **Agriculture, Food and Natural Resources (AFN)**
- **Science, Technology, Engineering and Math (STEM)**

STEM & AGRICULTURE Sub-pathways fall under the SCIENCE & HEALTH PATHWAY



STEM ACADEMY(Science, Technology, Engineering, Mathematics) This rigorous academic program is designed to cultivate students’ interests, awareness and application to careers related to physical and behavioral sciences. It includes planning, managing, and providing scientific research and technical services as related to Biology, Chemistry, Physics, Mathematics and Engineering. It also includes careers in therapeutic services, diagnostic services, health information, and biochemistry research, including laboratory and testing services and research and development.

- Career Cluster Areas:**
- Health Science(HS)
 - Agriculture, Food and Natural Resources(AFN)
 - Science, Technology, Engineering, and Math (STEM)
 - Construction & Architecture (CA)
 - Manufacturing (M)
 - Engineering & Engineering Technology (ET)
 - Transportation, Distribution, and Logistics (TDL)
 - Finance (F)



AGRICULTURE CAREER TECHNICAL EDUCATION PATHWAY UCASD (AE) Designed to cultivate students’ interests, skills and experiences for employment in the wide variety of careers in agriculture.

- Cluster Areas:**
Agriculture, Food and Natural Resources

Arts and Communications (AC) Pathway

This Pathway is designed to cultivate students’ awareness, interpretation, application, and production of visual, verbal, and written work.

Are you interested in...	Can you...	Do you enjoy...
<ul style="list-style-type: none"> News reporting and writing Interviewing and reviewing Multi-media productions Acting Radio, TV, Film, Video Performing in a band or chorus Attending concerts Drawing, painting Artwork 	<ul style="list-style-type: none"> Sing Play an instrument Be creative Act Articulate clearly Write and conduct interviews Meet deadlines Sell Draw Sculpt 	<ul style="list-style-type: none"> Writing Making videos Working with film props Seeking creative ideas Working with sound effects Performing in front of an audience Working with computers

If you answered “yes” to many of these questions, you might consider a future in one of the sample occupations listed below.

SAMPLE CAREERS

Entry	Technical/Skilled	Professional (4+ college)
<ul style="list-style-type: none"> Model Radio operator Stage hand Stunt performer Announcer Dancer Film loader Photographer Floral designer Florist Sound technician TV, Video, and movies 	<ul style="list-style-type: none"> Actor Illustrator Choreographer Dancer Disc jockey Musician Animator Artist Broadway technician Fashion designer Jeweler Make-up artist 	<ul style="list-style-type: none"> Art or music teacher Cinematographer Composer Film editor Multi-media artist Music critic Music director News broadcaster Producer and director Editor Curator Advertising creator

<ul style="list-style-type: none"> • Desktop publisher • Copy person • Newsroom worker 	<ul style="list-style-type: none"> • Recording Engineer • Video manager • Computer graphic artist • Web designer • Desktop publisher 	<ul style="list-style-type: none"> • Art director • Interior designer • Fashion designer • Industrial designer • Copy writer • News writer • Telecommunications • Writer
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ARTS and HUMANITIES CAREER PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced, Academic or Applied	English 11, Advanced, Academic or Applies	English 12, Advanced, Academic or Applies
World Cultures		Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I	Physics I, Chemistry I, Chemistry II	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry II
Algebra I, Geometry, Integrated Math A & B	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, PreCalc and Trig, Trig, Geometry, Accounting, CTE Math beginning in 2017-2018	Calc I, PreCalc and Trig, Accounting I or II, Consumer Math, CTE Math beginning in 2017-2018, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			
Electives (3 credits)	Electives (4 credits)	Electives (4 credits)	Electives (4 credits)
Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language
Media I	Media I	Media I	Media I
	Media II	Media II	Media II
Graphic Design I	Graphic Design I	Graphic Design I	Graphic Design I
	Graphic Design II	Graphic Design II	Graphic Design II
	Digital Photography	Digital Photography	Digital Photography
Marching Band	Marching Band	Marching Band	Marching Band
Concert Band	Concert Band	Concert Band	Concert Band
Guitar	Guitar	Guitar	Guitar
Percussion Ensemble	Percussion Ensemble	Percussion Ensemble	Percussion Ensemble
Jazz Band	Jazz Band	Jazz Band	Jazz Band
High School Chorus	High School Chorus	High School Chorus	High School Chorus
Intro to Theater	Intro to Theater	Intro to Theater	Intro to Theater
Musical Production	Musical Production	Musical Production	Musical Production

Drawing and Painting I	Drawing and Painting I	Drawing and Painting I	Drawing and Painting I
	Drawing and Painting II	Drawing and Painting II	Drawing and Painting II
Arts and Crafts	Arts and Crafts	Arts and Crafts	Arts and Crafts
Weaving and Fibers	Weaving and Fibers	Weaving and Fibers	Weaving and Fibers
Ceramics	Ceramics	Ceramics	Ceramics
	Jewelry Fabrication	Jewelry Fabrication	Jewelry Fabrication
	Stained Glass Design	Stained Glass Design	Stained Glass Design
Reading for Success	Reading for Success	Reading for Success	Reading for Success
Creative Writing	Creative Writing	Creative Writing	Creative Writing
	Conservation Photography	Conservation Photography	Conservation Photography
Erie County Technical School			
	Graphic Communications 10	Art and Design for Business 11	Graphic Communications 12
	Art and Design for Business 10		Art and Design for Business 12

Business, Finance, and Information Technology (BFIT) Pathway

This Pathway is designed to prepare students in the world of business, finance, and information services.

Are you interested in...	Can you...	Do you enjoy...
<ul style="list-style-type: none"> • A business environment • Office management • Sales • Computers and technology • Presentations to groups • Telecommunications • Advertising • Different work sites • Record keeping 	<ul style="list-style-type: none"> • Work easily with others • Organize your time • Work with statistics • Use computers and other technology • Pay attention to details • Solve problems • Work independently • Show initiative • Work on a team 	<ul style="list-style-type: none"> • Meeting with groups • Making budgets • Organizing a project • Planning an event • Working with technology • Selling products and services • Processing numbers • Preparing financial reports • Following directions • Learning new software programs

If you answered “yes” to many of these questions, you might consider a future in one of the sample occupations listed below.

SAMPLE CAREERS

Entry	Technical/Skilled	Professional (4+ college)
<ul style="list-style-type: none"> • Customer service • Representative • Shipping and receiving clerk • Telemarketer • Advertising sales agent • Bank teller • Cashier • Payroll clerk • Title searcher • Computer operator • Accounts payable manager • Administrative assistant • Data entry • Retail sales clerk • Secretary • Account executive 	<ul style="list-style-type: none"> • Computer salesperson • Graph designer • Retail technician • Bank collection officer • Claims adjuster • Legal secretary • Tax preparer • Paralegal • Computer support specialist • Software engineer • Computer programmer • Production support analyst • Desktop publisher • Media secretary • Real estate agent • Restaurant manager • Sales representative 	<ul style="list-style-type: none"> • Marketing manager • Certified public accountant • Economist • Financial manager • E-commerce analyst • Securities sales representative • Systems software engineer • Systems analysis • Hospital administrator • Human resources • Manager • Chief executive officer • Manufacturing sales • Representative • Business analysts • Project manager • Sports and entertainment agent • Actuary

BUSINESS, FINANCE, and INFORMATION TECHNOLOGY CAREER PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced, Academic or Applied	English 11 Advanced, Academic or Applied	English 12 Advanced, Academic or Applied
World Cultures	World Cultures	Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I	Physics I, Chemistry I, Chemistry II	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry II
Algebra I, Geometry, Algebra IA	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, Pre-Calculus and Trig, Trig, Geometry, Accounting, CTE Math beginning in 2017-2018	Calculus I, Pre-Calculus and Trig, Accounting I or II, Consumer Math, CTE Math beginning in 2017-2018, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			
Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language

Media I	Media I	Media I	Media I
	Media II	Media II	Media II
	Accounting I	Accounting I	Accounting I
	Accounting II	Accounting II	Accounting II
	Design, Market, and Sell	Design, Market, and Sell	Design, Market, and Sell
	Computer Programming	Computer Programming	Computer Programming
		Computer Applications II	Computer Applications II
			Website Design
			Senior Internship
Stock Market Fundamentals	Stock Market Fundamentals	Stock Market Fundamentals	Stock Market Fundamentals
International Business and Culture	International Business and Culture	International Business and Culture	International Business and Culture
Marketing and Event Planning	Marketing and Event Planning	Marketing and Event Planning	Marketing and Event Planning
Erie County Technical School			
	Electronics 10	Electronics 11	Electronics 12
	Computer Programming 10	Computer Programming 11	Computer Programming 12
	Art and Design for Business 10	Art and Design for Business 11	Art and Design for Business 12
		Computer Networking	Computer Networking
	Graphic Communications 10	Graphic Communications 11	Graphic Communications 12

Engineering and Industrial Technology (EIT) Pathway

This Pathway is designed to cultivate students' interest, awareness and application to careers related to technologies necessary to design, develop, install, and maintain physical systems.

Are you interested in...	Can you...	Do you enjoy...
<ul style="list-style-type: none"> • Building and construction • Tools, equipment and materials • Woodworking • Math and science classes • Fitness and sports • Precision work • Design and architecture • Engineering • Computer technology • Production management • How things work 	<ul style="list-style-type: none"> • Apply science and math to the real world • Read and understand directions • Solve problems • Understand and read maps • Organize reports and people • See a task through to completion • Use a computer 	<ul style="list-style-type: none"> • Travel • Working with your hands • Designing/working with projects, models, and prototypes • Working in a lab • Working on a team • Operating tools and equipment • Paying close attention to detail

If you answered "yes" to many of these questions, you might consider a future in one of the sample occupations listed below.

SAMPLE CAREERS

Entry	Technical/Skilled	Professional (4+ college)
<ul style="list-style-type: none"> • Carpet installer • Drywall worker • Roofer • Machine operator • Industrial machine mechanic • Baggage handler • Dock worker • Freight handler • Laborer • Warehouse worker 	<ul style="list-style-type: none"> • Grader and dozer operator • Electrical technician • Metal engineering technician • Supervisor • Welder • Civil engineering technician • Robotics technician • CAD/CAM technician • Laser technician • Auto mechanic • Air traffic controller • Auto body repair • Bus driver • Diesel mechanic • Dispatch • Motorcycle mechanic • Taxi driver • Truck driver • Truck terminal manager • Production and operating worker 	<ul style="list-style-type: none"> • Construction manager • Cost estimator • Industrial production manager • Purchasing agent • Astronaut • Nuclear engineer • Petroleum engineer • NASA scientist • Chemical engineer • Technical writer • Architect • Civil engineering • Industrial engineering • Mechanical engineering • Aeronautical engineer • Aerospace engineer • Airline pilot • Transportation engineer • Navigator
Apprenticeships		
<ul style="list-style-type: none"> • Brick mason • Carpenter • Electrician • HVAC • Plumber • Machinist • Surveyor • Diesel Mechanic 		

ENGINEERING and INDUSTRIAL TECHNOLOGY CAREER PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced, Academic or Applied	English 11 Advanced or Academic	English 11 Advanced or Academic
World Cultures		Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I	Physics I, Chemistry I, Chemistry II	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry II
Algebra I, Geometry, Integrated Math A & B	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, PreCalc and Trig, Trig, Geometry, Accounting, CTE Math beginning in 2017-2018	Calc I, PreCalc and Trig, Accounting I or II, Consumer Math, CTE Math beginning in 2017-2018, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			
Electives (3 credits)	Electives (4 credits)	Electives (4 credits)	Electives (4 credits)

Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language
Design Engineering I	Design Engineering I or II	Design Engineering I, II or III	Design Engineering I, II, III, or IV
Foundations of Technology, Technology and Society	Foundations of Technology, Technology and Society	Technological Design, Advanced Design Applications, Advanced Technological Design	Technological Design, Advanced Design Applications, Advanced Technological Design
			Senior Capstone STEM Academy Project
Media Production I	Media Production I or II		
	Physics of Power Technology	Physics of Power Technology	Physics of Power Technology
	Physics in the Design World	Physics in the Design World	Physics in the Design World
	Introduction to Nanotechnology	Introduction to Nanotechnology	Introduction to Nanotechnology
	Electrical Power and Generation	Electrical Power and Generation	Electrical Power and Generation
Home Maintenance and Repair	Home Maintenance and Repair	Home Maintenance and Repair	Home Maintenance and Repair
Manufacturing Technology	Manufacturing Technology	Manufacturing Technology	Manufacturing Technology
Design, Market and Sell	Design, Market and Sell	Design, Market and Sell	Design, Market and Sell
		Web Page Design	Web Page Design
Erie County Technical School			
	Drafting and Design 10	Drafting and Design 11	Drafting and Design 12
	Metal Fabrication 10	Metal Fabrication 11	Metal Fabrication 12
	Automotive Body 10	Automotive Body 11	Automotive Body 12
	Construction Trades 10	Construction Trades 11	Construction Trades 12
	Electrical Engineering 10	Electrical Engineering 11	Electrical Engineering 12
	Facilities Maintenance 10	Facilities Maintenance 11	Facilities Maintenance 12
	Electronics 10	Electronics 11	Electronics 12
	Precision Machining 10	Precision Machining 11	Precision Machining 12
	Automotive Technology 10	Automotive Technology 11	Automotive Technology 12

Science and Health (SH) Pathway

This Pathway is designed to cultivate students' interests in the life, physical and behavioral sciences. In addition, it involves and planning, managing and producing of therapeutic services, diagnostic services, health information and biochemistry research and development. Many of the careers involved with the food, fiber, environmental and natural resource systems fall under this pathway.

Are you interested in...	Can you...	Do you enjoy...
<ul style="list-style-type: none"> • Health care environment • Science and medicine • Medical research • Food production • Environment and conservation • Pharmacy • Animals • Physical therapy • Sports and fitness • Information systems • Radiology 	<ul style="list-style-type: none"> • Pay attention to detail • Use a computer and technology • Work in a lab setting or medical facility • Apply scientific theory to real life problems • Work outdoors around animals and plants • Collect and analyze data from experiments • Work with people in need • Work with science and math theories 	<ul style="list-style-type: none"> • Diagnosing and caring for sick animals • Working outdoors with wildlife • Working on cutting edge scientific research • Working on a team • Medical lab research • Making a contribution to society • Working with numbers • Developing conclusions from a database

If you answered "yes" to many of these questions, you might consider a future in one of the sample occupations listed below.

SAMPLE CAREERS

Entry	Technical/Skilled	Professional (4+ college)
<ul style="list-style-type: none"> • Hospital worker • Patient care technician • Dialysis technician • EEG technician • Home health aide • Nurse's aide, orderlies • Pharmacy technician • Physical therapy aide • Animal caretaker • Breeder • Extension service worker • Wildlife reserve worker • Optician • Data Entry • Farmer 	<ul style="list-style-type: none"> • Certified nursing assistant • Dental hygienist • Emergency medical technician • Licensed practice nurse • Medical lab technician • Personal trainer • Radiological technician • Respiratory therapist • Dental lab technician • Fish and game worker • Forest conversationalist • GPS technician • Surveyor • Veterinary Technician 	<ul style="list-style-type: none"> • Athletic trainer • Speech/Language pathologist • Dietician • Physician assistant • Medical examiner • Pharmacist • Physician • Registered nurse • Marine biologist • Soil conversationalist • Veterinarian • Chemist • Environmental scientist • Zoologist • Nuclear engineer

SCIENCE and HEALTH CAREER PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced, Academic or Applied	English 11 Advanced or Academic	English 12 Advanced or Academic
World Cultures		Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I	Physics I, Chemistry I, Chemistry II	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry

			II
Algebra I, Geometry, Integrated Math A & B	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, PreCalc and Trig, Trig, Geometry, Accounting, CTE Math	Calc I, PreCalc and Trig, Accounting I or II, Consumer Math, CTE Math, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			
Electives (3 credits)	Electives (4 credits)	Electives (4 credits)	Electives (4 credits)
Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language
Introduction to Anatomy of Sports Medicine	Introduction to Anatomy of Sports Medicine	Introduction to Anatomy of Sports Medicine	Introduction to Anatomy of Sports Medicine
Introduction to Biomedical Technology	Introduction to Biomedical Technology	Introduction to Biomedical Technology	Introduction to Biomedical Technology
	Forensic Biology	Forensic Biology	Forensic Biology
		Medical Interventions	Medical Interventions
		Introduction to Public Health	Introduction to Public Health
		Contemporary Issues in Health	Contemporary Issues in Health
Erie County Technical School			
	Health Assistant 10	Health Assistant 11	Health Assistant 12
Union City Career Technical Program			
General Agriculture 9	General Agriculture 10	General Agriculture 11	General Agriculture 12

Human Services (HS) Pathway

This Pathway is designed to cultivate students' interests, skills, and experiences for employment in careers related to family and human needs.

Are you interested in...	Can you...	Do you enjoy...
<ul style="list-style-type: none"> • Working with people • Owning your own business • Aging adults • Child development • Family and social services • Food preparation 	<ul style="list-style-type: none"> • Organize well • Plan and direct programs • Be creative • Communicate well • Assume leadership roles • Work with a team 	<ul style="list-style-type: none"> • Communication services • Helping and protecting others • Working with people • Counseling and advising people • Serving other's needs • Interviewing people

<ul style="list-style-type: none"> • Teaching • Counseling 	<ul style="list-style-type: none"> • Be conscientious and dependable • Plan budgets 	<ul style="list-style-type: none"> • Selling products or services • Handling customer complaints • Human problems
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If you answered “yes” to many of these questions, you might consider a future in one of the sample occupations listed below.

SAMPLE CAREERS

Entry	Technical/Skilled	Professional (4+ college)
<ul style="list-style-type: none"> • Child care worker • Cosmetic representative • Dry cleaning operator • Home health aide • Library assistant • Teacher’s assistant • Postal services worker • Security guard • Utility worker • Aerobics instructor • Waitress • Baker • Travel agent 	<ul style="list-style-type: none"> • Barber • Cosmetologist • Fashion designer • Manicurist • Massage therapist • Mortician • Truck driver • Personal trainer • Teacher’s aide • Firefighter • Postmaster • Police officer • Flight attendant • Chef 	<ul style="list-style-type: none"> • Funeral director • Therapist • Counselor • Professor • Principal • Teacher • Criminologist • FBI agent • Lawyer • Police officer • Park ranger • Executive chef • Food services manager • Hotel/motel management

HUMAN SERVICES CAREER PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced, Academic or Applied	English 11, Advanced, Academic or Applied	English 12, Advanced, Academic or Applied
World Cultures		Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I	Physics I, Chemistry I, Chemistry II	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry II
Algebra I, Geometry, Integrated Math A & B	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, PreCalc and Trig, Trig, Geometry, Accounting, CTE Math beginning in 2017-2018	Calc I, PreCalc and Trig, Accounting I or II, Consumer Math, CTE Math beginning in 2017-2018, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			

Electives (3 credits)	Electives (4 credits)	Electives (4 credits)	Electives (4 credits)
Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language
Media I	Psychology	Psychology	Psychology
	Sociology	Sociology	Sociology
	Modern Living II	Modern Living II	Modern Living II
	Child Psychology	Child Psychology	Child Psychology
	Culinary Essentials I	Culinary Essentials I	Culinary Essentials I
		Forensic Biology	Forensic Biology
		Intro to Criminal Justice	Intro to Criminal Justice
	Intro to Public Health	Intro to Public Health	Intro to Public Health
		Contemporary Issues in Health	Contemporary Issues in Health
		Intro to Archaeology	Intro to Archaeology
			Senior Internship
Erie County Technical School			
	Cosmetology 10	Cosmetology 11	Cosmetology 12
	Culinary Arts 10	Culinary Arts 11	Culinary Arts 12
	Early Childhood Education 10	Early Childhood Education 11	Early Childhood Education 12
	Tourism and Hospitality Mgmt 10	Tourism and Hospitality Mgmt 11	Tourism and Hospitality Mgmt 12

STEM ACADEMY

This PATHWAY is designed to cultivate students' interests, awareness and application as related to STEM (science, technology, engineering, and mathematics) careers.

Students who desire may apply for admission to the STEM Academy during the 4th quarter of their 8th or 9th grade year provided they meet the admissions requirements. Students accepted into the program will have specific courses that are required dependent upon their career choice. Students who are not part of the STEM Academy are still permitted to participate in most of the elective courses, provided pre-requisite course requirements are satisfied.

STEM ACADEMY CAREER PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced or Academic	American Lit, British Lit, Technical Writing, English in the Business World	

US History Post Reconstruction	World Cultures	Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I	Physics I, Chemistry I, Chemistry II	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry II
Algebra I, Geometry,	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, Pre-Calculus and Trig, Trig, Geometry, Accounting, CTE Math	Calculus I, Pre-Calculus and Trig, Accounting I or II, Consumer Math, CTE Math, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			
Electives (3 credits)	Electives (4 credits)	Electives (4 credits)	Electives (4 credits)
Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language
Introduction to Anatomy of Sports Medicine	Introduction to Anatomy of Sports Medicine	Introduction to Anatomy of Sports Medicine	Introduction to Anatomy of Sports Medicine
Introduction to Biomedical Technology	Introduction to Biomedical Technology	Introduction to Biomedical Technology	Introduction to Biomedical Technology
	Forensic Biology	Forensic Biology	Forensic Biology
		Medical Interventions	Medical Interventions
		Introduction to Public Health	Introduction to Public Health
		Contemporary Issues in Health	Contemporary Issues in Health
			Human Biology
	Accounting I	Accounting I	Accounting I
		Accounting II	Accounting II
	Design, Market, Sell	Design, Market, Sell	Design, Market, Sell
	Computer Prog/Coding	Computer Prog/Coding	Computer Prog/Coding
			Website Design
		Work Study	Work Study
			Internship
Home Maintenance and Repair	Home Maintenance and Repair	Home Maintenance and Repair	Home Maintenance and Repair
Manufacturing Technology	Manufacturing Technology	Manufacturing Technology	Manufacturing Technology
Design Engineering I	Design Engineering I	Design Engineering I	Design Engineering I
	Design Engineering II	Design Engineering II	Design Engineering II

		Design Engineering III	Design Engineering III
			Design Engineering IV
Power Technology	Power Technology	Power Technology	Power Technology
	Introduction to Nanotechnology	Introduction to Nanotechnology	Introduction to Nanotechnology
Foundations of Technology	Electrical Power and Generation	Electrical Power and Generation	Senior Capstone Project
Technology and Society	Technological Design	Physics in the Design World	Advanced Technological Design
		Advanced Design Applications	Advanced Design Applications
		Science Project Design	Science Project Design
Introduction to Agriculture, Food, and Natural Resources	Principles of Agricultural Science - Plant	Principles of Agricultural Science - Plant	Agriculture Marketing
Principles of Agricultural Science - Animal	Principles of Agricultural Science - Animal	Animal and Plant Biotechnology	Animal and Plant Biotechnology
	Agricultural Power and Technology	Agricultural Leadership	Agricultural Leadership
	Horticulture	Horticulture	Horticulture
	Hydroponics/Aquaponics	Hydroponics/Aquaponics	Hydroponics/Aquaponics
	Supervised Agricultural Experience I	Supervised Agricultural Experience II	Supervised Agricultural Experience III
Stock Market Basics	Stock Market Basics	Stock Market Basics	Stock Market Basics
Marketing/Event Planning	Marketing/Event Planning	Marketing/Event Planning	Marketing/Event Planning
International Business and Culture	International Business and Culture	International Business and Culture	International Business and Culture
	Environmental Engineering	Environmental Engineering	Environmental Engineering
	Conservation Photography	Conservation Photography	Conservation Photography
Introduction to Robotics	Introduction to Robotics	Introduction to Robotics	Introduction to Robotics
	Cyber Security and Technology	Cyber Security and Technology	Cyber Security and Technology
Erie County Technical School			
	Health Assistant 10	Health Assistant 11	Health Assistant 12
Union City Career Technical Program			
General Agriculture 9	General Agriculture 10	General Agriculture 11	General Agriculture 12

AGRICULTURE CAREER TECHNICAL PATHWAY UCASD

9th	10th	11th	12th
English 9, Advanced or Academic	English 10 Advanced, Academic or Applied	English 11, Advanced, Academic or Applied	English 12, Advanced, Academic or Applied
World Cultures		Civics and Government	Economics Advanced or Regular
Biology, Physical Science, Ecology	Biology - Academic or Applied, Chemistry I, Agriculture Education - Plant	Physics I, Chemistry I, Chemistry II, Agriculture Education - Plant	Advanced Physics, Anatomy and Physiology, Environmental Science, Chemistry I, Chemistry II
Algebra I, Geometry, Integrated Math A & B	Algebra I, Algebra II, Geometry, Algebra IB, Advanced Algebra II/III	Algebra III, PreCalc and Trig, Trig, Geometry, Accounting, CTE Math	Calc I, PreCalc and Trig, Accounting I or II, Consumer Math, CTE Math, Computer Science
PE	Health 10		Contemporary Issues in Health/Public Health
Computer I/Career		Computer II/Careers	
Modern Living (FCS)			
Technical/Electives			
Spanish I/Other World Language	Spanish I or II/Other World Language	Spanish I or II or III/ Other World Language	Spanish I or II or III or IV, Other World Language
Introduction to Agriculture, Food and Natural Resources	Principles of Agricultural Science - Plant	Animal and Plant Biotechnology	Science Project Design
Principles of Agricultural Science - Animal	Principles of Agricultural Science - Animal	Agriculture Leadership	Agricultural Marketing
	Agricultural Power and Technology	Supervised Agriculture Experience II	Supervised Agriculture Experience III
	Hydroponics		
	Supervised Agriculture Experience I		
Design, Market, and Sell	Design, Market, and Sell	Design, Market, and Sell	Design, Market, and Sell
	Environmental Engineering	Environmental Engineering	Environmental Engineering

Union City High School Personalized Learning (PL)

PERSONALIZED LEARNING PROGRAMS: Students have the opportunity to learn in an expanded educational environment which promotes them to take more ownership of their learning as they grow and mature. The goal is for students to become more committed to their learning because they find it challenging, interesting, and meaningful. Additionally, this program focuses on the development of problem solving and soft skills in an effort to increase learner's critical thinking skills. Union City High School believes that the communication process is essential to the success of this program. It is important for students, parents, and educational staff to understand their roles and responsibilities in this learning process in order for it to be effective. Personalized learning may take the form of **online classes, dual enrollment college courses, independent study courses, blended-hybrid courses**. Specifically UCHS plans to offer some of the following options: **Traditional Classes, Online Classes, Project Based Learning Courses, and Blended Hybrid Learning Courses**.

Traditional Courses- are those that **meet face to face every scheduled day**. Descriptions are found in 2017-18 UCHS Course Selection Book. Use Power School Online to register for these courses and then return paper copy of course requests including parents signature.

Project Based Learning - The courses will also focus on assessing learners through the use of projects to demonstrate mastery of the required skills and content. Courses will have **interconnected curriculums** that allow for learner voice and choice in the **development of their projects**. These courses promote learners to gain knowledge and skills by working for a period of time to investigate and respond to a complex question, problem, or challenge. These courses may meet in a variety of timeframes, including alternating days or flexible times.

+STEM Senior Capstone; _____
+Environmental Conservation; _____
+Physics in the Design World; _____
+Conservation Photography; _____

+Design Market & Sell; _____
+Physics of Power Technology; _____
+Introduction to Robotics; _____

Blended-Hybrid or Cyber Learning - These courses combine or mix of modes of instruction and learning using online technology and physical face-to-face interaction. This can be seen in a course that has face-to-face learning designed for specific days and other days/times are for on-line components to be worked on inside or outside of the physical classroom. These courses have course platforms which can allow students to complete them as "Independent Study Courses".

+ Drivers Education; _____ + Computer/Career I; _____ + Computer II/Futures; _____
+ Reading for Success; _____ +Cyber Security & Technology; _____ + SAT Prep; _____
+UC CYBER- using Educere Personal Learning Courses; _____

Seminar Classes: Seminar courses seek to expand student learning in a variety of academic areas extending to unique and interesting topics that may not typically be offered due to scheduling constraints or enrollment numbers. These courses will be **teacher led** and will help to broaden student perspective and further develop concepts and skills beyond the traditional course offerings. These courses may meet in a variety of timeframes, including alternating days or flexible times.

+Stock Market Basics; _____ +International Business & Culture; _____

+Marketing/Event Planning; _____

Before scheduling it is important to check course descriptions, pre-requisites, and other requirements.

Pre-requisites--Certain courses at Union City Middle/High School have prerequisites. Subjects I, II, III, IV sequence imply increasing difficulty and must be taken in order. Some courses require students to have successfully completed a specific previous course with at least an "A, B or C" average or require the recommendation of a teacher.

COURSE DESCRIPTIONS

*****THE DISTRICT RESERVES THE RIGHT TO DELETE OR ALTER ANY COURSE OFFERINGS BECAUSE OF: CHANGES IN INTEREST, ENROLLMENT OR OTHER UNFORESEEN FACTORS.**

ART

ARTS & CRAFTS- Grades 9-12(.50 cr) This class will explore the planning and making of a variety of craft items. Each student will develop his/her skills and manual dexterity in the use of tools and materials by making a variety of useful and functional crafts. Exposure in the class will be from different ages and cultures around the world. A variety of three-dimensional lessons will be explored through crafts such as weaving, basketry, sculpture, and paper Mache.

DRAWING & PAINTING Grades 9-12 (.50 cr) The course is built around a series of problems designed to enhance drawing and painting ability by developing skills in shading, color mixing, and perspective. The content of this class is to provide varied drawing & painting, experiences using a variety of different media. Emphasis is placed on the ability to observe, distinguish and relate to spatial relationships. The student will become familiar with important Artists and movements in art history. Students will learn matting and presentation of finished artwork. The class will include on site drawings outdoors as well as the continued study and rendering of Union City's historic buildings.

CERAMICS Grades 9-12 (.50 cr) This class will explore the making of aesthetic and utilitarian articles from fired clay. Each student will learn to manipulate clay in a variety of hand-building and wheel-thrown techniques. They will expand their own artistic expression through glazing and firing of their product. The class will study the history and decoration of pottery around the world.

JEWELRY FABRICATION Grades 11-12(.50 cr) Students will explore jewellery design and fabrication using silver, copper and brass. Students will plan and create their own jewellery pieces and develop skills and manual dexterity in the use of tools and materials They will learn sawing, soldering, stone setting and polishing in the creation of wearable art. Lab Fee \$20 min.

STAIN GLASS DESIGN Grades 10-12(.50 cr) This advanced class will explore designing, cutting, and soldering stain glass into several projects. The class will also work together on a large stain glass window that will be installed into the school permanently.

WEAVING & FIBERS- Grades 9-12(.50 cr) Students will design and create soft art work with all types of fiber crafts including weaving, macrame', batik, tapestry, and fabric painting.

Students will make utilitarian and decorative projects such as rugs, afghans, bags, and wall hangings. Lab Fee \$10.00 min.

GRAPHIC DESIGN I Grades 9-12(.50 cr) Students will use both Adobe Illustrator and Adobe InDesign to create vector graphics in a hands-on, project based course. A visual journal will be provided to each student so that ideas and progress can be easily documented. Class content includes Graphic Design Theory, Typography, Illustration, Color Theory, Advertising, Logo Design, and Page Layout. Most assignments will be completed in class. Students will develop creative habits, gain an understanding of what “good design” is, and be able to apply creative thinking to their own work. This course meets PA Standards for the Arts and Humanities. *This course can only be taken once a year and cannot be used to fulfil the computer requirement.*

GRAPHIC DESIGN II Grades 10-12(.50 cr) This advanced course builds on the content from Graphic Design I. Students will dive deeper into Adobe Illustrator and Adobe InDesign to create original vector based artwork. Students will develop ideas through the design process and document their progress within a visual journal. Advanced projects may include Packaging Design, Branding, Advanced Color Theory, Advanced Typography, and Designing a document with multiple pages. This course meets PA Standards for the Arts and Humanities. *This course cannot be used to fulfil the computer requirement.* Prerequisite: Graphic Design I with a “B” or better grade and/or teacher recommendation. Course cannot be taken more than **once** a year.

DIGITAL PHOTOGRAPHY Grades 10-12 (.50 cr) This is a basic course in photography where students will learn how to properly use a digital SLR camera to compose and capture original photos. Students will learn to adjust camera settings for greater creative and technical control in photographic composition: Aperture, Focus, Resolution, ISO, and Shutter Speed. Once students have mastered taking quality pictures, the original photographs will be edited with Adobe Photoshop. Students will learn how to give their photos a professional edge with editing techniques. Class content includes the History of Photography, the Mechanics of a Camera, creating Composite Images, and Working with Layers, Masks, and Filters. Students will also participate in critiques to examine images critically. This course requires some photographs to be taken outside of the classroom as homework. This course meets PA Standards for the Arts and Humanities. Students are encouraged to use their own Digital SLR cameras. A limited number of school owned cameras and memory cards will be available for students to use during this course.

CONSERVATION PHOTOGRAPHY Grades 9-12 (.50 cr) Taught in conjunction with Environmental Conservation, this course uses photography as a medium for the scientific investigation of French Creek. Students will focus on documentary photography techniques, crafting activist statements, and the organization of ideas and information to make statements visually. Students must also be enrolled in Environmental Conservation during the same quarter.

BUSINESS/TECHNOLOGY EDUCATION

CAREER/COMPUTER APPLICATIONS I Grades 9-10 (.50 cr) This required course uses the Windows environment and the integrated program called Microsoft Office. The students' will learn the basics to Word (word processing), and utilize the computer to generate assignments. **Students will also identify their interests, abilities and work values through a variety of assessment tools including Career Cruising and WIN** then use the resulting information to research and develop career portfolios.

COMPUTER APPLICATIONS II /FUTURES Grades 11-12 (.50 cr) This required course uses the Windows environment and the integrated program called Microsoft Office. The course will review word processing, database, power point, and spreadsheet in order to perform in depth research and advanced presentation skills in preparation for life after high school. Students will participate in a variety of activities to prepare them for the transition from high school to a future career. Included in this class will be resume writing, interview skills & other soft skills needed in any work environment. **Students will develop their career portfolios and utilize the WIN program.**

>COMPUTER PROGRAMMING Grades 10-12 (.50 cr) This course provides an introduction to computer programming. During the 9-weeks course, students will be asked to edit, write as well as debug programs. Hands-on programming will be strongly emphasized throughout the course. Prerequisites: Algebra I & II, Previous Computer Course

>WEB DESIGN /FUTURES Grades 11-12 (.50 cr) The Web Design class provides an introduction to the design, creation, and maintenance of web pages and websites. During this 9-weeks class, students learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn the importance of web design standards, and learn how to create and manipulate images. Students will be required to complete a culminating project in which they design and create their own website. **Students will develop their career portfolios and utilize the WIN program.** Prerequisites: Algebra I & II, Previous Computer Course

ACCOUNTING I Grades 10-12 (1 cr) Accounting I is a beginning course which gives the student a knowledge of the basic accounting principles. It teaches the student the new business practices, new business terms and new methods of recording and reporting business records. The students will experience hands-on applications using both manual and automated accounting systems. This course can be credited toward meeting a student's fourth math requirement.

ACCOUNTING II Grades 11-12 (1cr) This course has the student moving from the simple to the complex aspects of accounting. This advanced course is specifically vocational and career oriented. It is planned for the student who has the following objective: To go to post-secondary education and to major in accounting, marketing, management, or business procedures and business records so that as a future business owner or manager, he/she can direct an organization and interpret business records. Prerequisite: Accounting I grade "B" or better & Teacher Recommendation

YEARBOOK PRODUCTION Grades 9-12 (.50 cr) This course will provide students with an opportunity to be involved in the production of the UCHS yearbook. Instruction will be provided in the areas of: photoshop - computer image handling and use of scanners and digital cameras, pagemaker - setting up the yearbook, working with graphics, page submission and proof corrections, photography - students will be assigned to cover different school events to take pictures, write captions & articles, yearbook sales & advertisements: making spreadsheets, balancing budgets, working with book & Ad sales. *This course can be taken only once a year and cannot be used to fulfil the computer requirement.*

CYBER SECURITY & TECHNOLOGY Grades 9-12 (.50 cr) This course will utilize programs such as Heimdal's "Cyber Security for Beginners", the Air Force's program "Cyber Patriots", Sophos' "Introduction to Computer Viruses and Online Threatsaurus." Students may be able to become involved in competitions from organizations such as Technology Student Association

(TSA) and the Army Educational Outreach Program (AEOP) competitions such as eCybermissions.

STOCK MARKET FUNDAMENTALS—Grades 10-12, This seminar course will explore stock ownership for public companies and investors fundamentals. Free market participants represent many views and expectations, which create opportunities for the individual investor. The following topics will be explored throughout the course: What is a public company?; who can invest?; Understanding risks and rewards; How are the shares of a public company traded?; What type of investment strategies are there?; The use of Market Psychology; Fundamental vs. Technical Application

INTERNATIONAL BUSINESS & CULTURE--Grades 9-12: Learners will examine international business strategies and develop soft skill sets to increase cross-cultural literacy.
Prerequisites: None

MARKETING AND EVENT PLANNING--Grades 9-12: Learners will develop marketing, advertising and sales skills to research, plan, coordinate, manage and evaluate special event(s) of their design. Prerequisites: Graphic Design

Students in grade 12 may choose one of 3 Internship Electives if all graduation requirements have been fulfilled: Work Experience, Elementary Education/Mentor Experience, Middle/High School Teacher Assistant.

WORK EXPERIENCE INTERNSHIP Grade 12 A non-paid work experience has been organized with the cooperation of local businesses and trades to provide the student/learner who has the proper qualifications with the opportunity to further his knowledge and skill in the chosen occupational field during the school year. The student/learner will participate Monday through Friday for one block either at the beginning or end of the school day. They also will receive one elective credit each semester towards graduation. Participation is determined by students meeting minimum requirements and by the needs of local employers. Grading is based on submission of weekly logs and employer evaluations. Students who are currently employed may request an early release from school if all graduation credits have been fulfilled.

TEACHER INTERNSHIP/COMMUNITY SERVICE Grade 12 This is a school-based program in which students assist teachers. Students will be placed as teachers' assistants in the High School or Middle School. Participation is determined by students meeting certain academic standards and with the recommendation of the high school principal, guidance counselor, and assigned teachers.

ELEMENTARY ED INTERN/MENTORSHIP Grade 12 This is a school-based program in which students assist teachers as classroom tutors. Students will be placed as teachers' assistants in the Elementary and/or Middle School, students are assigned to specific teachers and classes to provide academic assistance to younger students. Participation is determined by students meeting certain academic standards and with the recommendation of the High School Principal, Elementary and High School Guidance Counselors, and assigned teachers.

ENGLISH

APPLIED ENGLISH 9 The primary objective of this course is the development of an "improved degree of literacy," through an in-depth focus on common core skills for each student. This course features a small class size and low teacher to student ratio. Placement in class is based upon successful completion of English 8 as well as student reading lexiles and performance on the eighth grade PSSA Reading/Writing Assessment. Applied English 9 attempts to equip the student with an improved competency in reading, writing, speaking and listening through a focus

on the comprehension and appreciation of various forms of literature, related writing assignments, as well as in-depth grammar and word study.

ENGLISH 9 The English 9 curriculum has as its primary objective the development within each student of an “improved degree of literacy;” that is, the ability to write not only correct but truly effective prose, and the ability to read correctly, make judicious value judgments, and appreciate literature. Through the reading of short stories, novels and drama, plus the completion of related writing assignments, the ninth-grade course attempts to equip the student with an improved competency in reading, writing, speaking and listening that will enable him/her to be a successful in other areas of academic studies.

ADVANCED ENGLISH 9 The curriculum for this class is the same as regular English 9 with the addition of research and documentation; higher level grammar, usage and mechanics; and additional analytical writing and critical thinking in relation to literature. Requirements: Grade “B” or better in 8th grade English and teacher recommendation.

APPLIED ENGLISH 10 -This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace. The class also focuses on the skills needed to pass the state literature exams. This course is not suggested for students pursuing 4-yr college.

ENGLISH 10 – World Literature: This class consists of reading and analysing prose from all over the Earth – from the beginning of recorded time through the present. We will also focus on composition, oral communication and critical thinking. The students will develop competency in English usage and mechanics through reading and analysing text. Skills measured on the Keystone exam are studied, intensely, in 10th grade English. The study of grammar is interrelated with their literary pursuits and other classroom activities.

*ADVANCED ENGLISH 10 -World Literature: This weighted course is designed for the 10th grade student who wishes to take a challenging curriculum in preparation for college. The basic English class material is covered at an accelerated rate, as well as the study of complex literary elements and writing strategies. This class is reading intensive and more emphasis is placed on a college-level vocabulary and advanced grammar skills. Numerous written compositions will be required. Requirements: Grade “B” or better in 9th grade Advanced English, teacher recommendation and completion of summer reading assignments.

APPLIED ENGLISH 11 This course is designed to improve reading, writing, and vocabulary skills for the workplace while furthering their understanding of the English language. Additional preparations for the Keystone Literature assessment will be provided for those students in need of remediation. Students will also complete the preliminary research and structure of Senior Project, which includes career assessment, research of three careers from three career clusters, introduction to job shadowing, writing, time management and organization. This course is not suggested for students pursuing 4-yr college.

ENGLISH 11 This is a survey course in American literature with emphasis on writing, enhancing vocabulary skills, and recognizing and using literary terminology. This course presents many facets of American literature which have taken place during our brief history. Letters, articles, essays, drama, short stories, poetry and novels will be taught to improve the student’s knowledge and appreciation of our literary heritage. The writing component consists of the student’s writing some of the same types of literature using grammar, mechanics and usage skills. Students in English 11 complete the preliminary research and structure of Senior Project, which includes career

assessment, research of three careers from three career clusters, introduction to job shadowing, writing, time management and organization.

*ADVANCED JR. ENGLISH In this weighted class novels such as *Of Mice and Men*, *The Scarlet Letter* and other classic pieces of literature will be read in their entirety, along with classic American stories and poems which will be read to supplement the text. Special preparation will be given in advanced vocabulary and college-level grammar. Additional writing will be emphasized. Compositions, research papers and college application essays will be written and showcased in a portfolio. Students are required to complete a summer reading requirement prior to entering this course. Prerequisite: Grade of "A" or "B" in Advanced English 10 and teacher recommendation. Students will complete the preliminary research and structure for Senior Project, which includes career assessment, research of three careers from three career clusters, introduction to job shadowing, writing, time management and organization.

ENGLISH 12 The senior English Literature textbook (McDougal, Littell) covers all major literary periods: Anglo-Saxon, Medieval, Renaissance, Restoration, Romantic, Victorian, and Twentieth Century. A knowledge of and appreciation for all types of literature is emphasized. A thesis paper and a senior project are required for graduation. The bulk of time will be spent on reading literature, writing essays, and increasing the student's vocabulary. A 3-ring binder kept by the student will contain all course work. Public speaking, grammar, research papers, skills needed for college, and famous books will be included to round out the scope of education. Guest speakers will speak on careers, motivation, and goal setting.

*ADVANCED SR. ENGLISH This is a weighted course that uses the same textbook in English literature as the regular English 12 students, but at an accelerated speed. In addition, more emphasis will be placed on college-level vocabulary and advanced grammar, and the writing of literary papers. A thesis paper and a senior project are required for graduation. Any gaps in the student's English background will attempt to be filled by this course in their final preparation for college. Famous novels not yet read will be discussed. World Literature paperbacks: Odyssey, Miracle Worker, Antigone, Oedipus, Count of Monte Cristo, Les Miserables, A Tale of Two Cities, and F451 will be read. In addition to Macbeth that all seniors study, Hamlet, Midsummer Night's Dream, Much Ado About Nothing, and Taming of the Shrew will be studied. Public speaking and oral reading of student writing will be encouraged. Perfect final copies of all papers will be kept in a portfolio. Prerequisite: Students must have earned an "A" or "B" in Advanced Junior English.

ENGLISH ELECTIVE COURSES

CREATIVE WRITING Grades 9-12(.50 cr) In this English elective course students will explore various forms of informal writing, such as poems, children's books, biographies, short stories, and one-act play scripts. Emphasis will be on imagination and style, creativity, and productivity. A willingness to express oneself in writing is all that's needed.

+READING FOR SUCCESS Grades 9-12(.50cr) How does reading affect the world around us or potentially a student's future? This course helps students answer these questions and prepare for college and career success. Reading is a vital skill in the information age, when we are virtually flooded with a stream of information. The ability to determine and comprehend the main ideas in this information rich society is essential to one's future success, both in the academic world and in the world of work. Gaining the skills to discern fact from opinion and bias from objectivity will empower students to make better life and work decisions. Students will also gain appreciation and joy of reading topics of interest.

MEDIA I/TELEVISION PRODUCTION Grades 9-12 (.50 cr) This course introduces the many facets of broadcasting and production. Students will produce programs that will air to the student population. Students will learn how to write complicated scripts and storyboard, as well as develop intricate skills in both videotaping and editing. Students are introduced to non-linear editing and graphics programs used in actual broadcasting stations. Students also concentrate on the storage, management, and retrieval of media assets in a production environment.

MEDIA II/ FILM STUDIES Grades 10-12(.50 cr) Prerequisite MEDIA I
This class studies the nature of film technique and film language, analysis of specific films, major historical, theoretical, and critical developments in film and film study from the beginnings of cinema to the present. Through the screening of a variety of significant films students will learn the history of motion pictures. The class will focus on the different historical perspectives and cultural influences in film from the early days of film to present day films. Students will study the early history of motion pictures and learn how films were first developed, how they evolved, and where they are going. A number of full-length films will be analyzed for plot, technique, symbolism, and character development. Utilizing classroom discussions, written comparisons, character sketches, and reviews, the students will learn to sharpen their powers of criticism and appreciate the artistic value of film. Students will be required to read and analyze scripts as well as write complicated criticisms of films. The class will also produce a short film in a studied genre.

INTRODUCTION TO THEATRE Grades 9-12 (.50 cr) Students will learn how to act and how to work backstage to support a production. Theories and practices of costume and set designers, makeup artists, and lighting technicians will be studied. Students will also learn theatre history, the names of famous plays and playwrights, and theatre jargon. They will participate in fun improvisational acting exercises, physical, and vocal warm ups. They will practice acting techniques by memorizing and rehearsing short monologues and acting scenes in small groups which will be performed for the class.(May not be available every year)

+S.A.T. VERBAL PREPARATION Grades 11(.50 cr.) This course is an on-line course provided by Edmentum (Study Island) to assist students in preparing for achievement exams such as the S.A.T. and A.C.T. which are used for college entrance. Students will have exposure to several practice exams emphasizing SAT writing, reading, and college level vocabulary. The course is a pass/fail class and requires limited homework.

READING ENRICHMENT (.50 cr) Grades 9-12 This nine weeks course seeks to improve the students' reading, writing, and test-taking skills. This course will be required for any student who performs below the proficient level on the PSSA or other school district approved standardized tests. This course will also be available as an elective to any student interested in improving their reading skills. Students will practice analytical reading and become familiar with the format, jargon, and scoring of the Keystone test and other tests.

ENGLISH ENRICHMENT (.50-1.0 cr) Grades 9-12 This course seeks to improve the students' reading, writing, and test-taking skills. This course could be required for any student who performs below the proficient level on the Keystone or other school district approved standardized tests. Students will practice analytical reading and become familiar with the format, jargon, and scoring of the Keystone test and other tests.

FAMILY & CONSUMER SCIENCES

MODERN LIVING Grades 9-10 (.50 cr) Students learn about Human Sexuality. Relationships, STD's pregnancy, birth, and baby basics are taught in detail. Students will have use of the empathy belly and Real Care babies. This course is required for students in grade 9.

MODERN LIVING II/PEER EDUCATORS Grades 10-12 (.50 cr) This class will focus on the information learned during the Modern Living I class. Students will complete a Peer Educator program and use their knowledge and skills to educate middle & elementary school students. They must be willing to research topics, write lessons, and present those lessons to their peers. Students need to have completed Modern Living I with at least a “C”, and must have the teachers recommendation

CULINARY ESSENTIALS I, Grades 10-12(.50 cr) This class is designed to teach students the fundamentals of cooking. Bookwork and labs are combined to give the student first hand experience in the art of cooking. Level I Chapters include: Knives & Smallwares, Safety & Sanitation, Moist & Dry Cooking Techniques, Seasonings & Flavorings, Breakfast Cookery, Sauces, Soups, and Meat Cookery. Cost \$30

CULINARY ESSENTIALS II, Grades 11-12(.50 cr) Chapters include: Nutrition, Poultry, Pasta & Grains, Fruits, Vegetables, & Legumes, Baking Techniques, Yeast Breads, Quick Breads, and Desserts. Prerequisite : Culinary Essentials I with at least grade of “C”. Cost \$35

FOREIGN LANGUAGE

SPANISH I Grades 9-12, An introductory course to the Spanish language and its diverse cultures focused on essential communication skills and vocabulary development. Thematic units include the basics (ABC, 123, etc...), meeting new people, describing yourself, likes and dislikes, school, and food. Initial grammar concepts are presented, but not the focus. Class is student centered and incorporates song, dance, technology and much more. Prerequisite: “C” average in English 7 and 8

SPANISH II Grades 10-12, Speaking, listening, reading, writing and cross-cultural communication skills are further developed in this level of Spanish. Thematic units include the hobbies, family, restaurant experiences, daily routines, home and chores, clothing and shopping. This course is a little more grammatically heavy and students will complete a grammatical research paper (in English! ☺). Prerequisite: “C” average in Spanish I

*SPANISH III Grades 11-12, Communication skills continue to play a central role in this course although additional grammatical concepts are covered. Thematic units include clothing and shopping, toys, games, and childhood, nature and animals, and more. In addition, students will help to plan and organize International Day. Prerequisite: “B” average in Spanish II and/or teacher recommendation

*SPANISH IV Grades 12, In this class, students are regularly exposed to authentic texts in the target language. Thematic units include college and professions, the environment, immigration and human rights. The class will be expected to produce a multi-media presentation in the target language. Prerequisite: “B” average in Spanish III and/or teacher recommendation

ONLINE WORLD LANGUAGE Grades 9-12 (**1cr**) These courses are taught as independent study cyber courses using online technology. Students will be using online educational tools to learn either: *French, German, Italian, Chinese, or Latin*. Students will study the grammar, vocabulary, conversational phrases and culture of the chosen World Language. The first level courses will provide a foundation for reading, speaking, writing and understanding the Language. Students must be self-motivated and work well independently. Prerequisites: “B”

average in prior years English and/or Foreign Language courses; Principal & Guidance Counselor Recommendation.

TECHNOLOGY & ENGINEERING

HOME MAINTENANCE & REPAIR Grades 9-12 (.50 cr) This course will offer instruction in Electricity- wiring of single pole, 3-way switches, duplex receptacles, lights, electricity generation, transformers, and more advanced study of generators, motors, & wiring. Plumbing - drain, waste, vent installation & function, S-traps, stacks, supply water, wells, and more advanced study of soldering Cu pipes, construction of drains etc. Roofing - tear-off, re-roofing, repairs, roofing materials, architecture, calculation of materials and more advanced study of shingle application, & design of trusses and rafters. Drywall - installation techniques, calculation of materials, finishing techniques and repairs. Woodshop - safe use of tools in construction of a wood project. Cost of this class which will be based on the amount of material in the projects.

MANUFACTURING Grades 9-12(.50 or 1cr) This class will include first-year through fourth-year students who will study the structure of manufacturing with an emphasis on production. They will research machine operation and safety, wood characteristics, types of joints, and assembly techniques used in woodworking. Then, as a class, they will organize and execute the construction of a mass-produced project. If time allows, they will then be required to custom-produce a project of their choosing. The project will be approved by the instructor based on their ability and skill level. There will be a cost to this class which will be based on the amount of material in the projects constructed.

INTRO ROBOTICS I Grades 9-12(.50) - This course is designed to provide students with a basic understanding of the working of robotics. Experiences students may have include programming using Lightbot software, Lego Mindstorms programming, Sea Perch underwater robots, programming robotic arms, etc. Students will compete against classmates and possibly enter additional competitive events. No pre-requisite is required.
Course Description

ROBOTICS II Grades10-12(.50cr) – This course will provide students with the opportunity to learn the proper usage of specialized tools utilized in the design of machines, including robots. The students will learn mechanical and electrical design. In addition, students will learn lay-out, measurement, and battery technology associated in the construction of robots. The culminating activity will be the construction of a working model.
The prerequisite for this course is Robotics I, participation with the Robobots program, or principal's approval.

>DESIGN, MARKET & SELL Grades 10-12 (.50 cr) This class provides students with the opportunity to conceptualize a product; design a prototype; and market, manufacture, and deliver the product. Students will use Auto Cad computer program, Laser Engraver, & 3D Printer to design and manufacture their product(s). Additionally, they will keep records using QuickBooks small business software. Examples of possible production items include: plaques, name plates, glassware, trophies, awards, signs, pens, key chains, or stamps. Some items may be manufactured entirely by the students; others will be purchased items that may be engraved by the students. This class will be co-taught by a Technology Education teacher for the product design and manufacture and a Business Education teacher for the marketing and bookkeeping.

>DESIGN ENGINEERING I & II Grades 9-12 (.50 cr) The student will add the following areas to their drafting background. Pattern Development, Pictorial Drawing, Machine Drawing. The student will be introduced to the world of Architecture and will, in the course work, cover the

following areas: CADD using Cadkey, Framing, Elevations, Legal Concerns, Plot Plans, Electrical Plans, Floor Plans, Windows and Doors, Foundation.

DESIGN ENGINEERING III & IV (.50 cr.) This course is an extension of Design Engineering II and is designed to offer the student more experiences in the area of design, architecture, etc. using various software. Prototypes will be created and evaluated for practicality and efficiency.

>TECHNOLOGY AND SOCIETY **Grades 9-10** (.5 cr) This is the first of four Engineering by Design (EbD) courses and focuses on technological literacy by engaging students in exploring and developing their understanding of the “big ideas” regarding technology. Students will learn about technology throughout history through an exploration of people using their skills to innovate, improvise and invent. Students will develop an understanding of engineering design, the formal process that transforms ideas into products or systems of the designed world.

>TECHNOLOGICAL DESIGN (0.5 cr) In this EbD course, students work in design teams to apply science, technology, and mathematics concepts to solve design problems and to innovate designs. Students follow the 6E Engineering Model to research, develop, test, and analyse engineering designs using criteria such as design effectiveness, public safety, social factors and ethics.

>ADVANCED DESIGN APPLICATIONS (0.5 cr.) Advanced Design Applications is an EbD course consisting of four units including Manufacturing, Energy and Power, Construction and Transportation. Topics include examining advances that maintain manufacturing efficiency, supply versus demand, renovation, the effect of energy and power on modern society and the environment, and the impact of transportation on society and the environment.

>ADVANCED TECHNOLOGICAL APPLICATIONS (0.5 cr.) In the Advanced Technological Applications EbD course, students study two components of the Designed World - Information Technology and Entertainment/Recreation. In the Information Technologies component of the course, students will research how technology facilitates the gathering, manipulation, storage and transmission of data and how these data can be used to create products. In the entertainment and recreation unit, students will investigate technological entertainment and recreation systems and the differences between these two technologies. Students will study the environmental implications of the usage of these technologies.

MATHEMATICS

INTEGRATED MATH A & B(Taught in A & B units per semester) Grade 9 (1-math cr + 1 elective cr) This year long course is for the student who has completed 8th grade Pre-Algebra with a final grade below 85% or had a standard state test score below Proficient. This course covers the primary concepts of Algebra at a slower pace than regular Algebra I while reinforcing basic math skills. The course includes topics such as variables, solving equations, positive and negative numbers, order of operations, polynomials, factoring, Pythagorean theorem, radicals and introduction to graphing calculators. Applications are emphasized throughout the course.

ALGEBRA I Grades 9-12 Algebra I is the necessary foundation for the development of logical thinking. The course includes topics such as variables, solving equations, positive and negative

numbers, order of operations, polynomials, factoring, Pythagorean Theorem, radicals and introduction to graphing calculators. Applications are emphasized throughout the course.

**Students will be expected to complete this course with a grade of 70% or higher and take the Keystone Exam, if Proficiency is not achieved the student will be required to complete remediation courses until competency levels are met.*

GEOMETRY Grades 9-12 This course is set up to develop the student's ability to think creatively and critically in both mathematical and non-mathematical situations. This is accomplished by developing an understanding of geometric relationships in both a coordinate plane and a non-coordinate plane. This is further brought about by developing an understanding of the meaning and nature of proof. The method of deductive proof will be introduced through a variety of forms, such as paragraph proofs, flow-chart proofs and two-column proofs. Geometric concepts will be integrated with arithmetic and algebraic skills to further enhance this aspect of geometry. Prerequisite: Algebra I with a "C" or better.

ALGEBRA II Grades 10-12 This course, primarily designed for the college-bound student, covers graphing, solving systems of equations, factoring, functions and relations, as well as adding, subtracting, multiplying and dividing rationals and irrationals. Prerequisite: Algebra I with a "C" or better.

***ALGEBRA II/III** Grades 10 This weighted course is designed for the accelerated college-bound student. The course includes graphing, solving systems of equations, factoring and functions and relations as well as adding, subtracting, multiplying and dividing rationals and irrationals. This course also extends the sequence of Algebra II through quadratic relationships, conics and quadratic systems. The opportunity to explore polynomial equations through exponential and logarithmic functions and work with other areas of algebra such as progressions, sequences, series and expansions is included. Prerequisite: Algebra I and Geometry with an "A" and teacher recommendation.

***ALGEBRA III/PRE-CALC (No Trig)** Grades 11-12 This weighted course is designed to extend the sequence of Algebra II through quadratic relationships, conics and quadratic systems. Explore polynomial equations through exponential and logarithmic functions. Work with other areas of algebra such as progressions, sequences, series and expansions. A brief introduction to statistics and probability is also included. Prerequisite: Algebra II and Geometry with a "C" or better.

***PRE-CALCULUS/TRIGONOMETRY** Grades 11-12 This weighted course is designed for the accelerated college-bound student. The subject is developed primarily as a means of finding the lengths of sides and the measure of angles of triangles. Analytic trigonometry is also discussed along with its use in the complex number system. In addition, polar coordinates, parametric equations, limits and continuity as well as rates of change and tangent lines will also be covered. Prerequisite: Algebra II/III with an "A" or "B". If a "C" was received in any grading period, the student must have a recommendation from both instructors.

***TRIGONOMETRY** Grades 11-12(.50 cr) Success in college-level mathematics is enhanced by a good understanding of trigonometry. This weighted course is designed for college-bound students who may desire to study calculus later. The subject is developed primarily as a means of finding the lengths of sides and the measure of angles of triangles. Analytic trigonometry is also discussed along with its use in the complex number system. If time permits, polar coordinates and parametric equations will also be covered. Prerequisite: Algebra II, Geometry

and Algebra III with a “C” or better. If a “D” was received in any grading period, the student must have a recommendation from both instructors.

*CALCULUS Grade 12 This is a weighted college-prep course that will provide a capable background in math for the student who may pursue a mathematical, scientific or engineering course of study as an undergraduate. Prerequisite: Pre-Calculus or Trigonometry with an “A” or “B”. If a “C” was received in any grading period, the student must have a recommendation from both instructors.

CONSUMER MATHEMATICS Grades 12 This course is designed as a practical business mathematics. It emphasizes basic math applications. Topics include percentages, fractions, measurement, geometry, statistics, probability, automobile and housing topics and banking/money management. The material covered throughout the course will aid an individual in becoming an intelligent consumer.

ECTS PERSONAL FINANCE Grades 11 &12 This course is offered at the Erie County Technical school starting during the 2017-18 School Year. Students will earn .50 credits per year for this math course taken while at ECTS during grades 11 & 12. It emphasizes personal finance and consumer math applications.

MATHEMATICS ELECTIVE COURSES

INTEGRATED MATH 1/2 Grades 11(.5cr) This math course is designed to focus on the fundamentals of mathematical applications. Areas covered include: word problems, solving equations, using algebraic techniques, basic geometric and statistics concepts. This course will also prepare students for standardized tests such as the PSAT, SAT, and Keystone Algebra I. Students are assigned to this course based upon performance on math assessments and remediation needs.

S.A.T. MATHEMATICS PREPARATION Grades 11(.50 cr.) This is an independent study course is designed to assist students in preparing for achievement exams such as the S.A.T. and A.C.T. which are used for college entrance. Students will have exposure to several practice exams emphasizing SAT mathematics. The course is a pass/fail class and requires limited homework.

MUSIC

MARCHING BAND Grades 9-12(.50 cr) (1st Quarter) The UC Marching Bears This class consists of musicians and color guard. The musicians are percussion, brass and woodwinds. The color guard uses an assortment of equipment and props to perform in visual representation, the mood and feeling of the music. Tryouts for color guard are held in the late winter/spring of the previous year. Musicians must already be accomplished on their instrument before joining. You may take lessons with Mr. Black in the spring of the prior year if you would like to join. **Marching Band is co-curricular in that your grade is based on in-school rehearsals and after school performances.** We perform between 15-25 times in the fall. There are after school and Saturday rehearsals as well. Marching Band camp in August is required and there are other summer practices and performances. We are a highly competitive group committed to

excellence on and off the field. Some sections of the band may be auditioned ahead of time because of numbers and extremely high ability levels.

CONCERT BAND Grades 9-12(.50 cr) This class is designed to enhance student ability on their instrument to maximize performance skills. It is for band students in grades 9-12. Scales, harmonic studies, internet lessons and area experts will be utilized to develop all musicians in this class. Students will be amazed at the individual progress they make! The target goal will be to perform in an end of nine weeks ensemble concert which is graded. Participating and performing in a small ensemble (solo, duet, trio or quartet) is optional. This class also provides extra rehearsal time for students participating in PMEA ensembles. It may be possible to share students with the High School Choir class meeting at the same time.

GUITAR CLASS Grades 9-12 (.50 cr) This class meets for one block daily during nine weeks of the year. It is generally offered in alternating school years. This course is meant for the beginning guitarist. Some advanced techniques will be presented depending on the ability of the class. You must provide your own acoustic guitar (solid body electric guitars are not accepted).

PERCUSSION ENSEMBLE Grades 9-12 (.50 cr) This class meets for one block daily during nine weeks of the year. It is generally offered in alternating school years. All students in the class will learn to play drum set, snare drum, marching drums, keyboards and the auxiliary percussion instruments. There will be a required, graded, evening performance.

JAZZ BAND Grades 9-12(.50 cr) (4th Quarter) The UC Jazz Ensemble is one of the most enjoyed performing ensembles in the district. We work on classic jazz/rock repertoire as well as newly composed "modern" music. We study jazz performance and jazz history as part of class. The end goal is both a spring concert and performing at graduation in June. Jazz studies include jazz scales and harmonies that are not typically explored in concert band. Learning how to improvise will also be explored and several students will end up soloing at the concert. Students also have the opportunity to play guitars, bass guitars, pianos and drum sets as part of this experience. Clarinet and flute players may learn new instruments such as saxes or brass. The music performed is powerful and entertaining.

HIGH SCHOOL CHORUS Grades 9-12 (.50 cr) High School Chorus is for students in grades 9-12 who wish to improve their vocal and choral abilities with attention to concrete understanding of choral notation while focusing on mid-level choral repertoire. A variety of genres will be explored with opportunity for student input on concert selections. Students in this group will be given an opportunity to audition for solo or group concert performances. There will be a required, graded, evening performance and possible performances during the day.

MUSICAL PRODUCTION Grades 9-12 (.50cr) (3rd Quarter-Odd Years) Musical Production is for high school students with a desire to be part of a high school musical production. Students will collaborate on all the aspects related to producing a musical depending on their individual interest and abilities, including acting, singing, dancing, practical and artistic aspects of set development, design and construction, technical aspects of sound and lights, costuming, stage make-up and stage crew; and will be responsible for the timely completion of specific, assigned tasks. The course culminates with final weekend performances for which several evening rehearsals during the last three weeks of the quarter will be required. The actual performance weekend may take place beyond the end of the quarter. (May not be available every year)

MUSIC COMPOSITION & PERFORMANCE Grades 9-12 (.50cr) (3rd Quarter-Even Years) This class is designed for students to write/adapt and perform music on stage. It requires

collaborating with other students, writing music or performing music ideas, and working back stage. The product will be a live show with an unlimited variety of music!

PHYSICAL EDUCATION & HEALTH

PHYSICAL EDUCATION Grades 9-10 (.50 cr) This is a mandated course by the state of Pennsylvania and required for 9th grade students, with separate sections for Girls and Boys physical education. Emphasis is placed on building the student's self-discipline, personal hygiene, ability to work with other skill levels in various areas of sport and fitness and trying to better each person in a vast number of skill areas, both physically and mentally. The physical education program consists of a combination of team sports, life-time sports activities and fitness training. Basic skills are taught along with simplified rules for several of the major team sports such as football, soccer, speedball, volleyball, basketball, floor hockey, indoor recreation activities, and swimming. Exercise techniques for maintenance of proper body weight and strength are also included. Presidential Fitness testing is administered each nine-week grading period. Levels of modification vary with skill levels and abilities of the class, skill development and knowledge of particular areas. Also included are fun activities and outdoor activities (softball, volleyball, golf, etc.) when weather permits. *Each class will begin with a pre-class routine: stretching together, walk/run/walk and/or weight room activity.

PHYSICAL FITNESS Grades 9-12(.50 cr) During this course students will improve their personal health by setting measurable physical fitness goals which will be established jointly by the student and instructor. Students will increase their knowledge and participation in lifetime personal fitness activities including: aerobics, yoga, circuit & weight-training, swimming, walking, and running.

RECREATIONAL ACTIVITIES Grades 9-12(.50 cr) During this course, students will play a variety of fun activities/games. Games and Activities include: Capture the Flag, Fort Knox, Survivor, various kickball and wiffleball games, basketball golf, 3-sport-combo(volleyball, knock-out and jump roping), gatorball, team handball, scooter ball, captain basketball (swimming is not required). This is a great course for the student who wants to have fun with physical activity.

TEAM SPORTS Grades 9-12(.50 cr) During this course, students will develop the skills to practice and play a variety of team sports i.e. basketball, volleyball, soccer, floor hockey, softball, flag football (swimming is not required). Teamwork, competition, and fair play will be stressed at all times. This is a great course for any student who loves to play team sports. Each student will develop a deeper understanding of the intricacies of the game.

ECTS HEALTH/PE 10 Grade 10 (.50 cr) This course is available only to students who attend the Erie County Technical School and are unable to schedule the course during the school day. Students complete an independent study health curriculum which includes information about substance abuse and how to maintain a healthy lifestyle.

ECTS PHYSICAL EDUCATION Grade 11 or 12 (.50 cr) This course is available only to students who attend the Erie County Technical School and are unable to schedule the course during the school day. Students complete an independent study Physical Education curriculum which includes research and reporting on a variety of physical activities as well as completion, documentation of 100 hours of pre-approved physical activity in a lifetime sport or activity.

HEALTH 10 Grade 10 (.50 cr) As sophomores approach adulthood they will begin to take responsibility for their own health. Students will be asked to examine their current lifestyles and see how their future health and the health of their future children will be impacted by today's choices. Topics for discussion will include life-style diseases, physical fitness, nutrition, mental

health, suicide prevention, character education, alcohol and substance abuse, and stress management.

>INTRO TO PUBLIC HEALTH Grades 10-12(.50 cr) This elective class will explore the field of Public Health. This is an ideal class for students that may be interested in a health career (doctor, nurse, social worker, pharmacist, etc). Students will investigate issues such as disease prevention and health promotion, public health policies and healthcare, careers in public health, and current events affecting the health and wellness of a community. Medical terminology will also be studied by looking at the Greek and Latin origins to help build a foundation for the pursuit of any medical career. >STEM Course

CONTEMPORARY HEALTH ISSUES Grades 9-12(.50cr) The health issues that affect today's society are changing rapidly, especially for teenagers. Such issues include teenage depression, eating disorders, bullying, HIV/ AIDS, new drugs, and obesity to name a few. Students will be asked to examine these issues through individual research, reports, and presentations.

DRIVERS EDUCATION Grades 10-12(.50 cr) This course reviews laws, regulations and safety information promoted by the Pennsylvania Department of Transportation. Students will receive instruction with respect to drivers training that will prepare them to take the drivers examination. Behind-the-wheel training will be offered separately and at a cost.

AQUATICS-WATER SPORTS Grade 9-12 During this course students will improve their swimming skills and explore recreational water sports. Students will increase their knowledge and participation in lifetime aquatic fitness activities including: Swim Stroke Development, Water Polo, Water Volleyball, Snorkeling and other water activities.

2 SPORT PHYSICAL EDUCATION ALTERNATIVE Grade 9-12 (.50 cr) This is not a course, but an alternative for students' who complete **two PIAA athletic team seasons within a single school year** to fulfill the Physical Education requirements for graduation.

SCIENCE

PHYSICAL SCIENCE A/B Grade 9 This is an introductory course in physical science. Topics in the course include measurements, the metric system, properties of matter, motion and forces, work, machines & energy, heat, the atom, electricity, magnetism, sound & light. Laboratory work is emphasized in this class.

APPLIED BIOLOGY Grade 10 Applied Biology offers the same content as the general course but gives the students the opportunity to work at an alternative pace. Students are required to complete the same course work as listed in the general course but are frequently given alternative assignments. This course is designed to meet the needs of each student while following the state standards in Biological Sciences. This course meets science requirement, but not suggested for students pursuing 4-yr college.

BIOLOGY Grades 9-10 Biology is a required high school course that deals with the science of life. The course covers a variety of biological topics including: biochemistry, cell structure and function, cellular physiology, genetics, DNA technology, Evolution, and Ecology. The course is based on lecture, labs, activities, current events, projects, tests, and homework. The course

follows the state standards in Biological Sciences and the students will be taking the state mandated Keystone exam at the end of the course.

APPLIED CHEMISTRY Grades 11-12 Applied Chemistry is a lab-based course designed to introduce the student to basic lab practices of equipment use and measuring. Areas of study to be covered include: *Characteristic properties of matter *Periodic table and its trends *Chemistry in the home *Data collection and analysis *Safety in class and beyond. This course meets a science requirement, but is not suggested for students pursuing 4-yr college.

CHEMISTRY Grades 10-12 This course emphasizes the chemical concepts of composition, structure and properties of substances and the changes they undergo. These concepts are reinforced through carefully aligned laboratory experiments and problem solving exercises. Concepts covered are designed to give background to students pursuing careers in science related field. Topics covered include laboratory safety, composition & characteristics of matter, data collection & analysis, atomic structure, periodic table, chemical bonding, chemical formulas, chemical reactions & equations, stoichiometry & gases. This course is considered a lab science for meeting college admissions requirements. Prerequisites: Algebra I & II, Biology

ENVIRONMENTAL SCIENCE– Grades 11-12 This is a required course for students completing the Agriculture Education Technical Program and focuses on the following topics: Wise use of renewable and non-renewable resources, Pollution, including types, control measures and clean-up, Ecosystems & their interactions, including biomes & communities of organisms, Population, food and hunger, Watershed and wetlands, Agriculture and society, Integrated Pest Management, Threatened, endangered and extinct species, Humans and the environments, Environmental laws and regulations, and Health of humans, plants and animals related to the environment.

HUMAN BIOLOGY Grades -12 This course designed for the college bound 12th grade student who may be interested in science, but has not completed the Physics course. This is a comprehensive course designed to provide students with an understanding of the human body. Our journey through the body covers eight units including key terminology and all the major body systems. The student will be required to complete formal lab reports. A minimum of one lab practicum will accompany the laboratory format. The course will cover the human body including the anatomical structures, physiological mechanisms, and current applications to the medical field. Grade of “C or Better” in Prerequisites: Chemistry, Biology, Algebra II

*PHYSICS Grades 11-12 Physics is a one-credit weighted course for high school students, and will be weighted for students in the class of 2012 or later. This course emphasizes the use of the scientific method in problem solving, recommended for all college-bound students. Experiments are planned to encourage students to explore, innovate, and enjoy the laboratory experience. Topics covered include measurements, motion, vectors, projectile motion, dynamics, work, energy, momentum, circular motion, heat & thermodynamics. Prerequisite: Grade of 80% or better in Chemistry, Biology Algebra II & III & Geometry

*ANATOMY & PHYSIOLOGY Grades 12 This weighted course is taught as an anatomy and physiology course designed for the 12th grade student who may be considering majoring in the medical field or a related science field. The student will be required to complete eight formal lab reports and a rat dissection. A minimum of one lab practicum will accompany the laboratory format. The course will cover the human body including the anatomical structures, physiological mechanisms, and current applications to the medical field. This course is designed for the college bound student and will allow a maximum of twenty students to participate. The option of

completing the College Board AP Exam for this course may be offered in the spring of each school year. Grade of "A or B" in Prerequisites: Chemistry, Biology, Physics

*ADVANCED CHEMISTRY II Grades 11-12 Advanced Chemistry II is a weighted course which provides more in-depth study of general chemistry and study of new topics not previously covered. The course reinforces all concepts with carefully aligned laboratory experimentation. New topics include solution chemistry, acid-base theory, advanced chemical reactions and equations, oxidation-reduction, VSEPR chemical bonding, and organic chemistry. Prerequisite: Grade of 80% or better in Chemistry, Algebra II, & Physics

*ADVANCED PHYSICS II Grades 12 This class is actually a Physics II weighted course exploring areas not covered in physics. Topics covered include electricity, magnetism, nuclear, fluid flow, sound, light, and fundamental particles. Conceptual learning is stressed more than the rigorous problem solving in physics. College-bound students looking to major in any of the sciences, including nursing, will benefit from this course. Prerequisites: Grade of 80% or better in Chemistry, Biology, Physics I

SCIENCE ELECTIVE COURSES

>NANOTECHNOLOGY (.50 cr) Grades 11-12 is an introductory course in this new and exciting field, working in the nanoscale, a billionth of a meter in length. Hands-on activities and guided-inquiry with open-ended explanation investigations will be implemented to help learn the basics for the cutting edged new applications coming out seemingly weekly.

>PHYSICS OF POWER TECHNOLOGY – Grades 9-12 (.50 cr) In this course, students will be introduced to the following areas: Electricity, Pneumatics, Structures & Mechanisms, & possibly Lasers & Fiber Optics, and **Alternative Energy**. Students will explore the relationship between force, work, energy, and power. Students will **examine and apply the principles of electrical, fluid, and mechanical power, as well as the use of lasers, fiber optics,** and alternative energy. Students will further explore some of the many careers that exist in energy and related technologies, **specifically wind energy.**

>PHYSICS IN THE DESIGN WORLD Grades 11-12 (0.5 cr.) In Physics in the Designed World, students study two components of the Designed World - Information Technology and Entertainment/Recreation. In the Information Technologies component of the course, students will research how technology facilitates the gathering, manipulation, storage and transmission of data and how these data can be used to create products. In the entertainment and recreation unit, students will investigate technological entertainment and recreation programming, including analyzing the science that impacts it. You tube videos will be used and maybe even some Mythbusters.

>INTRO TO ANATOMY OF SPORTS (.50 cr) Grades 9-12 This class will allow students to explore various career opportunities in sports medicine, including athletic training, fitness, strength and conditioning, and physical therapy, anatomy & physiology. Students will use hands-on activities that introduce them to proper stretching techniques, athletic taping, on-the-spot treatment of injuries, rehabilitation, and nutrition. (May alternate years)

>PRINCIPALS OF BIOMEDICAL SCIENCE (.50 cr) Grades 9-12 This nine week elective course is designed for STEM Academy students who are interested in pursuing a career in biomedical sciences. This course will introduce students to human physiology, animal physiology, medicine, forensics, and medical research. Activities include investigations of a

variety of health conditions including infectious disease. Laboratory activities will include dissection of animal organs. (May alternate years)

>MEDICAL INTERVENTIONS (.50 cr) Grades 10-12 This is the second course in the Biomedical track. The third course recommended in this track would be Anatomy & Physiology or Human Biology taken the senior year. This course will provide students with a “how-to” approach of the medical field. The course will include topics such as: the Hippocratic Oath, patient interactions, diagnostic test simulations i.e.: urine analysis, BMI analysis, blood smears, HIV test, lung capacity, x-rays, hormone tests, and a mock surgery. Students will be expected to behave in a professional manner similar to a new employee in the medical profession. Students will experience either guest speakers from the medical profession and/or a fieldtrip to a local medical school or hospital. Prerequisite Principals of Biomedical Science with a grade of “C” or better. (May alternate years)

>FORENSIC BIOLOGY (.50 cr) Grades 10-12 This class will provide in-depth explorations of forensic science and many of its sub-fields including forensic medicine, odontology, pathology, chemistry, and toxicology. Students will discover the usefulness of DNA evidence and electrophoresis. They will also be exposed to common forensic laboratory procedures such as blood type determination, blood type matching, drug identification, and urinalysis. (May alternate years)

>+ENVIRONMENTAL CONSERVATION (.50 cr) Grades 9-12 Taught in conjunction with Conservation Photography, this course is designed to give students an understanding of the relationship between human beings and the natural environment. We will discuss the recent history of environmental concern and action within social movements. We will turn French Creek into our outdoor laboratory. Rich in historical significance, incredible biodiversity, and recreational opportunities, the French Creek Watershed is truly a community treasure. Students must also be enrolled in Conservation Photography during the same quarter.

>+STEM SENIOR CAPSTONE PROJECT - Grades 12 (.50 cr) This course is designed to provide students with the opportunity to integrate the knowledge they learned in previous science and mathematics classes to understand the application of the concepts and to develop projects. This is a required course for STEM Academy students who want STEM recognition at graduation. Students will have the option to choose the section of Science Project Design that interest them the most, specifically, Medical, Engineering/Business, Agricultural/Business.

SOCIAL STUDIES

AMERICAN HISTORY Grade 8 (1 cr) This course is a chronological survey of the major political, social, economic, and international developments in the United States since 1865. A great deal of emphasis is placed on relating events of the past to contemporary events. A variety instructional materials including textbooks, worksheets, maps, videos and computer assignments are incorporated into classroom activities.

WORLD HISTORY & CULTURES Grade 9-11 (1 cr) This course covers content from prehistory to Modern times with a basic focus on western civilizations and cultures. The course views various civilizations and cultures from the geographical, political, economic, military and socio-cultural perspectives. It should help the student gain an understanding and appreciation

of the peoples, cultures and history of the world through cause-effect relationships, cultural contributions and assimilation.

UNITED STATES GOVERNMENT & CIVICS Grade 11 (.50 cr) The past and present (in theory and reality) is the course of study through this class. Topics will range from the understanding of our national constitution and the resulting form of federal government (local, state and national) to a character analysis of various American leaders. A continuing discussion of current national and international events will also be part of this course as it pertains to American Government. This course shall be primarily concerned with developing an awareness of civic-mindedness and participation in our democratic process.

ECONOMICS Grade 12 (.50 cr) This course will prepare students to understand the U.S. and global economic system and how it relates to citizens as consumers and producers. Consumer practices and responsibilities are investigated and the skills needed for management of resources and financial security are developed with an emphasis on decision making, critical thinking, and using technology.

ADVANCED ECONOMICS Grade 12 (.5 cr.) This is an advanced course designed to provide academically prepared seniors with a thorough understanding of the principles of Economics that apply to the functions of consumers and producers within the economic system. Consumer practices and responsibilities are investigated and the skills needed for management of resources and financial security are developed with an emphasis on decision making, critical thinking, and using technology. Advanced level reading, writing, & active class participation will be required.

SOCIAL STUDIES ELECTIVE COURSES

INTRODUCTION TO CRIMINAL JUSTICE Grade 10-12(.50 cr) This course provides the philosophical and historical background of the agencies that compose the criminal justice system. It focuses on the development of justice and law, crime and punishment, the administration of laws, the agencies' functions, career orientation and public relations. It describes the formal components of the criminal justice system, their history of evolution, and their operations. The focus throughout is on people: the criminal offenders, the professional members, and the role of the public.(May not be available every year)

INTRODUCTION TO PSYCHOLOGY Grades 10-12(.50 cr) This is an introductory course into the field of psychology. The course design follows the National Standards for High School Psychology providing the students with exposure to key terminology, concepts and theory. The topics covered include principles of psychology, the fields of specialty, psychological perspectives, learning (classical and operant conditioning), sensation and perception, memory & thought, motivation & emotion, personality theory, psychological testing & abnormal behaviour. (May not be available every year)

INTRO TO CHILD PSYCHOLOGY Grades 10-12 (.50 cr) This class is designed for the student who is interested in learning about the stages of human development. Key concepts and principles of child development will be explored. Students will learn terminology and basic concepts related child rearing and education. (May not be available every year)

INTRODUCTION TO SOCIOLOGY Grades 10-12(.50 cr) This is a study of human relations--the meaning behind group behaviours and society's impact on the individual. This introductory course exposes students to the terminology, concepts, and theory surrounding the history of

society. This course covers society, culture, social institutions, contemporary problems, socialization, group dynamics and continuity. (May not be available every year)

INTRODUCTION TO ARCHAEOLOGY Grade 10-12(.50 cr) This course will help students with an interest in the field of Archaeology and provide a venue for career exploration in the Archaeological fields. It will provide the students with an understanding of how material evidence left behind can help us piece together past human behaviours. The topics covered include: Archaeological history, Nature of Evidence, Careers, Field Work, Reconstructing and Research principles. . Prerequisites; World History (May not be available every year)

VOCATIONAL AGRICULTURE

INTRODUCTION TO AGRICULTURE, FOOD & NATURAL RESOURCES Grades 9-10(1 cr)
This course is the first course in the CASE program of study and is designed to introduce students to the world of agriculture, the pathways of study available to agriculture students, the science, math, and language arts component they will use throughout the four-year program. The Course includes hands-on activities and practical applications designed to develop and improve employability skills of students. Career and post-secondary opportunities will be explored.

PRINCIPLES OF AGRICULTURAL SCIENCE – ANIMAL Grades 9-10(1 cr)(Alt Years)
This CASE course is designed to provide the foundation for students to engage in hands-on laboratories and activities to explore the world of animal agriculture. Students will have the opportunity to develop a comprehensive Producer's Management Guide for an animal of their choice. Career and post-secondary opportunities will be explored. (Offered Alternating years)

PRINCIPLES OF AGRICULTURAL SCIENCE – PLANT Grades 9-11(1 cr) (Alt Years)
This course from the CASE program of study is designed to provide the foundation for students about the form and function of plant system. Students are immersed in inquiry-based exercises filled with activities, projects, and problems to teach them plant concepts through laboratory and practical experiences. Career and post-secondary opportunities will be explored. (Offered Alternating years)

ENVIRONMENTAL SCIENCE Grades 11-12(1 cr) This course is designed to provide students with an overview of natural resources and ecology. Students are immersed in inquire-based exercises complete with activities, projects, and problems designed to teach concepts through field and laboratory experiences. Career and post-secondary opportunities will be explored. This course can be used to fulfil a Science credit requirement for graduation.

HORTICULTURE Grades 9-11(1 cr) This course is a study of the field of horticulture with emphasis placed on the scientific and technical knowledge for a career in horticulture. Topics include plant growth and development, plant selection, media selection, pest management, chemical disposal, inter-personal skills, and leadership development. Skills previously learned in the courses of Algebra, Chemistry, and Biology are utilized. Work-based learning strategies for this course include agriscience projects and internships. Supervised Agriculture Experience programs and FFA leadership development are an integral part of this course. Students will have the opportunity to take the private applicators section of the PA State Pesticide Certification Examination for possible certification. Students will utilize the school greenhouse to propagate plants. Consideration will be given to genetics, nutrition, sods, plant pathology, entomology, and disease and pest control. Part of this class will involve propagating and planting the community gardens located on school district property. Growing plants using hydroponics will be a component of this class. Career and post-secondary opportunities will be explored.

AGRICULTURE HYDROPONICS Grades 9-12(.50 cr)—This course is designed as a foundation level course teaching the following essentials of hydroponics: nutrient solutions, plant nutrition, types of hydroponic systems, nutrient films, plant culture and harvesting. Students will utilize their skills in the hydroponic part of the greenhouse.

ANIMAL & PLANT BIOTECHNOLOGY/ AGRICULTURE LEADERSHIP Grades 11-12(.5 cr) (Alt Years) Students may enroll in either or both of these courses. The Animal and Plant Biotechnology CASE course provides the opportunities for students to participate in projects involving micropipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. Research and experimental design are highlighted as students develop and conduct industry appropriate investigations. Career and post-secondary opportunities will be explored. The Agricultural Leadership course is designed for the student to learn the leadership skills of team building, ethical decision making, time management, goal setting, public speaking and conflict resolution. **This course stresses the value of student leadership memberships in organizations such as FFA and National Young Farmer Educational Association.**

AGRICULTURE POWER & TECHNOLOGY Grades 9-12(.50 cr) (Alt Years)—This is a foundation level course designed to teach the fundamentals of agricultural mechanics. Study areas include: shop safety, tool operation, materials use and selection, engineering, and technology applications. (Offered alternating years)

AGRICULTURE MARKETING Grades 9-10(.50 cr) (Alt Years) Agriculture Marketing is designed to provide the student with the continuing changes and variations confronted in managing an agriculture business. Topics include: agricultural marketing concepts, farm marketing objectives and strategies, target marketing, handling produce, customer relations, market research, promotions, and managing marketing. Students will have the opportunity to develop a business plan, implement the plan, and analyze the results.

SUPERVISED AGRICULTURE EXPERIENCE I, II, III

(Agriculture Records I) Grades 9-10 (1 cr) This course is an independent study course for full-time agriculture students and is completed outside of the normal school day. Credit is based upon a work experience project or a production enterprise. The student will be required to maintain weekly contact with his/her teacher supervisor, to log his/her time, and must complete a record book and a completed computer printout.

(Agriculture Records II) Grades 10-11 (1 cr) SAE II is an extension of SAE I. A personal analysis of records will be stressed. Students must complete a Keystone FFA Degree Application as a part of this course.

(Agriculture Records III) Grades 11-12(1 cr) SAE III is an extension of SAE II. This course is an independent study completed by the student under the supervision of the teacher.

VOCATIONAL TECHNICAL COURSE OFFERINGS BY TECHNICAL TRAINING CLUSTERS Grades 10 -12 --- 3.5 or 4 credits/year

All of the technical training program areas are taught with classroom knowledge and applied directly to hands-on experiences. Students complete an application process to participate in are two or three-year course programs designed for high school students in grades 10, 11 and 12. **All courses are offered at Erie County Technical School (ECTS).** Students take their core academic courses at Union City, and

attend classes at ECTS for the other half of the day either in the AM or PM. **Additional information about the Erie Technical School can be found on their website at: www.ects.org**

ARCHITECTURE & CONSTRUCTION CAREER PATHWAY CONSTRUCTION, DRAFTING, FACILITY MAINTENANCE & ELECTRICAL ENGINEERING

CONSTRUCTION TRADES This program prepares students to enter the building trades industry with marketable skills. This three-year program encompasses all phases of residential construction. The student will gain knowledge in the following areas:

- 1) basic building materials
- 2) blueprint reading
- 3) brick and block laying
- 4) rough framing
- 5) door and window installation
- 6) drywall hanging and finishing
- 7) stair construction
- 8) roofing and siding
- 9) finish trim applications, and
- 10) basic principles of wiring and plumbing.

First-year students learn how to safely operate hand and power tools. They acquire the fundamental skills and theory behind laying brick and block. The students also receive introductory lessons in framing, roofing and siding in the lab, along with related theory. Students study the different building materials used today and math skills related to the construction industry.

In the second year, students begin with floor framing and proceed to wall, ceiling and roof framing. Students learn by working on individual projects and then incorporating these skills in larger group projects. This provides training to work as a team, similar to that of a construction job site. The second-year student will be able to layout and construct stairs, install doors and windows and correctly apply roofing material. The students also learn how to read blueprints, specifications and detail drawings in order to determine dimensions and materials to use in building projects. Students also learn cost estimating and material selection techniques.

Third-year students receive job-site experience through our cooperative education program or by participating in community-based construction projects. The students in Construction Trades have been very active constructing or renovating various buildings throughout Erie County.

Prospective students should have mechanical aptitude, coordination, stamina, physical strength, manual dexterity, mechanical dexterity and no fear of heights.

DRAFTING AND DESIGN Drafting careers are changing rapidly as computer technology replaces traditional procedures and functions. The course instructs students in industry standards while using one of the most up-to-date drafting laboratories in the area. The Drafting & Design program prepares students to step into the workplace or it gives them an important edge, if choosing to further their education in this field. Drafting, mechanical drafting and CAD involve making precise, instrument-aided drawings that show how to construct machines, buildings and infrastructures.

The Drafting & Design curriculum includes all facets of drawing, including preparation of reports, charts and data sheets. The Drafting & Design program is designed for those students interested in drafting, mechanical design, engineering and architectural drawing.

Prospective students should possess the following characteristics: creative mind and good imagination, logical thinking, basic math skills, accuracy and artistic ability.

FACILITY MAINTENANCE This unique and highly versatile course offers several trades in one for the student who is interested in becoming a skilled craftsperson in a variety of trades.

Course content includes shop safety, proper use of hand and power tools, basic construction, plumbing, painting, electricity, woodworking, finish carpentry and small engine repair.

Employment possibilities range from individual buildings to manufacturing and industrial companies, municipalities, school districts, hotels, hospitals, airports and large commercial operations.

Prospective students should have physical stamina, mechanical aptitude, responsibility, manual dexterity, coordination and patience.

ARTS, VISUAL TECHNOLOGY, & COMMUNICATION CLUSTER ART & DESIGN FOR BUSINESS, COMPUTER NETWORKING, GRAPHIC COMMUNICATIONS

ART & DESIGN FOR BUSINESS In the first year of the Art & Design program, students receive training in core art skills, including color theory, perspective and illustrative drawing, lettering, photography and basic graphic design. Students also focus on work skills such as preparing a résumé, writing business correspondence and acquiring basic computer skills.

In the second and third years, students receive complex training in problem-solving skills by applying the design process to projects. Using a combination of computerization, photographic and conventional illustrative methods, students prepare portfolios of approximately 30 pieces of artwork.

Prospective students should possess the following characteristics: 1) a demonstrated talent in drawing; 2) solid verbal and written communication skills; 3) a good sense of color, proportion and design; 4) applied math skills; 5) developed problem-solving skills; and 6) fine motor skills.

COMPUTER NETWORKING This course is designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to further their education and training in the computer networking field.

Instruction includes safety, networking, network terminology and protocols, network standards, local-area networks (LANS), wide-area networks (WANS), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing and network standards.

Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication and social studies concepts to solve networking problems.

In addition, instruction and training are provided in the proper care, maintenance and use of networking software, tools and equipment and all local, state and federal safety, building and environmental codes and regulations.

GRAPHIC COMMUNICATIONS The Graphic Communications program introduces students to theoretical aspects as well as hands-on experiences using computers, darkroom equipment and printing presses. Students acquire marketable skills in job planning, design and layout, copy preparation, proofing, plate making, offset press operation, bindery and finishing.

Desktop publishing and computer graphics have become an essential part of the printing industry. To meet the demands of the industry, students acquire introductory skills in electronic imaging techniques using software applications including Adobe PhotoShop and PageMaker.

Prospective students should possess the following characteristics: creative mind, good typing skills, good background in English and spelling, strong mechanical skills, good attention to detail, organized and neatness.

EDUCATION & TRAINING

EARLY CHILDHOOD EDUCATION The Early Childhood Education program provides the student with the necessary skills for entry-level positions in the child care field, with an emphasis on the preschool environment. The students gain the knowledge of child development principles and will learn positive guidance techniques needed for working with children.

In this program, students participate in both group theory lessons and in individualized, self-directed training toward an occupational goal. Students select and work on competency-based learning guides, which lead to mastery of specific childcare skills in a preschool setting.

Curriculum areas include preschool teaching techniques, child development and growth, nutrition, art, music and children's literature. Students work three days per week in the Tech Tikes preschool as a Preschool Aide. * Prospective students should enjoy children and have a pleasant personality, even temperament, patience and good communication skills, particularly spelling and grammar.

ENERGY

ELECTRONICS & ELECTRICAL ENGINEERING

ELECTRONICS Increased complexity of technology will increase the demand for technicians. This course emphasizes electrical and electronic fundamentals and prepares students for a variety of entry-level positions in the electronics field. Basic theories of electronics, circuitry, communications, instrumentation and electronic automated techniques are part of this extensive curriculum.

The Electronics student learns in detail the workings of alternating current, direct current, solid state components and digital electronics. Students also learn how to assemble, install, repair, maintain and modify electronic systems.

Prospective students should have a solid understanding of Algebra, a mechanical inclination and good communication skills.

ELECTRICAL ENGINEERING Students in this program learn the fundamentals of electrical skills and theory. The Electrical Engineering Technologies students acquire the skills for employment in all industrial electric occupations. The students learn in detail the theory and hands-on application of alternating current, direct current, hydraulics, pneumatics, motor controls, programmable logic controllers and residential wiring.

Using a variety of hand tools and electrical testing equipment, the students learn how to wire a variety of industrial-rated components (relays, motor starters, motors, transformers, timing relays, push buttons, selector switches) and all components used in residential wiring applications. In addition, the students receive instruction in reading residential wiring schematics, motor control schematics, programmable logic controller schematics and hydraulic or pneumatic schematics.

Prospective students should possess mechanical aptitude, ability in basic math and manual dexterity.

HEALTH SCIENCE

HEALTH ASSISTANT The Health Assistant program is ideal for students considering a career in the health and medical field. This program introduces student to various career opportunities that exist in health care. It prepares the student to enter the health care system as a competent assistant to the health care professional.

The course exposes the student to health and medical practices such as physical therapy, occupational therapy, dietetics, medical office, nursing, medical secretary, and medical laboratory. Students are introduced to basic medical terminology, anatomy and physiology and beginning skills in medical procedures. An emphasis is placed on work attitudes necessary to be caring men and women sensitive to the complex needs of patients.

Prospective students should possess good communication and interpersonal skills, neatness and cleanliness, manual dexterity, good professional appearance, the ability to maintain confidentiality and the ability to lift fifty pounds.

HOSPITALITY & TOURISM

CULINARY ARTS, TOURISM & HOSPITALITY MANAGEMENT

CULINARY ARTS The Culinary Arts program assists the student who is interested in the fast-paced and ever-growing food services industry. The program offers a comprehensive presentation of basic principles and techniques necessary to obtain an entry-level position in the food service industry or prepare for continued training and education.

Incorporating theory and practical experience, this program introduces students to a variety of food preparation techniques using the schools fully equipped commercial kitchen and restaurant. Realistic instruction is provided by using the dining room, instructional kitchen, cafeteria, bakery and theory room.

Students learn the preparation of soups, sauces, salads, meats, shellfish, poultry, vegetables, presentation, garnishing and the preparation of desserts. In addition, instructional areas include safety and sanitation, proper use of equipment, purchasing, inventory control, menu planning, diet and nutrition, serving and food service management.

Prospective students should enjoy working with people and be able to work well under pressure; have physical stamina and coordination; good organizational skills; and basic math and reading abilities.

TOURISM & HOSPITALITY MANAGEMENT When you work in lodging or food service, you're part of the hospitality profession. You are also part of the largest, fastest-growing industry in the world—travel and tourism, where opportunities abound. The Tourism & Lodging Management program has everything you will need to get started on a hospitality career. Upon graduation, students are ready to begin their hospitality career or continue their education at a college or university.

In this program, students participate in classroom activities that teach valuable lodging skills and knowledge. Students will also participate in internships supervised by the instructor and a worksite mentor. Major instructional units in the curriculum include: an overview of lodging management, the front office, housekeeping, leadership and management, marketing and sales, and food and beverage service.

The objectives of this program correspond to competency lists used in the American Hotel & Motel Association's Educational Institute's post-secondary curriculum and form the basis for articulation agreements with colleges and universities. A national certificate from the Hospitality Business Alliance (HBA) will be issued to recognize student

achievement both in the classroom and in the workplace. Future employers and college admissions officers will recognize the HBA credential as evidence of a graduate's preparation for hospitality success. This credential can put you on the road to management in one of America's largest industries.

HUMAN SERVICES

COSMETOLOGY, CULINARY ARTS & EARLY CHILDHOOD EDUCATION

COSMETOLOGY Cosmetology is an art and a science involving the study of the skin, hair and nails. The Cosmetology program provides each student with the knowledge and skills required to become a licensed cosmetologist. The license requires 1250 hours of instruction.

The curriculum includes specialized classroom training in:

- 1) hair and scalp analysis;
- 2) hair cutting, setting and styling techniques;
- 3) hair coloring and permanent waving;
- 4) skin care, facials and make-up techniques;
- 5) manicures and pedicures;
- 6) wig styling;
- 7) anatomy and physiology;
- 8) sanitation and sterilization; and
- 9) salon management.

Students receive hands-on experience by using mannequin heads and live models during clinic service. The proper use of tools, equipment, safety procedures and state laws and regulations are also important elements of the curriculum.

Prospective students should possess creative and artistic aptitude, enjoy working with people, physical stamina, flexibility and patience.

INFORMATION TECHNOLOGY

ART & DESIGN, COMPUTER NETWORKING, COMPUTER PROGRAMMING & GRAPHIC COMMUNICATIONS

COMPUTER PROGRAMMING Design programming solutions for business information challenges. Use a wide range of unique software development languages to manipulate and present data. Write and edit source code and applets in interactive web-based applications such as HTML and Java. Students achieve entry-level skills in areas of computer operations, data entry and computer programming depending on their ability and interests. Combined with a background of knowledge, skills and appreciation of the data processing industry, each student is able to seek employment in the area of their interest. Studies include the basics of computer science in such areas as design and internal functions, operations, computer operation and programming, data processing and systems design. The Computer Information Systems program allows students to explore a career path that can lead to higher education in computer programming and many other related fields. Students will gain marketable skills to use computers in any field. --- Prospective students should be able to think logically, have good speaking, reading and writing skills and pay attention to detail.

MANUFACTURING CLUSTER

DRAFTING & DESIGN, ELECTRICAL ENGINEERING, ELECTRONICS, FACILITY MAINTENANCE, PRECISION MACHINING & METAL FABRICATION

METAL FABRICATION This is a comprehensive program designed to give students entry-level skills in the field of metal fabrication. Areas of study include the techniques and fundamentals of pattern development, fabrication, design, proper use of hand and power tools, acetylene welding, acetylene cutting, and metal inert gas welding.

Students experience training on a variety of machines. Emphasis is placed on bench work, precision measuring instruments, shearing, forming, rolling, assembly, welding, heat treatment, blueprint reading, layout and design, quality control, press brake operation, gas tungsten arc welding (tig) and shielded metal arc welding. Prospective students need manual dexterity, mechanical aptitude, physical stamina and basic math skills.

PRECISION MACHINING The machinist is a skilled worker who forms and shapes metals from their raw state to a finely finished and accurately shaped part. Students trained in this program develop the necessary skills to be entry-level machinists.

The Tool & Die program gives students the opportunity to manufacture machine parts from various metals on

machines such as engine lathes, vertical and horizontal milling machines, surface and cylindrical grinders, drill presses and the band saw. Students learn the properties of steel, aluminum and brass. Then they see how these properties are applicable in the trade.

This basic-to-advanced curriculum offers in-depth training from hand and power tools to state-of-the-art techniques such as computerized numerical control and electrical discharge machining. The understanding of shop mathematics, trigonometry, blueprint reading and precision measuring instruments are critical elements of this program.

Prospective students should possess above-average math skills, good work attitudes, mechanical aptitude, eye-hand coordination and the patience to work neatly and accurately.

TRANSPORTATION, DISTRIBUTION & LOGISTICS **AUTO BODY REPAIR & AUTOMOTIVE TECHNOLOGIES**

AUTO BODY REPAIR This course presents current and future practices in the rapidly changing world of auto body repair. Projects and class work use the latest technologies, equipment and shop practices. The latest approaches to modern automobile repair and reconstruction require skilled workmanship. Students in the Auto Body program learn all phases of auto body repair including:

The proper use of hand and power tools; damage analysis; rebuilding, reconditioning, sanding and refinishing; basic metalworking and dent repair; frame straightening; spray painting; welding; glass installation; and safety practices. Students also learn how to estimate, prepare job orders and general shop operation. The program uses demonstration automobiles to provide students with the opportunity to develop confidence by applying the theoretical concepts.

Prospective students should have good hand-eye coordination, manual dexterity, multi-limb coordination, mechanical aptitude, skill with tools, physical strength, accuracy and the ability to work with minimal supervision.

AUTOMOTIVE TECHNOLOGIES Changes in automotive technology have increased the importance of the automotive technician. This program provides the student with the theory and practical experience needed to diagnose and repair automotive systems and their components. Students meeting the requirements will be eligible to take the state inspection test for a Class One License.

This course covers the repair and maintenance of the ignition system, tires, braking, steering and suspension, alignment, electrical and electronic systems, fuel injection, engine repair, engine performance and cooling system. Major and minor tune-up and inspection procedures are also included.

An appropriate share of the program is devoted to studying automotive theory. Students use repair manuals, textbooks and computers for diagnosing problems. A major emphasis of this course is to promote safe, clean and efficient work habits.

Prospective students should have mechanical aptitude, manual dexterity, skill with tools, physical stamina, good hand-eye coordination, physical strength, willingness to work in an uncomfortable environment and the ability to think logically.

ECTS WORK TRANSITION

Students with special education needs may be eligible to attend the Transition Center. Students must be recommended by their high school teachers, guidance counselor, and special education director. Students will receive a vocational assessment and have the opportunity to gain specific training in: Custodial Maintenance, Food & Dining Services, and Hotel Housekeeping.

REGIONAL CHOICE INITIATIVE-RCI/Dual Enrollment College Courses

Regional Choice Initiative-RCI is an opportunity for qualified students in grades 11-12 from Erie County Public High Schools to enroll in college level classes at a reduced tuition rate. This program is managed by the Intermediate Unit V. Edinboro University, Gannon University, Mercyhurst University, and Penn State Behrend, offer classes on Tuesday/Thursday mornings on the second floor of the Skill Center building adjacent to the Erie County Technical School, or at their campuses. Transportation is provided by UCASD to the Skill Center only. These courses are considered Dual Enrollment, allowing students to receive both College and High School Credit. ***Students taking these college credit courses will be required to pay reduced tuition fees plus the cost of books, payment plans are available through the UCASD Business Office.**

**RCI Course Offerings vary each semester and applications are available at the High School Guidance Office to eligible students.*

Participation in Regional Choice Initiative (RCI) Dual Enrollment Courses

Participation in Regional Choice Initiative (RCI), Dual Enrollment Courses is available to students entering grade 11 and 12. Additionally, students in grades 9 or 10 with a Gifted IEP may also participate in this program if approved by the university. Students in grade 11 must have a 3.25 cum GPA and be enrolled in college prep courses including Physics or other advanced science course, Foreign Language, and Algebra II or higher math. Students in grade 10 must have a 3.5 cum GPA and be enrolled in college prep courses including Chemistry, Foreign Language and Geometry or higher math. At Union City, RCI courses are primarily used as elective credit and generally do not replace core curriculum courses.

Eligible students complete an application and return it to the Guidance Office by a specified date. The application is forwarded on to Intermediate Unit V for processing; course scheduling is determined by the date of application and seat availability for the entire program. Additionally, students must be recommended by the high school principal or guidance counselor. **Students may include a maximum of four RCI/Dual Enrollment courses in their cumulative GPA on the weighted grading scale; any additional RCI courses will be calculated into the GPA on the non-weighted grading scale.** Students may lose the opportunity to continue in the RCI program, if they do not maintain a “C” average in each of their regular and/or RCI courses. ***Any student who is participating in RCI and fails either a Union City or RCI course will not be permitted to continue in the RCI program in the future. Student will not be permitted to begin a new RCI course if they have any outstanding amounts still owed on previous courses.**

Union City Area School District is an equal opportunity education institution and will not discriminate on the basis of race, color, national origin, sex and handicap in its activities, programs or employment practices as required by Title VI, Title IX and Section 504.

For information regarding civil rights or grievance procedures contact the Superintendent, (Title IX Coordinator), at 107 Concord St., Union City, PA 16438 (814-438-3804 ext. 5454).

For information regarding services, activities and facilities that are accessible to and usable by handicapped persons, contact Stacey Mulson, Special Education Coordinator at (814-438-7571 extension 3404)

Helpful Online Resources for Students and Parents

FAFSA (Free Application for Federal Student Aid)

www.FAFSA.gov – Seniors who plan to attend or are thinking about attending a postsecondary school upon graduation should use this website to apply for financial aid.

www.fsaid.ed.gov -- Use this website to apply for the: **FSA ID** username and password that students & parents will use to electronically sign the FAFSA before electronically filing it with the government. **The FAFSA is a FREE APPLICATION! It is free to complete and send electronically. If anyone is charging you to file this application, then you are at the wrong website.**

College & Scholarship Resources

<http://aessuccess.org>

<http://estudentloans.com>

<http://www.actstudent.org> –ACT College Entrance Test

<http://www.collegescholarships.com>

<http://www.collegeboard.com> - SAT College Entrance Test

<http://www.collegeispossible.org>

<http://www.ed.gov/about/offices/list/ope/index.html?src=mr>

<http://www.educationplanner.org>

<http://www.fastweb.com> -Scholarship Search

<http://www.finaid.org>

<http://www.march2Success.com> –Free online test prep for ASVAB or SAT

<http://www.pasfaa.org>

<http://www.petersons.com>

<http://www.pheaa.org> Pennsylvania Higher Education Assistance Agency- State Grant Filing Site

<http://www.princetonreview.com>

<http://www.scholarships.com>

<http://www.students.gov>

<http://www.upromise.com>

<http://www.YouCanDealWithIt.com>

***The Union City High School Guidance Office is available as a resource to both students and parents with questions about the college application process and financial aid. A copy of this Course Selection Guide and other Guidance Resources are available on the UCASD Website. The High School Guidance Counselor, Kimberlie Dawson, can be reached by email at kdawson@ucasd.org or by phone at 814-438-7673 ext. 5413.

UNION CITY HIGH SCHOOL ACADEMIC & CAREER PLANNING (CEW Doc)

Student Name _____ Graduation Year _____ Current Grade Level _____

1. I have achieved Keystone Proficiency in: Algebra I _____; Literature _____; Biology _____
I have taken or plan to take: Pre-ACT _____; PSAT _____; ASVAB _____; SAT/ACT _____

2. Planned UC Program of Study: College Prep ____; Agriculture ____; General ____; ECTS _____; RCI/College _____

3. My Current Career Pathway Interest Areas Are: ARTS AND COMMUNICATIONS (AC); BUSINESS, FINANCE AND INFORMATION TECHNOLOGY (BFIT); ENGINEERING AND INDUSTRIAL TECHNOLOGY (EIT); HUMAN SERVICES (HS); SCIENCE AND HEALTH (SH); STEM ACADEMY (STEM); AGRICULTURE- CAREER TECH ED(AE-CTE)

1. _____ 2. _____

4. My Holland Interest Code Areas Are: R=Realistic; I=Investigative; A=Artistic; S=Social; E=Enterprising; C=Conventional: 1. _____ 2. _____

5. My Current Post-Secondary Plans Are: 4 Year college: _____ 2 Year College: _____ Technical School: _____
Military: _____ On Job Training/Apprentice: _____ Certification Program: _____ Employment _____ Unsure: _____

6. After HS Possible Programs of Study that I would like to pursue are: 1. _____
2. _____ 3. _____

*7. Possible Courses that I will need to take this year in High School Connected to My Cluster/Pathway Are:

1. _____ 2. _____ 3. _____ 4. _____ 5. _____
6. _____ 7. _____ 8. _____ 9. _____ 10. _____

Graduation Requirements	Total =28	Schedule: 8-credits/year		Job Shadow	Senior Project	2 College Visits ____;
Subject	Required Tot.Credits	Grade 9	Grade 10	Grade 11	Grade 12	Additional
Grade English: Adv., Reg., Applied	4					
Math:	4					
Science:	4					
Social Studies: US History	3	World- 1.0cr		US GOVT. .50cr	Economics .50cr	
Physical Education:	.50	Grade 9-.50 Phys. Ed				
Health:	1		Health 10	Contemp. Health- 11		
Computer:	1	Career/Comp. 1-.50			Computer 2/Futures	
Family/Cons.Science:	0.5	Modern Living I-.50				
STEM Required Electives:	1					

Electives: General=3 Career Pathway=6;	9					
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Parent Signature: _____ Date: _____