ASD Allentown
SCHOOL DISTRICT

#ASDCommittedToExcellence

2020-2021 HIGH SCHOOL PROGRAM OF STUDIES

ALLENTOWN SCHOOL DISTRICT

2020 -2021 Program of Studies, Grade 9 – 12

Table of Contents

Page #

General Information

Board of School Directors & Central Administration 3
Board Goals 4
Principal's Letter 5
William Allen, Louis E. Dieruff & Building 21 High school Administration & Counselors 6
Sequence Course Chart (Grade 9-12) 7
Graduation Requirements 8
Graduation Plan Sheet 15

Pathways to Success

- Collegiate Program Experience 16
- Advanced Placement 16
- Dual Enrollment 16
- Lehigh Career & Technical Institute 17
- Virtual Courses 17
- Independent Study 17
- Gifted Program 19
- Advanced Courses 19
- Special Education Programs and Services 19
- NCAA Approved Courses 20
- How to Read the Course Descriptions in the Program of Studies 23

Course Descriptions

- English 24
- Mathematics 28
- Science 33
- Social Studies 37
- Art 40
- Business/Technology 42
- Dance 43
- English to Speakers of Other Languages 44
- Family and Consumer Science 44
- Health and Physical Education 45
- Music 46
- Theatre 47
- World Languages 47
- Air Force Junior Reserve Officer Training Corps 50
- Naval Junior Reserve Officer Training Corps 51

Allentown School District Academics

- The Allentown Virtual Academy 52
- The Academy of the Arts (William Allen High School) 56
- The Academy of Information Technology (Louis E. Dieruff High School) 59
- Building 21 60

Lehigh Career and Technical Institute Enrollment Options 63

SCHOOL DISTRICT OF THE CITY OF ALLENTOWN
BOARD OF SCHOOL DIRECTORS

Sara J. Brace *President*
Audrey Mathison *Vice-President*

Lisa A. Conover
Phoebe D. Harris
Nicholas Miller
Charles F. Thiel
Linda Vega
Cheryl L. Johnson-Watts
Nancy Wilt

Janet Morillo
Board Secretary

John E. Freund III
Solicitor

CENTRAL ADMINISTRATION

Thomas E. Parker
Superintendent

Jennifer M. Ramos
Deputy Superintendent for Operations

Dr. Lucretia N. Brown
Assistant Superintendent for Equity & Accountability

TBD
Treasurer / Business Manager

Anthony Pidgeon
Executive Director of Human Resources

Scott Cole
Executive Director of Elementary Education

TBD
Executive Director of Secondary Education

Takecia Saylor
Assistant to the Superintendent, Technology

Andrea Stock
Director of Child Nutrition Services

Jennifer Bryant
Director of Literacy

Brandy Sawyer
Director of STEM

Dr. Kurt Berbaum
Director of Assessment

Tiffany Polek
Acting Director of Community & Student Services

Josephine Cacace
Director of Finance

William Seng
Director of Alternative Learning

Keith Falko
Director of Operations

Brian Siket
Director of Special Education

Kathleen Gill
Director of ESOL & World Languages, Principal of Newcomer Academies

Melissa Smith
Director of Grants & Development

Tom Smith
Director of Facilities

2020 ASD School District & Board Goals

VISION

Each and every student, with the active support of the entire community, will graduate ready to thrive in a diverse and complex world.

MISSION

Each and every student will graduate college and career ready by having their individual needs met through active engagement in a rigorous, safe and nurturing learning environment.

CORE VALUES

In ASD, our commitment to Excellence, Partnership and Equity means that we believe in:

- Honoring each student's unique qualities
- Ensuring equity of access and opportunities
- Nurturing the pursuit of lifelong learning
- Strengthening partnerships with families and communities
- Promoting cultural responsiveness
- Building trust and mutual respect

THEORY OF ACTION

Our theory of action is grounded in a clear understanding of our challenges and the opportunities that exist to bring about continuous improvement. It tells a story of the choices and changes we intend to make to improve teaching, learning, and leadership.

IF WE:

Cultivate a culture in which students feel safe, valued and nurtured;
Center the district's work on personalized learning and instruction;
Collaborate meaningfully and deeply with families and communities;
Create and expect organizational effectiveness and accountability; and
Calibrate leadership and learning at all levels,

THEN:

ASD students will graduate college and career ready with the skills necessary to explore and pursue post-secondary options that lead to success in work and life.

Letter from Your Principals

The Allentown School District is excited to share the 2020-21 Program of Studies. It is designed to guide you to the important information needed to select your courses for the upcoming school year.

Our high schools offer a wide variety of academic courses designed to prepare you for the future. Please review the courses listed and described on the following pages with your parents. It is important to develop an academic plan based on your personal interests and future goals. Careful consideration should be given to the course descriptions, graduation requirements and program options contained in this booklet.

As you prepare to build your schedule for next year, we encourage you to challenge yourself both in your academic course work and your investment in extracurricular activities. Take an advanced class in your favorite subject area.

Get involved. Students who are connected to school by participating in activities stay engaged in their classes and are generally more successful in school.

Our staff is here to ensure your high school experience is a special one. Should you have any questions about the registration process, please talk with one of your teachers, an administrator, or make an appointment to see your guidance counselor. We will all do our best to address your questions and concerns.

Sincerely,

Michael Makhoul
Principal, Dieruff High School

Mr. Jose Rosado, Jr.
Principal, Building 21

Mr. Shannon Mayfield
Principal, Allen High School

Building 21 Allentown High School Administration

School Leader.....Jose Rosado, Jr.
Assistant School Leader.....Telsa Comunale

Counselors

Tania Brannon
Scott Wolff

Louis E. Dieruff High School Administration

Principal.....Michael Makhoul
Assistant Principal (9th Grade).....Jose Delgado
Assistant Principal (9th Grade).....Maggie Drake
Assistant Principal (Blue Pod).....Matthew Givler
Assistant Principal (Grey Pod).....Melissa Petronio
Supervisor of Instruction.....Lisa Krause

Counselors
Janet Schnalzer, Chairperson

Olga Cosme
Beatriz Gambourg
Jeanne Grieger
Maria Markunas
Jeffrey Penizotto
Nichol Gibbs

William Allen High School Administration

Principal.....Shannon Mayfield
Assistant Principal (9th Grade).....Jeremy Thatcher
Assistant Principal (9th Grade).....Randy Atiyeh
Assistant Principal (10th Grade).....Michael Bolinsky
Assistant Principal (10th Grade).....Corey Cowen
Assistant Principal (11th Grade).....Ken Fritz
Assistant Principal (12th Grade).....Lilly Figueroa
Supervisor of Instruction.....Michele Kloiber

Counselors
Craig Smith, Chairperson

Craig Borrell
Brooke Dietrick
Rina Duggan
Allison Hausman
Dawn Tehonica
Liayn Morris
Kristin Mosser
Vanessa VanNorman

Sequence Course Chart

Classes of 2020, 2021, 2022 and 2023 Course Sequence

ASD High School Course Sequences

Grade 9 (2024)

Required

English (specific required courses are on page)	1.0 credit
Social Studies (specific required courses are on page)	1.0 credit
Math (see Math course offerings listed on page)	1.0 credit
Science (specific required courses are on page)	1.0 credit
Physical Education	.5 credit
Health Education	.5 credit
Computer Programming	.5 credit
Required Courses	**5.5 credits**
Elective Courses	**up to 1.5 credits**

ASD High School Course Sequences

Grade 11 (2022)

Required

English (specific required courses are on page)	1.0 credit
Social Studies ** (specific required courses are on page)	1.0 credit
Math *	1.0 credit
Science *	1.0 credit
Physical Education	.2 credit
Required Courses	**4.2 credits**
Elective Courses	**up to 2.5 credits**

** At least three total credits each of Math and Science are required for graduation.*

*** Students who attend LCTI are not required to take Grade 11 Social Studies*

Grade 10 (2023)

Required

English (specific required courses are on page)	1.0 credit
Social Studies (specific required courses are on page)	1.0 credit
Math (see Math course offerings listed on page)	1.0 credit
Science (specific required courses are on page)	1.0 credit
Physical Education	.5 credit
Required Courses	**4.5 credits**
Elective Courses	**up to 2.5 credits**

Grade 12 (2021)

Required

English * (specific required courses are on page) *	1.0 credit
Social Studies **	.5 credit
Physical Education	.2 credit
Required Courses	**1.7 credits**
Elective Courses	**up to 5.0 credits**

(Must schedule at least .5 Elective Course credits)

**A total of four credits in specific required English courses are required for graduation*

*** Students who attend LCTI will have one total credit of Social Studies*

Graduation Requirements

Credit Requirements

Subject Area for Credit	Number of Credits – Class of (2020-2021)	Number of Credits – Class of (2022-2023)
English	4.0	4.0
Social Studies	3.5	3.5
Mathematics	3.0	3.0
Science	3.0	3.0
Arts & Humanities* (at least. .5 of each)	2.0	2.0
Health	0.5	0.5
Physical Education	0.8	2.0
Computer Programming/Technology	0.5	0.5
Electives	5.0	5.0
Total Minimum Credits	22.3	23.5

LCTI Students (Full and Half Day)

Subject Area for Credit	Number of Credits – Class of (2020-2021)	Number of Credits – Class (2022-2023)
English	4.0	4.0
Social Studies	3.0	3.0
Mathematics	3.0	3.0
Science	3.0	3.0
Arts & Humanities* (at least .5 of each)	2.0	2.0
Health	0.5	0.5
Physical Education	0.8	2.0
Computer Programming	0.5	0.5
LCTI Electives	5.0	5.0
Total Minimum Credits	21.8	23.0

* Courses that qualify for Humanities: Journalism, Media Print, Foreign Languages, DE British Literature, DE Speech, DE Interpersonal Communication, Psychology, Sociology, Economics, Genetics, and any Family and Consumer Science elective

* The Arts includes any course listed in Art, Dance, Theatre, and Music Electives

* Mathematics of Personal Finance Course maybe used towards satisfying one credit in social studies, family and consumer science, Mathematics, or business education credit requirements for graduations

Allentown School District Assessment Requirements

Students are expected to demonstrate proficiency on the Literature, Algebra I, and Biology Keystone Exams. The Literature Keystone Exam will be administered at the end of English II. The Algebra I and Biology Keystone Exams will be given at the end of each respective course. A student who does not attain proficiency on the Keystone Exams in Literature, Algebra I and/or Biology, will be provided with remediation, and be given additional opportunities to re-take the Keystone Exams.

Grade 9 Academic Program

9TH GRADE COURSES	Subject	Traditional	LCTI Option (Half Day)	Advanced
	Mathematics	Developmental Algebra or Algebra 1*	Algebra 1* or Algebra 2	Geometry, or Advanced Geometry, or Algebra 2, or Advanced Algebra 2
	Science	Physical Science	Physical Science	Advanced Biology*
	Social Studies	US History I	US History I	US History I - Advanced
	English	English I	English I	English I - Advanced
	Health	Health	Wellness/ Fitness	Health
	Physical Education	Phys. Ed.		Phys. Ed.
	Computer Applications	Computer Programming	Computer Programming	Computer Programming
	Electives	Electives, Virtual Academy Electives or READ 180	LCTI LAB	Electives, Virtual Academy Electives

*Indicates a Keystone Exam is given at the end of the course.

Grade 10 Academic Program

10TH GRADE COURSES	Subject	Traditional	LCTI Option (Full Day)	LCTI Option (Half Day)	Advanced
	Mathematics	Algebra I* Foundations of Algebra II, Algebra II, Geometry or Advanced Geometry	Geometry	Foundations of Algebra II, Algebra II, or Geometry	Advanced Geometry, Algebra II, Advanced Algebra II, (TRIO) Algebra III/ Trigonometry/ Analytic Geometry or Pre-Calculus
	Science	Biology*	Biology*	Biology*	Advanced Biology, Chemistry/ Advanced Chemistry
	Social Studies	World Cultures	American Studies	American Studies II	World History AP
	English	English II*	English II*	English II*	Advanced English II*
	Physical Education	Phys Ed	Literacy Advantage/ Math Apprenticeship ---------- Level I LAB		Phys Ed
	Electives	Electives, Virtual Academy Electives		Level I Tech LAB	Electives, Virtual Academy Electives

*Indicates a Keystone Exam is given at the end of the course.

Grade 11 Academic Program

11TH GRADE COURSES	Subject	Traditional	LCTI Option (Full Day)	LCTI Option (Half Day)	Collegiate Program Experience/ Dual Enrollment	Collegiate Program Experience/ Advanced Placement
	Mathematics	Foundations of Algebra 2, Algebra 2, Geometry, Advanced Geometry, PreCalc	Algebra III/ Trigonometry or Geometry or Algebra II	Geometry, Advanced Geometry	Pre-calculus or Probability and Statistics	Advanced Algebra III/ Trigonometry/ Analytical Geometry, AP Statistics, AP Calculus AB
	Science	Chemistry. Advanced Chemistry, Physics, Environmental Science, Science Electives Options	Chemistry or Physics	Chemistry, Physics, Env. Science, Science Electives Options	Physics Anatomy & Physiology	AP Physics, AP Chemistry, AP Biology, AP Environmental Science, Science Electives Options
	Social Studies	US History II	World Cultures		Intro to Psychology, Intro to Sociology, State & Local Government, US History since Reconstruction	AP US History
	English	English III	Integrated American History & Literature	English III	College English I	English Language & Composition - AP
	Physical Education	Physical Education	Wellness Fitness	Wellness Fitness	Physical Education	
	Electives	Electives, Virtual Academy Electives	Technical LAB	Technical LAB	Interpersonal Communication, Speech, DE Online Options	Optional AP Electives, Virtual Academy AP Electives

Grade 12 Academic Program

12TH GRADE COURSES	Subject	Traditional	LCTI Option (Full Day)	LCTI Option (Half Day)	Collegiate Program Experience/ Dual Enrollment	Collegiate Program Experience/ Advanced Placement
	Mathematics	(TRIO) Algebra III/ Trigonometry/ Analytic Geometry, Statistics, Algebra II, AP Computer Science Principles	**Choose <u>one</u> Science or Math:** Biology, Chemistry, Physics, Geometry, Algebra II or Algebra III Trigonometry Earth & Space, Chemistry, Physics II	LCTI Program of Choice	Probability & Statistics, Pre-Calculus, Calculus & Analytical Geometry	AP Calculus AB, AP Calculus BC, AP Statistics, AP Computer Science Principles
	Science	Chemistry, Physics, Environmental Science, or Science Electives Options			Physics, Anatomy and Physiology, or Emerging Health Professions	AP Physics 2, AP Physics C, AP Chemistry, AP Biology, or AP Environmental Science
	Social Studies	US Government	American Govt./ Civics/ Econ	American Govt./ Civics/ Econ	Intro to Psychology, Intro to Sociology, State & Local Government, Human Growth and Development, Modern Social Problems, US History since Reconstruction	United States Government & Politics AP & Macroeconomics AP
	English	English IV	English Lang Arts IV	English Lang Arts IV	College English 1 or II, Speech, British Literature	AP English Literature & Composition
	Physical Education	Physical Education	Wellness Fitness	Physical Education	Physical Education	Optional AP Electives, Virtual Academy AP Electives
	Electives	Electives, Virtual Academy Electives	Technical LAB	Technical LAB	Interpersonal Communication, Speech, Foreign Language, Introduction to Art	

Allentown School District
Non-Disciplinary/Non-Traditional Academic Pathways

Program	Student	Educational Setting	Curriculum	Referral/Enrollment Process
G.A.I.N. Graduation Attainment Initiative Network	Students age 18-21 not demonstrating academic progress in the traditional classroom setting	In-school, small size	Academic, career exploration, extended teacher support.	Counselor recommendation
REC Re-Engagement Center	Drop out dis-engaged youth, ages 17-21 or 24 (depending on which program is chosen traditional diploma [21] or GED [24])	Out-of-school	Case-managed support and strong career support, as well as a flexible academic program individually tailored to meet the needs of the student. Center staff reviews students' transcripts and develops an individualized plan that enrolls the student in the best program that fits them. The staff continues to provide support to students after enrollment to provide each student the support needed to keep them on track to graduate.	Students can contact or visit the Center on their own or be referred to the Center by another.
ELECT Education Leading to Employment and Career Training	Parenting students or students expecting a child under age 22	In school and out of school	Case-managed support and strong career support, as well as a flexible academic program individually tailored to meet the needs of the student. Provides social support and educational parenting resources for students needs both in school and outside of school.	Students may contact their counselor, school nurse or The Elect Office or be referred to the program by another.

Allentown School District
Non-Traditional Academic Pathways

Program	Student	Educational Setting	Curriculum	Referral/Enrollment Process
AEDY Middle School & AEDY High School	Identified students who have specific behavioral needs in Grade 6-12	William Penn Building	A comprehensive alternative education program which is run in partnership with Communities in Schools (CIS). The school offers an educational placement system that moves students through short-term academic and behavioral interventions before placing students back into their home schools as they meet the established exit criteria.	Administrator recommendation, Parent consent
VISTA Middle School & VISTA High School	Students that have been expelled from the district in Grade 6-12.	William Penn Building	Instruction in four basic curriculum areas include English, Mathematics, Science and Social Studies. All instruction is based upon curriculum calendars provided by the Allentown School District. Students are encouraged to be employed or engage in community service to earn additional credits toward graduation. *Reintegration/Graduation* Students are periodically evaluated to determine eligibility to either return to the home school, enter an appropriate alternative educational program, or complete their academic requirements and obtain an Allentown School District diploma.	Administrator recommendation, Parent consent

Graduation Plan					
Subject	Credits Required	Grade	Courses Completed/To Be Completed	Year	Total
English	4	9			
		10			
		11			
		12			
Math	3	9			
		10			
		11			
		12			
Science	3	9			
		10			
		11			
		12			
Social Studies	3.5	9			
		10			
		11			
		12			
Health/PE	2.0	9			
		10			
		11			
		12			
Electives (including computer programming)	5.5	9			
		10			
		11			
		12			
Arts & Humanities Electives	2	9			
		10			
		11			
		12			
TOTAL CREDITS = 23.5 TOTAL CREDITS LCTI = 23.0					

Pathways to Success

Allentown Early College Pathway
NEW PATHWAY

Allentown School District is launching a new program for students in 2019 – the Allentown Early College Pathway. This new initiative, in partnership with Lehigh Carbon Community College (LCCC), is tied to the Strategic Framework objective to center the district's work on personalized learning and instruction. Allentown School District will be responsible for covering all costs associated with student participation.

The Allentown Early College Pathway is a dual enrollment program where select high school juniors will have the opportunity to earn an associate of the arts degree while they are simultaneously completing their high school diploma. While in their junior and senior years, students will complete dual enrollment courses at Lehigh Carbon Community College's Main Campus and/or Donnelly Campus. Upon completion of high school graduation requirements and completion of the dual enrollment courses from LCCC, students will graduate with both their high school diploma and associate degree. Students will have the opportunity to use this course work when applying to traditional four-year colleges or any other post-secondary option.

- Participating students would take all junior and senior classes as dual enrollment with LCCC.
- Students must place into college level courses or qualify for exemptions.
- Program is available to qualifying students from all three Allentown School District high schools.
- Allentown School District will be responsible for covering all costs associated with student participation. The costs covered by the district include:
    - Tuition - $55 per credit, 60 credits = $3,300 per student
    - Textbooks – estimated at $2000 per year
    - Transportation and lunch
- The Allentown Early College Pathway program builds on best practices from other states already using this model.

Dual Enrollment

The Dual Enrollment program provides students with opportunities to take college course offerings from Lehigh County Community College (LCCC). Students are simultaneously enrolled at both their home high school and LCCC. Tuition will be paid by the district for students taking dual enrollment courses through LCCC. The benefits for students successfully completing dual enrollment courses include:

- Possible attainment of an associate degree (61 College Credits) from LCCC
- Students are able to receive college credit while in high school at no cost, saving significant tuition costs towards college.
- Students are able to experience the dynamics of a college classroom before entering college.
- Students easily transition from high school to college with a working knowledge of what to expect.
- Successful completion of dual enrollment courses can shorten the time to college degree completion.
- College credit is earned at the same time as high school credit.
- Students narrow down their career interests by having the chance to explore a variety of fields at the college level.
- Dual Enrollment Courses receive a .2 weighting for course completion with a grade of "C" or higher.
- The following Dual Enrollment Courses are offered to ASD students through LCCC:
- **English**: British Literature, College English I & II
- **Math**: Probability & Statistics, Pre-calculus, Calculus & Analytic Geometry
- **Science**: Introduction to Environmental Science, Anatomy & Physiology I, Chemistry and Physics
- **Social Studies**: US History since Reconstruction and State & Local Government
- **Electives**: Speech, Intro to Sociology, Foreign Language, Human Growth and Development, Modern Social Problems, Intro to Computers & Applications, Intro to Psychology, Intro to Art, Interpersonal Communication, and Physical Education.
- **Emerging Health Professionals** courses (see program description below)

Pennsylvania has created a seamless statewide transfer and articulation system, which requires Pennsylvania's 14 community colleges and the 14 universities in the Pennsylvania State System of Higher Education (PASSHE) to adopt mandatory equivalency standards for the purpose of creating at least 30 hours of foundation courses that can be easily transferred to any of the participating institutions. This means that an ASD student electing to take Dual Enrollment Courses may earn up to 30 credits towards a bachelor's degree while still in high school and save one year of tuition costs at a state or state related university.

Advanced Placement

The Advanced Placement Program (AP), administered by The College Board, offers college-level courses that are taught at local high schools by high school teachers. In 1955 the AP program was initiated in the United States. Since then, approximately 8 million students have taken advantage of this program. ASD offers 22 Advanced Placement courses to its students. The AP program allows students to experience post-secondary coursework and its increased academic rigor while still in enrolled in the supportive environment of their local high school. The advantages of taking AP courses for students are many:

- College credit can be given to students who pass the AP exam (passing is generally considered scoring three or higher out of five, although some schools only accept a four or a five score for credit).
- Advanced Placement courses offer an accelerated skill development curve. AP courses can help students acquire the skills and habits they will need to be successful in college. Students will improve their writing skills, sharpen problem- solving abilities, and develop time management skills, discipline, and study habits.
- Real college conditioning– Research consistently shows that students who are successful in AP typically experience greater academic success in college than students who do not participate. Advanced Placement courses offer students a seamless pathway between high school and college.
- Students taking one AP course will be required to take the course AP exam at the conclusion of the course. Students taking two or more AP courses will be required to take a minimum of two AP exams at the conclusion of their courses. Students taking more than two AP courses can choose the exams that are required. Students may elect to take an AP exam for all AP courses completed; however, they will only be required by the district to take two exams. The costs of these exams are assumed by the district.
- Advanced Placement Courses receive a .3 weighting for course completion with a "B" grade or higher. The following Advanced Placement Courses are offered in our high schools and/or the ASD Virtual Academy:
- English: Language & Composition and Literature & Composition
- Math: Calculus AB, Calculus BC and Statistics
- Science: Biology, Chemistry, Environmental Science, Physics 1, Physics 2, and Physics C
- Social Studies: World History, US History, US Government & Politics and Macroeconomics
- Electives: Computer Science, Studio Art, Art History, Music Theory, German Language, Psychology/Virtual), Spanish Language and Culture

Additional information concerning AP courses may be obtained at the following address:
https://apstudent.collegeboard.org/home

Lehigh Career & Technical Institute

The Allentown School District and the Lehigh Career and Technical Institute (LCTI) have developed a program called Career Pathways to help all students plan realistically for a promising future. At the high school level, the program is designed to guide students to choose a career cluster based on their specific interests and to select courses appropriate for that cluster. LCTI students can choose either a traditional or a technical academic pathway within any of the following career clusters: Arts & Humanities, Business and Communication Technology, Engineering & Industrial Technology, and Health & Human Services.

LCTI program offerings are listed on page 60.

Virtual Courses

The Allentown School District (ASD) is a leader in K-12 for preparing our students for the 21st century. The ASD Virtual Academy offers high quality, internet-delivered high school courses that equip students to thrive in the complex life and work environment of the 21st century. This initiative enables the Allentown School District to offer courses that might not otherwise be available. Virtual courses may be requested through your counselor for the following reasons:

- Enrichment
- Make up a failed course
- Course does not fit into your schedule
- Homebound tutoring

Independent Study

Independent study programs are intended to add to the curriculum established by each of the core discipline areas. An independent study is intended to encompass rigorous learning activities that are aligned to state standards. Independent Study is for students who have a strong desire to study a subject in depth that is not contained within the academic program. Students interested in securing an independent study must contact prospective teachers to collaborate on an independent study contract including standards, objectives and a content outline that must be accomplished by the end of the course. The independent study contract must also identify resource materials and learning strategies by which the student will master the stated objectives. The following guidelines must be adhered to when requesting independent study programs:

- Independent study programs will not be approved for courses that are already offered on the master schedule.
- Independent study programs will not be assigned a weighted grade unless the program being offered is an advanced placement or advanced course not offered through the master schedule. Administrative approval must be granted.
- Independent study program contracts must be approved for a student each semester.
- Only one independent study program will be approved for a student each semester.
- Independent study programs do not replace selected courses on a student's academic schedule. An independent study is considered an addition to the required courses needed for a complete academic schedule.
- The amount of effort to fulfill the independent study contract will be comparable in expectations to rigorous high school academic courses.

Prior written approval of the principal, curriculum coordinator and the parent or guardian is required on the written contract before the independent study begins. All independent study programs will be operated under the supervision of a faculty member and reviewed by the appropriate curriculum coordinator for the fulfillment of the contract. Fully approved contracts for independent study programs will be submitted to the school counselor during the regular registration period established for all course selections for the upcoming year. Credit will be granted for the independent study program only if an approved contract is on file in the Counseling Office. Independent study program grades will be recorded each marking period and a final grade will appear on the student's high school transcript.

SAT Suite of Assessments

In the Allentown school District, all students in Grade 10 take the PSAT 10 Assessment offered through College Board in the fall. PSAT 10 are highly relevant to your future success because they focus on the skills and knowledge at the heart of their education. They'll measure what you learn in high school and what you need to succeed in college. The PSAT 10 also provides:

- A great way to practice and get familiar with the format of the SAT,
- An SAT study plan customized for you based on your scores,
- A suggestion of AP courses that are a great match based on your scores, and a
- Connection to scholarship partners that offer scholarships to qualified low-income and minority students.

In the Allentown School District, students in Grade 11 take the SAT college entrance exam offered through the College Board during SAT School Day in the spring. SAT School Day breaks down barriers that students face on their path to college and career readiness buy expanding access during the school day for the SAT to be administered, lower stress levels due to testing in a familiar setting, and builds confidence through free practice offered from College Board. There are additional college and career planning benefits including:

- Connections to colleges and scholarship programs,
- Free access to Career Finder which can help you find careers that interest you,
- Free practice through College Board including the opportunity to earn money for college when you practice and improve your score, and
- Measures what students are learning in high school and what they need to know to succeed in college and beyond.

Workforce Board Lehigh Valley Employability Skills Curriculum Course

Workforce Board LV Employability Skills **No. 840**

Grade 12 Year 0.5 5 Periods 0.5 Credit

The Allentown School District, in partnership with the Workforce Board Lehigh Valley, recognizes that career readiness is an essential part of the educational process for students as they prepare for college and careers. The Workforce Board Lehigh Valley created a curriculum based on Employability Skills Framework developed from the Standards of Career and Technical Education (CTE) along with workforce development and business organizations and the U.S Department of Education. Employability skills are a crucial component of college and career readiness where students will attain the skills to be college and career ready, including academic knowledge, technical expertise, and a set of general, cross-cutting abilities called "employability skills". These skills are centered around three main areas, including effective relationships, workplace skills, and applied knowledge. Students that are taking this course will learn interpersonal skills, technology use, systems thinking, communication skills, information use, resource management, and critical thinking and problem-solving skills.

- Course will be offered to incoming 12th grade students in the 2019-2020 SY
- Students that complete the course will receive a certificate of completion from the Workforce Board Lehigh Valley and interview with Career Link
- All costs for the new course are encumbered through a grant with the Workforce Board Lehigh Valley (LEA)
- ASD will hire a teacher for this new course.
- Professional Development for the teacher will occur through the grant in the summer and the beginning of the year, including mentoring from Dr. Bell, creator of the curriculum

Drivers Education Theory Course

Driver Education Theory **No. 850**
Grade 11,12 Year 0.5 5 Periods 0.5 Credit

Driver's Education Theory courses help prepare young drivers to be safe and responsible behind the wheel. The PA Department of Transportation requires young adults, under the age of 18 years old, to complete a driver's education theory course to obtain a PA driver's license. In this course, students will learn about PA traffic laws and regulations and learn practical skills and information, such as: operating and inspecting a vehicle, recognizing aggressive drivers, driving distractions, handling roadside emergencies, and the effects of alcohol and drugs on driving. The course will ensure that young drivers have all the information and skills necessary to be a safe, knowledgeable, and courteous driver.

- Course will be offered as a semester course and 0.5 ASD credits.
- The course will be a minimum of 30 hours of driver's theory.
- Students completing the course will receive a certificate of completion.
- Many insurance companies have discounts available for students that have completed the Drivers Education Theory course.
- Upon completion, students may take the 6-hours of behind the wheel training at CLIU 21 or any approved facility, however, this is not required to get a PA driver's license.

Gifted

The District provides gifted support services for eligible students meeting the PA Department of Education guidelines. Students designated as gifted have a Gifted Individualized Education Plan (GIEP) that is developed yearly.

Gifted education is based on the unique needs of the student, not solely on the student's classification. The gifted student may participate in Advanced Placement or Advanced classes, both or none, as deemed appropriate by the student, parent, and teachers when the GIEP is developed at a joint meeting. Gifted is defined as outstanding intellect and creative ability that requires specially designed instruction or support services, or both.

Students are encouraged to select courses of academic rigor that support their individual ability, interest, and achievement as they develop their post-secondary plan.

A student eligible for gifted support services has the opportunity to participate in any available course offerings. The gifted identification does not preclude the student from any regular education programming including academies and Lehigh Career and Technical Institute (LCTI).

Advanced Courses

Advanced classes in selected subjects receive .1 weighting and are offered in the freshman and sophomore years as preparation for the Collegiate Program experience. To remain in an advanced class, a student must maintain a B average. If a student cannot maintain this average during the first semester, he/she may be transferred to the corresponding course developed for the college-bound student. If the student's final average in an advanced subject, falls below a B, he/she may not be permitted to continue in the advanced class of that subject the following year. A grade of B or better is required to receive the extra .1 weighting. Advanced courses are available in the following subjects:

- **English**: English I & II
- **Math**: Algebra II, Geometry, Analytic Geometry, Trigonometry, Algebra III
- **Science**: Biology & Chemistry
- **Social Studies**: US History I

Special Education Programs and Services

Under Pennsylvania and federal laws, a student who meets the eligibility requirements for special education has the right to participate in the general curriculum in the least restrictive environment (LRE). The program of support and services is described within the student's Individualized Education Program (IEP). Providing a free appropriate public education (FAPE) for a student with a disability begins with the consideration of services in the LRE. The organization and delivery of special education services are planned in a flexible and responsive manner to accommodate the student's special needs of eligibility without removing the student, unnecessarily, from the general curriculum. Supplementary aids and services received by the student are dependent upon his/her individual need. The Allentown School District promotes inclusive opportunities for all students.

The students shall participate in the general curriculum to the maximum extent appropriate, which may be adapted or modified. Eligible students may also be provided instruction through supplemental curricula. Supplemental studies are listed within this Program of Studies. A

supplemental study may be selected when the curriculum option is deemed as not providing enough support. A program may be offered when the curriculum needs to be intensified in order to meet the instructional needs. The level of instruction is geared to the ability and needs of the student through the IEP. Supplemental studies are formed around the learning needs of the student whose programs are determined by his/her IEP. This plan is reviewed annually and revised as needed.

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

A student with an IEP may select dual enrollment (DE) or advanced placement (AP) courses provided he or she meets the prerequisites for the selected courses. Academic support is available to students in the DE and AP courses.

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

Any student with a disability whose individualized education program as established pursuant to 22 Pa. Code §14.131 (relating to IEP) and ASD Policy No. 217 prescribes continued special education programs beyond the fourth year of high school, shall be permitted to participate in the commencement ceremonies with the student's graduating class. The student receives a certificate of attendance, provided that the student has attended four (4) years of high school regardless of whether the student has completed the individualized program. A certificate of attendance is not a high school diploma.

National Collegiate Athletic Association (NCAA) Approved Courses

Any student athlete interested in playing a sport at a Division I or Division II college or university must be registered with the Clearinghouse. The NCAA encourages on-line registration at:
www.eligibilitycenter.org

NCAA Eligibility Center

one opportunity. limitless Possibilities.

If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at **eligibilitycenter.org**. If you want to play Division III sports or you aren't sure where you want to compete, start by creating a Profile Page at **eligibilitycenter.org**.

ACADEMIC REQUIREMENTS

To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA.

CORE COURSES

Only courses that appear on your high school's list of NCAA core courses will count toward the 16 core-course requirement; visit **eligibilitycenter.org/courselist** for a full list of your high school's approved core courses. Complete 16 core courses in the following areas:

Division i

Complete 10 NCAA core courses, including seven in English, math or natural/physical science, before your seventh semester.

ENGLISH	MATH (Algebra I or higher)	NATURAL/ PHYSICAL SCIENCE (Including one year of lab, if offered)	ADDITIONAL (English, math or natural/physical science)	SOCIAL SCIENCE	ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy)
4 years	3 years	2 years	1 year	2 years	4 years

Division iI

ENGLISH	MATH (Algebra I or higher)	NATURAL/ PHYSICAL SCIENCE (Including one year of lab, if offered)	ADDITIONAL (English, math or natural/physical science)	SOCIAL SCIENCE	ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy)
3 years	2 years	2 years	3 years	2 years	4 years

GRADE-POINT AVERAGE

The NCAA Eligibility Center calculates your grade-point average based only on the grades you earn in NCAA-approved core courses.

- DI requires a minimum 2.3GPA.
- DII requires a minimum 2.2GPA.

SLIDING SCALE

Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. Find more information about test scores at **ncaa.org/test-scores**.

HIGH SCHOOL TIMELINE

9TH GRADE

PLAN

- *Start planning now!* Take the right courses and earn the best grades possible.
- Find your high school's list of NCAA-approved core courses at **eligibilitycenter.org/courselist**.
- Sign up for a free Profile Page at **eligibilitycenter.org** for information on NCAA requirements.

10TH GRADE

REGISTER

- If you fall behind academically, ask your counselor for help finding approved courses you can take.
- Register for a Profile Page or Certification Account with the NCAA Eligibility Center at **eligibilitycenter.org**.
- Monitor your Eligibility Center account for next steps.
- At the end of the year, ask your counselor at each high school or program you attended to upload your official transcript to your NCAA Eligibility Center account.

11TH GRADE

STUDY

- Check with your counselor to make sure you are on track to complete the required number of NCAA-approved courses and graduate on time with your class.
- Take the ACT or SAT and submit your scores to the NCAA Eligibility Center using code 9999.
- Ensure your sports participation information is correct in your Eligibility Center account.
- At the end of the year, ask your counselor at each high school or program you attended to upload your official transcript to your NCAA Eligibility Center account.

12TH GRADE

GRADUATE

- Complete your final NCAA-approved core courses as you prepare for graduation.
- Take the ACT or SAT again, if necessary, and submit your scores to the NCAA Eligibility Center using code 9999.
- Request your final amateurism certification beginning April 1 (fall enrollees) or Oct. 1 (winter/spring enrollees) in your NCAA Eligibility Center account at **eligibilitycenter.org**.
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation to your NCAA Eligibility Center account.
- *Reminder:* Only students on an NCAA Division I or II school's institutional request list will receive a certification.

4 X 4 = 16

How to plan your high school courses to meet the 16 core-course requirement:

9TH GRADE
(1) English
(1) Math
(1) Science
(1) Social Science and/or additional
4 CORE COURSES

10TH GRADE
(1) English
(1) Math
(1) Science
(1) Social Science and/or additional
4 CORE COURSES

11TH GRADE
(1) English
(1) Math
(1) Science
(1) Social Science and/or additional
4 CORE COURSES

12TH GRADE
(1) English
(1) Math
(1) Science
(1) Social Science and/or additional
4 CORE COURSES

For more information: ncaa.org/playcollegesports | eligibilitycenter.org

Search Frequently Asked Questions: ncaa.org/studentfaq

Follow us: @NCAAEC @playcollegesports @ncaaec

NCAA is a trademark of the National Collegiate Athletic Association.
August 2019

Course Information

How to Read the Course Information

English 1 Grade 9 Year 1 5 Periods 1.0 Credit Course # 100

English 1 is a course for all freshmen. A wide range of literary genres is studied in accordance with the PA Common Core Standards. Extensive composition instruction in a variety of modes emphasizes the writing process and develops critical thinking. Research skills are taught, and students complete research related tasks. Vocabulary development is stressed and oral communication skills are refined. Reading skills and strategies are also addressed.

English 1 – Indicates Course Title					
Information	**Grade 9**	**Year 1**	**5 Periods**	**1.0 Credit**	**No. 100**
Explanation	Grade(s) where this course is appropriate	Length of course	Periods offered per week	ASD credits earned	
Information	English I is a course for all freshmen. A wide range of literary genres is studied in accordance with the PA Common Core Standards. Extensive composition instruction in a variety of modes emphasizes the writing process and develops critical thinking. Research skills are taught, and students complete research related tasks. Vocabulary development is stressed and oral communication skills are refined.				
Explanation	Short Description of the course				

How to Read the Dual Enrollment Course Information

College English II – DE* **No.130DE**

Prerequisite: 120DE College English I

Grade 11, 12 1 Semester

1.0 ASD Credit 3.0 College Credits

Dual Enrollment in College English II (ENG 106) is a writing course in which students write analytical essays about literature (short fiction, drama, novels, and poetry). Students strive for good logic, effective use of details, correct grammar and mechanics, and appropriate vocabulary and diction.

College English II – DE – Indicates Course Title (for High School use only)					
Prerequisite: 120DE College English I					
Information	**Grade 11, 12**	**Semester 1**	**1.0 ASD Credit**	**3.0 College Credits**	**No.120DE**
Explanation	Grade(s) where this course is appropriate	Length of course	ASD credits earned	College credits earned	
Information	Dual Enrollment in College English II is a writing course in which students write analytical essays about literature (short fiction, drama, novels, and poetry). Students strive for good logic, effective use of details, correct grammar and mechanics, and appropriate vocabulary and diction.				
Explanation	Short Description of the course which indicates the course name as it appears in the LCCC Course Catalog and student's LCCC Transcript.				

Courses are listed in the Program of Studies in order of progression.

KEY for Course Codes: A – Advanced Placement; AA – Allen Arts Academy at William Allen; AD – Advanced; CT – Dieruff Information Technology Academy; DE – Dual Enrollment; (*) before a course indicates weighting of grade

English Course Offering

	9th Grade	10th Grade	11th Grade	12TH Grade
Requirement	English I	English 2	English 3	English 4
	English I – Advanced	English 2 - Advanced	AP English Language & Composition	AP English Literature & Composition
	Functional Language Arts	Functional Language Arts	Functional Language Arts	Functional Language Arts
			DE – College English I	DE – College English I
			DE – College English 2	DE – College English 2
Electives	Career & Work Strategies	Career & Work Strategies	SAT Reading & Writing	British Literature
	Reading	Keystone Literature Seminar	Career & Work Strategies	Career & Work Strategies
		Journalism I	Keystone Literature Seminar	Journalism I
		Journalism II	Journalism I	Journalism II
		Journalism III	Journalism II	Journalism III
		Media Print I	Journalism III	Media Print I
		Media Print II	Media Print I	Media Print II
		Media Print III	Media Print II	Media Print III
			Media Print III	Speech
			Speech	Interpersonal Communications
			Interpersonal Communications	

English I – Advanced* Grade 9 Year 1 5 Periods 1.0 Credit No. 100

English I focuses on the PA Common Core Standards for Reading, Writing, Language, Speaking and Listening. Students read extensively in a wide variety of genres and then analyze and respond to what is read. Research skills are taught, and students complete research related tasks (e.g. I-Search Paper, mini research papers). Vocabulary development is stressed and speaking and listening skills are refined. Instruction in a variety of reading strategies and critical thinking skills is embedded throughout the course.

English I Grade 9 Year 1 5 Periods 1.0 Credit No. 101

English I is a course for all freshmen. A wide range of literary genres is studied in accordance with the PA Common Core Standards. Extensive composition instruction in a variety of modes emphasizes the writing process and develops critical thinking. Research skills are taught, and students complete research related tasks. Vocabulary development is stressed and oral communication skills are refined. Reading skills and strategies are also addressed.

Functional Language Arts Grade 9, 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 108

This course is designed for eligible students whose primary identified need is to learn functional skills. This course is aligned to the PA Alternate Standards. The students increase and improve their sight word vocabulary and improve their ability to read and understand functional words, which aids them in becoming more independent. As the student demonstrates increased competencies, direct instruction programs will further advance their reading, decoding and comprehension skills. Students are instructed in applied writing skills to foster independence and employability.

English II – Advanced* Grade 10 Year 1 5 Periods 1.0 Credit No. 110AD

Students will read, discuss, analyze, and write about a variety of literary genres written by world-renowned authors in accordance with the PA Common Core Standards. The conventions of English are emphasized through the study of the writing process. Research skills are taught, and students complete research related tasks. Critical thinking and oral communication skills are developed through a variety of assignments. Students will take the PSAT/NMSQT examination in October. There is no cost for this examination.

English II Grade 10 Year 1 5 Periods 1.0 Credit No. 111

English II is a course for all sophomores. A wide range of literary genres is studied in accordance with the PA Common Core Standards. The conventions of English are emphasized through the study of the writing process. Research skills are taught, and students complete research tasks (e.g. I-Search Paper, mini research papers). A wide variety of literary genres is studied. Reading skills and strategies are emphasized, along with the development of critical thinking. Oral communication skills are taught through a variety of assignments.

English Language & Composition – AP* Grade 11 Year 1 5 Periods 1.0 Credit No. 120A

Prerequisite: 110 AD or application to the program via administrator/teacher conference and recommendation

Advanced Placement English Language and Composition is a college level course. Students study and write in a variety of genres, with an emphasis on expository, analytical and argumentative texts. Students become aware of their own composing processes, from the exploration of ideas through the revision and publication stages. This course will prepare students for the College Board's Advanced Placement English Language and Composition Examination by enabling them to read, comprehend, and write about complex texts, while developing communication skills on a college level.

College English I – DE* No. 120DE

LCCC - Research & Composition NG105

Prerequisite: COLLEGE SUCCESS Writing Score of 66 or exemptions – SAT or PSAT – Critical Reading of 490; PSSA Reading of 1492

Grade 11, 12 1 Semester

1.0 ASD Credit 3.0 College Credits

Dual Enrollment in College English I (ENG 105), students write essays, develop a research paper, and master library skills. Students strive for sound logic, effective use of details, appropriate diction, and correct grammar and mechanics. Students study models of good writing, which include student essays as well as professionally written essays. This course meets the graduation requirement for English IV.

English III Grade 11 Year 1 5 Periods 1.0 Credit No. 121

English III is a course for all juniors. This course concentrates on the effectiveness of expression in expository writing, and in both formal and informal oral communication. Various works of American literature are studied. Research skills are taught and students are required to complete a research paper in which they demonstrate critical thinking and mastery of the conventions of written English. Vocabulary study is stressed, and college-bound students prepare for the SAT and, if desired, SAT II examinations. Reading skills and strategies are emphasized.

English Literature & Composition – AP* Grade 12 Year 1 5 Periods 1.0 Credit No. 130A

Prerequisite: 120 A or application to the program via administrator/teacher conference and recommendation

Advanced Placement English Literature and Composition is a college level course. Students exercise critical thinking through the lively interchange of ideas and the investigation of various levels of meaning in fiction and nonfiction works of classic and contemporary world-famous authors. Composition skills are refined as literary techniques, and principles of rhetoric and syntax are analyzed and put to use. Students prepare to take the College Board's Advanced Placement English Literature and Composition Examination.

College English II – DE* No. 130DE

LCCC – Introduction to Literature ENG106

Prerequisite: 120DE College English I
Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits
Dual Enrollment in College English II (ENG 106) is a writing course in which students write analytical essays about literature (short fiction, drama, novels, and poetry). Students strive for good logic, effective use of details, correct grammar and mechanics, and appropriate vocabulary and diction.

English IV Grade 12 Year 1 5 Periods 1.0 Credit No. 131

English IV is a course for all seniors. Students write in a variety of genres, from literary responses to research reports. Students read and analyze works of British literature. The reading skills and strategies necessary for post-high school success are reviewed.

British Literature – DE* No. 140DE

LCCC - British Literature ENG210

Prerequisite: 120DE Research & Composition and 130DE Intro to Lit
Grade 12 1 Semester
1.0 ASD Credit 3.0 College Credits
Analyzes works of significant literary and intellectual movements from Anglo-Saxon times to neoclassicism to cultivate an appreciation of British literature and to develop thinking, reading, and writing skills.

Designs for Literacy Grade 9, 10, 11 Year .5 5 Periods 0.5 Credits No. 145

Journalism I (Newspaper) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 161

Journalism I is an introductory course that is directed to an inductive study of the contemporary newspaper. The principles of style, objectivity, format, and layout will be applied in practical situations. Students receive assignments to facilitate the production of the school newspaper.

Journalism II (Newspaper) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 162

Prerequisite: Journalism I and English teacher recommendation
Journalism II further develops the skills and insights gained in Journalism I. Emphasis is place on the following specialized areas of journalism: editing; reporting; column writing; circulation; research; news photography; cartooning; investigative reporting; and conducting interviews. Students will increase their involvement in the production of the school newspaper.

Journalism III (Newspaper) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 163

Prerequisite: Journalism I and II and English teacher recommendation
Journalism III will be available, on an independent study basis, to interested individuals who are accepted for the production of a newspaper. The teacher-adviser will determine specifics for each student. It will be expected that Journalism III students will participate in the production of a newspaper in their area of specialization.
Note: This course may be repeated for additional credit.

Media Print I (Yearbook) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 164

Prerequisite: Teacher recommendation
Media Print I students explore the varied aspects and functions of the contemporary periodical, concentrating on what it is and how it works. Comparisons of popular, mass-circulation, and specialized magazines are made to explain and to understand individual philosophies and functions. Students study feature writing, advertising techniques, layout, photography, and typography. Members of this class will be directly involved in yearbook production.

Media Print II (Yearbook) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 165

Prerequisite: Media Print I and teacher recommendation
Media Print II builds on the skills developed in Media Print I. Students will study such aspects of print media as writing, advertising, layout, photography, and typography. The course also offers students the opportunity to specialize in one or more of these areas. Those who schedule this elective will be directly involved in the production of the school yearbook.

Media Print III (Yearbook) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 166

Prerequisite: Media Print I & II and teacher recommendation
Media Print III offers intensive work in the actual publication of the yearbook. Desktop publishing, photography, public relations, and feature writing highlight course units of study and requirements. Students will facilitate business relationships with outside consultants as well as implement intra-office team management skills, planning and meeting publication deadlines.

Speech – DE* No. 175DE

LCCC – English ENG111

Prerequisite: COLLEGE SUCCESS Writing Test, minimum score of 66
Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits
A public speaking course designed to develop self-confidence through several types of speaking situations: formal, informal, and impromptu. Students learn how to analyze an audience and how to prepare an effective presentation through research and use of visual aids. In addition, students learn to develop listening skills and a greater command of the English language. Constructive evaluation and videotaping of student speeches lead to self-improvement. NOTE: It is recommended that ESL students complete ESL 252 or obtain permission from an ESL instructor before enrolling in this course.

Interpersonal Communications – DE* No. 177DE

LCCC – Interpersonal Communications CMN105

Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits
Designed to provide a fuller understanding of self and others through the study and practice of interpersonal communication skills. Topics will include verbal and nonverbal messages, perception, listening, intercultural communication, and conflict resolution skills.

SAT Reading and Writing Grade 11 Year .5 5 Periods 0.5 Credit No. 178

SAT Reading and Writing is designed to prepare students for the critical reading and writing components of the Scholastic Aptitude Test. Test-taking approaches, vocabulary development, reading strategies and writing skills will be stressed. Students will complete practice test items as part of this course.

Career and Work Strategies: Grade 9 Year .5 5 Periods 0.5 Credit No. 181A/181B-1A/1B

This course is designed for the eligible student participating in an inclusion setting or receiving a modified curriculum. The supportive instruction is aligned with the 9th grade Academic Standards for Career Education and Work and will provide strategies to be successful past post-secondary education. Students will engage in various lessons that focus on analytical skills, career awareness, career acquisition, career retention, career advancement, entrepreneurship, post-secondary education/training and character development.

Career and Work Strategies: Grade 10 Year .5 5 Periods 0.5 Credit No. 182A/182B-2A/2B

This course is designed for the eligible student participating in an inclusion setting or receiving a modified curriculum. The supportive instruction is aligned with the 10th grade Academic Standards for Career Education and Work and will provide strategies to be successful past post-secondary education. Students will engage in various lessons that focus on community mapping, career awareness, career acquisition, career retention, career advancement and character development.

Career and Work Strategies: Grade 11 Year .5 5 Periods 0.5 Credit No. 183A/183B-3A/3B

This course is designed for the eligible student participating in an inclusion setting or receiving a modified curriculum. The supportive instruction is aligned with the 11th grade Academic Standards for Career Education and Work and will provide strategies to be successful past post-secondary education. Students will engage in various lessons that focus on analytical skills, career awareness, career acquisition, career retention, career advancement, entrepreneurship, post-secondary education/training and character development. Students will begin job shadowing and exploring careers within their community.

Career and Work Strategies: Grade 12 Year .5 5 Periods 0.5 Credit No. 184A/184B-4A/4B

This course is designed for the eligible student participating in an inclusion setting or receiving a modified curriculum. The supportive instruction is aligned with the 12th grade Academic Standards for Career Education and Work and will provide strategies to be successful past post-secondary education. Students will engage in various lessons that focus on post-secondary education/training and character development. Students will identify agencies and community contacts that will facilitate their transition path. Also, students will complete their online portfolio with all the tools needed in today's job market or higher education.

Reading Grade 9 Year 1 5 Periods 1.0 Credit No. 191

Students are assigned to this course based on assessment data and teacher/counselor recommendation.
This course is designed to strengthen basic reading proficiency through the teaching of specific skills in comprehension, word recognition, and study techniques. It stresses both written and media texts. Through the use of instructional strategies designed to enable students to gain competence in the application of reading skills, students will have the opportunity to develop skills needed for success in the high school curriculum. This course does not count towards English requirements for graduation but may be applied as an elective credit.

Keystone Literature Seminar Grade 10, 11 Year .5 5 Periods 0.5 Credit No. 198

Students are assigned to this course based on reading achievement and teacher/counselor recommendation.
In this course, students review the content and skills necessary to achieve proficiency on the Keystone Exam.

Mathematics Course Offering

8th Grade	9th Grade	10th Grade	11th Grade	12TH Grade
8th Grade Pre-Algebra	Developmental Algebra	Algebra 1	Foundations of Algebra 2 (Below and Basic Keystone)	Algebra 2 Applied Geometry Geometry
			Algebra 2 (Proficient Keystone Exam)	Applied Geometry Geometry
	Algebra 1	Foundations of Algebra 2 (Below Basic and Basic Keystone Exam Score)	Algebra 2	Applied Geometry Geometry Statistics AP Comp Sci Principles*
			Applied Geometry Geometry	Algebra 2
		Algebra 2 (Proficient Keystone Exam)	Geometry AP Comp Sci Principles*	(TRIO) Algebra 3 Trigonometry Analytic Geometry Precalculus Statistics AP Comp Sci Principles
			Statistics	AP Statistics
Algebra 1	Algebra 2	Geometry	(TRIO) Algebra 3 Trigonometry Analytic Geometry Precalculus AP Comp Sci Principles*	Precalculus Statistics AP Comp Sci Principles*
			Statistics	AP Statistics*
	Advanced Algebra 2*	Advanced Geometry*	(Adv. TRIO)* Adv. Algebra 3* Adv. Trigonometry* Adv. Analytic Geometry* AP Comp Sci Principles*	Statistics AP Statistics* AP Calculus AB* AP Comp Sci Principles*
Algebra 2 Geometry	Advanced Geometry TRIO) Adv Algebra 3* Adv Trigonometry* Adv Analytic Geometry*	(TRIO) Adv. Algebra 3* Adv. Trigonometry* Adv Analytic Geometry*	AP Calculus AB*	AP Calculus BC*
			AP Statistics* AP Comp Sci Principles*	AP Statistics* AP Calculus AB* AP Comp Sci Principles*
		AP Calculus AB*	AP Calculus BC*	College Course
			AP Calculus AB*	AP Calculus BC*
		AP Statistics*	AP Statistics* AP Comp Sci Principles*	AP Statistics* AP Comp Sci Principles*

Please Note: Administration and Department Chair may recommend alterations

Algebra I — Grade 9 — Year 1 — 5 Periods — 1.0 Credit — No. 301

Algebra I develops basic concepts of reasoning and calculations with symbols. In problem-solving situations, students will apply properties of real numbers, simplify numeric and rational expressions, solve and graph linear equations, inequalities and systems, solve quadratic equations, and analyze patterns and functions. Students are required to take the Algebra I Keystone Exam at the completion of this course.

Developmental Algebra I — Grade 9 — Year 1 — 10 Periods — No. 304

1.0 Credit Mathematics & 1.0 Credit Elective

Students are assigned to this course based on standardized test scores and teacher/counselor recommendation.

Students will strengthen and extend their understanding of pre-algebra concepts to prepare them for Algebra 1. Additionally, students will be introduced to basic reasoning and calculations with symbols.

Algebra IA — Grade 9 — Year 1 — 5 Periods — 1.0 Credit — No. 306

Algebra 1A, designed for the eligible student, develops basic concepts of symbolic reasoning and calculations with symbols. In problem- solving situations, students will learn to solve, and graph linear equations solve quadratic equations, analyze patterns and functions, apply concepts of the order of operations, and coordinate geometry. Students will complete the Algebra 1A requirement and take the Keystone exam at the completion of Algebra 1B.

Functional Mathematics — Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 308

This course is designed for eligible students whose primary identified need is to learn functional skills. This course is aligned to the PA Alternate Standards. This course teaches basic math operations, money skills, and computation skills. In addition, functional measurement, time, estimation, and reading and analyzing tables, charts, and graphs are included for real-life instruction.

Algebra II – Advanced* — Grade 9, 10, 11 — Year 1 — 5 Periods — 1.0 Credit — No. 310AD

Prerequisite: Algebra I

Algebra II Advanced continues the study of algebra by presenting new concepts and extending the basic topics of Algebra I. Topics include systems of equations and inequalities, quadratic, exponential, and logarithmic functions, complex numbers, conic sections, matrices, sequences, series, probability and statistics. This course provides a thorough preparation for trigonometry, college algebra, and other advanced mathematics courses. Students engage in solving a variety of challenging problems and are encouraged to inquire, hypothesize, investigate, and discover ideas for themselves.

Algebra II — Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 311

Prerequisite: Algebra I

Algebra II presents new concepts and extends the basic topics of the Algebra I course. Topics include systems of equations and inequalities, quadratic, exponential and logarithmic functions, complex numbers, conic sections, matrices, sequences, series, probability and statistics. This course prepares students for trigonometry, college algebra and other advanced mathematics courses.

Foundations of Algebra II — Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 312

Prerequisite: Algebra I

Students are assigned to this course based on standardized test scores and teacher/counselor recommendation.

Foundations of Algebra II strengthens and extends students understanding of Algebra I to prepare them for retaking the Algebra I Keystone Exam. Additionally, students are introduced to Algebra II concepts to support their future success in Algebra II. The topics to be covered in this course include rational expressions, linear equations, systems of equations, inequalities, quadratic equations, probability and statistics, exponential functions, logarithmic functions, and complex numbers.

Algebra IB — Grade 10 — Year 1 — 5 Periods — 1.0 Credit — No. 316

Prerequisite: Algebra IA

Algebra IB, designed for eligible student, develops basic concepts of symbolic reasoning and calculations with symbols. In problem- solving situations, students will learn to solve operations with polynomials, linear equations, and apply concepts of data analysis and probability. Students are required to take the Algebra I Keystone Exam at the completion of this course.

Geometry – Advanced* — Grade 9, 10, 11 — Year 1 — 5 Periods — 1.0 Credit — No. 320AD

Prerequisite: Algebra II-Advanced

This course provides students opportunities to develop logical thought, practice critical evaluation, and make intelligent generalizations through the exploration of the mathematical concepts of geometry. Students will analyze and write formal proofs and solve problems involving plane and solid figures.

Geometry — Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 321

Prerequisite: Algebra II

Geometry for the college-bound student includes the development of formal, logical reasoning and proofs. Students will apply axioms, theorems, and properties to solve problems involving plane and solid figures.

Mathematics of Personal Finance Grade 11, 12 Year 1 5 Periods 1.0 Credit No. 325

This course covers the basic personal financial needs of most individuals. Topics covered included basic budgeting, saving, checking, investments, credit, the wise use of insurance, and paying and preparing income tax returns. Students taking this course will learn to be better prepare for their financial futures.

Algebra III – Advanced* Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 330AD

Prerequisite: Geometry-Advanced and Algebra II-Advanced

Algebra III Advanced extends the concepts and skills developed in previous algebra courses with emphasis on analytical aspects. Students explore mathematical connections in topics including; sequences, series, functions (exponential, logarithmic, polynomial, and rational) and their graphs. Prepares the student for the rigor of a College Board® Advanced Placement course.

Algebra III Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 331

Prerequisite: Geometry and Algebra II

Students in Algebra III will extend their understanding of the topics introduced in Algebra II and the connections between algebraic and geometric representations. They will solve problems involving systems of equations, matrices, higher degree equations, the binomial theorem, sequences, series, permutations and combinations and conic sections.

Pre-Calculus Grade 10, 11, 12 1 Year 5 Periods 1.0 Credit No. 335

Prerequisite: Geometry and Algebra II

Students will extend their knowledge of topics they have covered in both Algebra II and Geometry. Topics to be covered will include: sequences, series, exponential and logarithmic functions, functions and their graphs, trigonometric functions, analytic trigonometry and trigonometric applications.

Trigonometry – Advanced* Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 340AD

Prerequisite: Geometry-Advanced and Algebra II-Advanced

In Trigonometry Advanced, students study the elementary properties of the periodic trigonometric functions and their graphs. The student is given opportunities to explore the applications of trigonometry using trigonometric identities. Prepares the student for the rigor of a College Board® Advanced Placement course.

Trigonometry Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 341

Prerequisite: Geometry and Algebra II

This course introduces the properties of the trigonometric functions that students apply to solve practical problems. Trigonometry is particularly important in the study of high school physics, technical courses and many trades.

Analytic Geometry – Advanced* Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 350AD

Prerequisite: Algebra III-Advanced and Trigonometry-Advanced

Analytic Geometry Advanced applies algebraic and trigonometric concepts to explore the topics of conics, matrices, systems of equations, vectors, polar and parametric equations. Prepares the student for the rigor of a College Board® Advanced Placement course.

Pre-Calculus – DE* No. 350DE

LCCC – Pre-Calculus MAT170

Prerequisite: COLLEGE SUCCESS Algebra 71 and high school math through Trigonometry

Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits

Designed for students whose backgrounds are not sufficient to immediately begin the calculus sequence. Serves any student looking for a mature investigation of algebra and trigonometry. This one-semester course covers the topics included in MAT 160 and MAT 165 at a relatively rapid pace. Topics include: polynomials, systems of equations, sequences and series, trigonometric functions and graphs, inverse functions, exponential and logarithmic functions, identities and equations, parametric equations, and polar curves. A graphing calculator is required.

Analytic Geometry Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 351

Prerequisite: Algebra III and Trigonometry

Analytic Geometry applies algebraic and trigonometric concepts to the study of geometry emphasizing theory, analysis, rigorous proof, and applications.

Calculus (AB) – College Board AP* Grade 10, 11, 12 Year 1 5 Periods 1 Credit No. 360AB

Prerequisite: Analytic Geometry-Advanced

Advanced Placement Calculus (AB) provides the student the opportunity to study calculus with the theory and rigor necessary to prepare the student to take the College Board® Advanced Placement Calculus (AB) Examination.

Calculus (BC) – College Board – AP* Grade 11, 12 Year 1 5 Periods 1 Credit No. 360BC

Prerequisite: Calculus (AB) AP

Advanced Placement Calculus (BC) offers students a wider range of topics than Calculus (AB). With an emphasis on theory and application, this course prepares the student to take the College Board® Advanced Placement Calculus (AB or BC) Examination. Students are expected to do independent study of selected BC topics.

Calculus & Analytical Geometry – DE* No. 360DE

LCCC – Calculus & Analytical Geometry MAT191

Prerequisite: COLLEGE SUCCESS Algebra 71 and high school math through Trigonometry

Grade 12 1 Semester

1.0 ASD Credit 4.0 College Credits

This course is primarily intended for students majoring in science, mathematics, or engineering. Topics include data analysis, limits, differentiation with applications (optimization and related rates), and integration. A graphing calculator is required.

Statistics – College Board® AP* Grade 11, 12 Year 1 5 Periods 1.0 Credit No. 390A

Prerequisite: Algebra II

The themes of this course include the topics addressed on the Advanced Placement Statistics examination: describing data, sampling and experimentation, using probability and statistics to make predictions, and statistical inference. Students will incorporate technology in activities and projects that include the design, implementation, and presentation of original research. There will be an emphasis on decision-making, validating/justifying statistical hypotheses, and demonstrating the critical connections between the analysis and conclusions of statistical design experiments. This course is designed to prepare students to take the College Board® Advanced Placement Statistics Examination.

Probability and Statistics – DE* No. 390DE

LCCC – Probability and Statistics MAT150

Prerequisite: COLLEGE SUCCESS Algebra 66 and two years of high school Algebra

Grade 11, 12 1 Semester

1.0 ASD Credit 3.0 College Credits

This math course is for students in programs where measurements and predictions are made. Topics include the following: tabulation of data, measures of central tendency and dispersion, sampling, types of distributions, probability, hypothesis testing and elementary aspects of correlation. A graphing calculator is required.

Statistics Grade 11, 12 Year 1 5 Periods 1 Credit No. 391

Prerequisite: Algebra II

In Statistics, students explore relationships among variables in real world situations. Students will use probability distributions, simulations, and models to make predictions and draw conclusions based on data. Students engage in group problem-solving and use technology, projects and experiments to develop and demonstrate their understanding of data collection, description, and analysis.

Computer Programming I Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 371

Computer Programming I in Java (LED) or Visual Basic (WAHS) introduces students to the capabilities of computers and provides a fundamental knowledge of programming structures. By writing programs, students will use microcomputers as a problem-solving tool and learn techniques that are transferable to other programming languages.

Computer Programming II Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 372

Prerequisite: Computer Programming I

This rigorous course is designed for students interested in writing programs using Java. Students will expand their sequential and random-access file management, and graphics and audio applications. This course will stress writing programs with applications to fields and a final project.

Computer Science Principles Grade 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 375

College Board – AP

Prerequisite: Algebra I

Students will learn the fundamentals of computing, including problem solving, working with data, understanding the Internet, cybersecurity, and programming. The course goal is to broaden their understanding of computer science for use in a diversity of majors and careers. The course is designed to prepare students for the two College Board® Advanced Placement projects and the end-of-year exam: multiple choice.

Computer Science A — Grade 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No 376A

College Board*

Prerequisite: Computer Science Principles – AP

Students will learn the fundamentals of programming and problem solving using the JAVA language, with an emphasis on problem solving and algorithm development. The course goal is to develop skills for future study or a career in computer science or other STEM fields. This course is meant to be the equivalent of a first semester course in computer science and helps prepare the student for the College Board Advanced Placement end-of-year exam: multiple choice and free response.

SAT Math — Grade 11, 12 — Year .5 — 5 Periods — 0.5 Credit — No. 382

SAT Math is a course designed to prepare students for the geometry, algebra and probability questions on the Scholastic Aptitude Test. Students will practice test-taking strategies, problem solving skills and methods.

Science Core Courses

<table>
<tr><th>8th Grade</th><th>9th Grade</th><th>10th Grade</th><th>11th Grade</th><th>12TH Grade</th></tr>
<tr><td rowspan="4">8th Grade Science</td><td rowspan="2">Physical Science</td><td rowspan="2">Biology or Advanced Biology*</td><td>Chemistry or Advanced Chemistry*</td><td>AP Biology*
Physics
AP Physics*
AP Chemistry*
Environmental Science (FY)
AP Environmental Science*
Anatomy and Physiology (DE)
Environmental Science (0.5 CR)
Forensic Science (0.5 CR)
Genetics (0.5 CR)
Astronomy (0.5 CR)
Zoology (0.5 CR)</td></tr>
<tr><td>Physics
Environmental Science (FY)
AP Environmental Science*</td><td rowspan="3">Physics
AP Physics*
AP Chemistry*
Environmental Science (FY)
AP Environmental Science*
Anatomy and Physiology (DE)
Environmental Science (0.5 CR)
Forensic Science (0.5 CR)
Genetics (0.5 CR)
Astronomy (0.5 CR)
Zoology (0.5 CR)</td></tr>
<tr><td rowspan="2">Advanced Biology*</td><td>Chemistry or Advanced Chemistry</td><td>Physics
AP Physics*
AP Biology*
AP Chemistry*
DE Anatomy and Physiology*
Environmental Science (FY)
AP Environmental Science*
Forensic Science (0.5 CR)
Genetics (0.5 CR)
Astronomy (0.5 CR)
Zoology (0.5 CR)</td></tr>
<tr><td>Environmental Science (0.5 CR or FY)
Forensic Science (0.5 CR)
Genetics (0.5 CR)
Astronomy (0.5 CR)
Zoology (0.5 CR)</td><td>Environmental Science (0.5 CR)
Environmental Science (FY)
Forensic Science (0.5 CR)
Genetics (0.5 CR)
Astronomy (0.5 CR)
Zoology (0.5 CR)</td></tr>
</table>

Biology I – Advanced* Grade 9 Year 1 5 Periods 1.0 Credit No. 400AD

Advanced Biology is an enriched first-year biology course. The course introduces and builds upon the basic biological principles of unity, diversity, structure, function, growth, development, biological organization, classification, ecology and human interactions. Certain basic principles of biochemistry are incorporated in order to deal with the molecular and cellular concepts presented. Laboratory investigations play a major role in the course. They offer students insights into problem solving in the biological sciences as well as practical applications of biological principles to their own lives. Students are required to take the Biology Keystone Exam at the completion of this course.

Biology I Grade 10 Year 1 5 Periods 1.0 Credit No. 401

This course presents the basic biological concepts that contribute to the unity and diversity of all living things. Areas of study include, but are not limited to structure, function, growth, development, biological organization and classification. Laboratory investigations offer students insights into problem solving in the biological sciences as well as practical applications of biological principles to their own lives. Students are required to take the Biology Keystone Exam at the completion of this course.

Functional Science — Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 408

This course is offered for eligible students whose primary identified need is to learn functional skills. This course is aligned to the PA Alternate Standards. This course provides instruction in the general science areas of energy, matter, environment, motion, conservation, weather, and human body systems.

Chemistry I – Advanced* — Grade 10, 11, 12 — Year 1 — 7 Periods — 1.0 Credit — No. 410AD

Prerequisite: Algebra I, grade of "C" or better

Chemistry I Advanced is an enriched first-year chemistry course. Through lectures, readings and laboratory activities, concepts such as the classification of matter, systems of units and measurement, atomic structure, the periodic table, bonding, nomenclature, chemical reactions and stoichiometry, gases, and solution chemistry are considered. This course utilizes more math, has deeper coverage of topics, and requires more independent work than Chemistry I.

Chemistry I — Grade 10, 11, 12 — Year 1 — 7 Periods — 1.0 Credit — No. 411

Prerequisite: Algebra I, grade of "C" or better

Chemistry I is a first-year chemistry course designed to give students and understanding of the major concepts in the field of chemistry. Through lectures and laboratory activities, concepts such as the classification of matter, systems of units and measurement, atomic structure, the periodic table, bonding, nomenclature, chemical reactions and stoichiometry, gases, and solution chemistry are considered.

Physics (Elements 110) – DE* — No. 450DE

LCCC – Physics DHY110

Prerequisite: COLLEGE SUCCESS Algebra test, minimum score of 49

Grade 11, 12 — 1 Semester — 1.0 ASD Credit — 4.0 College Credit

Primarily for technical students requiring one semester of physics and for students to meet a general science requirement, this course provides the student with basic concepts of physics. Areas of study include mechanics, properties of matter, heat, waves, and electricity and magnetism. Technical applications are cited. Computers are frequently used in lab for data acquisition and analysis.

Physics — Grade 11, 12 — Year 1 — 7 Periods — 1.0 Credit — No. 421

Prerequisite: Full Year, pass Algebra, grades of "C" or better

This laboratory course focuses on concepts and principles that explain many naturally occurring events in the world. Students also develop strong problem-solving skills as they build an understanding of straight line and rotational motion, gravitation, momentum and energy, electricity, and magnetism. Considerable effort is made to relate physics theory with real-world and laboratory experiences.

Biology – AP* — Grade 11, 12 — Year 1 — 7 Periods — 1.0 Credit — No. 430A

Prerequisite: Biology I and Chemistry I

Biology Advanced Placement is an enriched biology course conducted on the college freshman level. The course includes the study of the essential unity of all living things, the interdependence of organism and environment, functional morphology, evolution, biochemistry, and genetics. Laboratory work is utilized to amplify lectures and discussions, and also to help students develop a scientific attitude for problem solving. This course will help students prepare to take the Advanced Placement Examination in Biology.

Chemistry – AP* — Grade 11, 12 — Year 1 — 7 Periods — 1.0 Credit — No. 440A

Prerequisite: Chemistry I and Algebra I, grades of "C" or better

Advanced Placement Chemistry is a second-year chemistry course conducted on the college freshman level. Fundamental chemical concepts are studies, including structure and states of matter, atomic structure and periodicity, nature of reactions, solution and gas stoichiometry, thermodynamics, chemical kinetics, chemical equilibrium, acid-base equilibrium, bonding and molecular geometry, and electrochemistry. This course contributes to the development of the students' ability to think clearly and express ideas orally and in writing. Laboratory experiments, including inquiry investigations, are an integral part of the course. Students prepare to take the Advanced Placement Examination in Chemistry. Chemistry teacher recommendation required.

Physics 1 – AP* — Grade 11, 12 — Year 1 — 7 Periods — 1.0 Credit — No. 450A

Prerequisite: Full year, passed Algebra, grades of "C" or better

This course provides a systematic introduction to the main principles and concepts in physics: Newtonian mechanics, rotational motion, work, energy, power, waves, sound and circuits. AP Physics 1 and AP Physics 2 from a two-year equivalent to the first and second semesters of a typical introductory, algebra-based, college physics course. AP Physics may be taken as a stand-alone course.

Physics 2 – AP* Grade 12 Year 1 7 Periods 1.0 Credit No. 451A

Prerequisite: Full year, passed AP Physics 1

This course provides a systematic introduction to the main principles and concepts in physics: fluids, thermodynamics, electricity, magnetism, optics, and topics in modern Physics. AP Physics 1 and AP Physics 2 form a two-year equivalent to the first and second semesters of a typical introductory, algebra-based, college physics course.

Physics (C) – AP* Grade 12 Year 1 7 Periods 1.0 Credit No. 452A

Prerequisite: Full Year, passed or concurrent Calculus

This course forms the first part of a college physics sequence for students majoring in the physical sciences or engineering. This course focuses on mechanics. Methods of calculus are used as appropriate in developing concepts and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems in a laboratory setting.

Physical Science Grade 9 Year 1 5 Periods 1.0 Credit No. 464

Physical Science is an introduction to concepts relating the principles of chemistry and physics. Through investigations students will learn about the basic building blocks of the universe. This course is designed to help students improve their own problem-solving skills, and to answer questions about the relationship between matter and energy.

Environmental Science (Full Year) Grade 11, 12 Year .1.0 5 Periods 1.0 Credit No. 466

Prerequisite: Biology

This course is designed to develop an understanding of the complex interactions between humans and the environment. Areas of study include, but are not limited to, economics and environmental policy, earth's environmental systems, ecology, earth's resources, and global sustainability. Laboratory investigations offer students the opportunity to learn how humans interact with the earth's resources and develop an appreciation for how today's decisions define our future environment. The course includes an environmental science novel study and case studies.

Environmental Science (Half Year) Grade 11, 12 Year .5 5 Period .5 Credit No. 4661

Prerequisite: Biology

This course is designed to develop an understanding of the complex interactions between humans and the environment. Areas of study include, but are not limited to, economics and environmental policy, earth's environmental systems, ecology, earth's resources, and global sustainability. Laboratory investigations offer students the opportunity to learn how humans interact with the earth's resources and develop an appreciation for how today's decisions define our future environment.

Environmental Science – AP* Grade 11, 12 Year 1 7 Periods 1.0 Credit No. 466A

Prerequisite: Biology and Physical Science or Chemistry

This course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative
solutions for resolving or preventing them. Students prepare to take the Environmental Science Advanced Placement Examination.

Anatomy & Physiology – DE* No. 470DE

LCCC – Anatomy & Physiology B10163

Prerequisite: Biology Placement Test

Grade 11, 12 1 Semester

1.0 ASD Credit 4.0 College Credits

Provides students, primarily in health-related programs, with an in-depth understanding of the anatomy and physiology of complex living organisms, including humans. Biological principles, as well as the structural
and functional relationships among several organ systems, are discussed. (Considerable dissection is required.)

LCCC - *TAHLTH Emerging Health Professions – DE Grade 12 15 Periods 2.0 Credit

This course based at the Lehigh Valley Hospital & Health Network and Penn State is a dual enrollment program with Penn State University and LCTI. This program is for students who wish to excel in a health career and possess an aptitude for science. This program requires an application evaluation and committee review. Classes receive high school advanced credit and may be used toward college credit. Tuition costs must be covered by the student.

Forensic Science

Grade 10, 11, 12 | Year .5 | 5 Periods | .5 Credit | No. 467

Prerequisite: Biology

This course surveys key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Through online lessons, virtual and hands-on labs, and analysis of fictional crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

Genetics

Grade 10, 11, 12 | Year .5 | 5 Periods | .5 Credit | No. 468

Prerequisite: Biology

This course presents students with a basic review of genetics as covered in Biology I. Students will follow up by examining unique and insula inheritance patterns as they apply to the expression of genes. Students will take an in-depth look at the genetics behind diseases, and the new fields of research that use genetics to treat medical conditions and diseases, as well as advanced technology to solve court cases and improve human living.

Astronomy

Grade 10, 11, 12 | Year .5 | 5 Periods | .5 Credit | No. 475

Prerequisite: Biology

Astronomy students will study archeoastronomy, the earth-moon system and comparative planetology. Other focus topics may include stellar evolution, as well as the form and structure of our universe.

Zoology

Grade 10, 11, 12 | Year .5 | 5 Periods | .5 Credit | No. 477

Prerequisite: Biology

This course involves the study of animals, including using taxonomic groupings to differentiate the structure and physiology of invertebrate and invertebrate animals. Students will be offered insights into factors that distinguish one species from another including animal behavior patterns and reproductive development.

Social Studies Course Offering

	9th Grade	10th Grade	11th Grade	12TH Grade
Requirement	United States History Advanced	World Cultures - AP	United States History II	United States Gov't & Politics AP
	United States History I	World Cultures	United States History – AP	United States Government
	Functional Social Studies	Functional Social Studies	Functional Social Studies	Macroeconomics AP
			United States History Since Reconstruction DE	Functional Social Studies
				United States History Since Reconstruction DE
Electives		Psychology	Psychology	Economics
		Psychology - AP	Psychology - AP	Human Growth & Development DE
		Sociology	Sociology	Modern Social Problems DE
			State & Local Government DE	Psychology
			Introduction to Psychology DE	Psychology - AP
			Introduction to Sociology DE	Sociology
				State & Local Government DE
				Introduction to Psychology DE
				Introduction to Sociology DE

United States History I – Advanced* Grade 9 Year 1 5 Periods 1.0 Credit No. 200AD

United States History I Advanced will combine both primary resources and literary documents in exploring and uncovering the nation's earliest history. Students will engage in class discussions, debates, and simulations to illustrate events from our past. Through document-based questions and in-depth analysis, students will prepare themselves for both advanced placement courses and Advanced level classes in a variety of subjects. Students will develop their individual as well as cooperative learning skills through a variety of techniques.

United States History I Grade 9 Year 1 5 Periods 1.0 Credit No. 201

United States History I spans the age of exploration through Reconstruction. Students will be introduced to the diverse groups of people who formed a common bond while blending their individual cultures to shape the United States. The incorporation of works of literature into this course promotes the development of reading and writing strategies and will help students to better understand United States history.

Functional Social Studies Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 208

This course is designed for eligible students whose primary identified need is to learn functional skills. This course allows the students the opportunity to become familiar with the places within our community and how to access the services they offer. This course also helps students to develop appropriate social interaction skills.

World History – AP* Grade 10 Year 1 5 Periods 1.0 Credit No. 210A

World History Advanced Placement highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. Focused primarily on the past thousand years of the global experience, the course builds on an understanding of geography and cultural, institutional, and technological precedents. Students prepare to take the College Board's World History Advanced Placement Examination.

World Cultures Grade 10 Year 1 5 Periods 1.0 Credit No. 211

World History traces the development of civilization from ancient to modern times. Consideration will be given to cultures in the global setting with emphasis on Western, Eastern, African, Middle Eastern and Latin cultures in current and historical perspective. A variety of historic materials will be used to enable students to approach the present world with an understanding of its institutions and ideas. The incorporation of works of literature into this course promote the development of reading and writing strategies and help students to better understand world history.

United States History Since Reconstruction* No. 220DE

LCCC – United States History Since Reconstruction HIS124

Prerequisite: COMPASS Reading (79) and Writing (66) or PSAT, SAT (Critical Reading 490
Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits
The economic, political, and social development of the United States since the Reconstruction Era to the present is the core of this course. Topics considered include developments in agriculture, industry, culture, organized labor, and urbanization. Analysis is made of the changing role of government, reform efforts, America's rise to a world power, and its role in the world since 1945.

United States History II Grade 11 Year 1 5 Periods 1.0 Credit No. 221

United States History II is designed to give students an understanding of the 20th century evolution of our nation. The period since 1865 has been a time of great political, economic, social, and cultural change – a transition from an agrarian America to that of the unique, urban society of today. The incorporation of works of literature into this course promotes the development of reading and writing strategies.

United States Government & Politics – AP* Grade 12 Year .5 5 Periods 0.5 Credit No. 230A

This course is designed for students preparing to take the College Board's Advanced Placement Examination. The course involves the study of general concepts and the analysis of specific case studies. Topics to be explored are the Constitution, political beliefs and behavior, political parties and interest groups, institution and policy processes, civil rights and civil liberties. Students may have the opportunity to participate in the We the People competition.

United States Government Grade 12 Year .5 5 Periods 0.5 Credit No. 231

United States Government focuses on the study of the United States Constitution. Major emphasis will be placed on the powers and duties of the executive, judicial, and legislative branches of the government at the federal, state and local levels. Students will have the opportunity to participate in Student Government Day. In order to understand and appreciate the American form of government, students will have the opportunity to explore and to evaluate the governments of other countries.

Macroeconomics – AP* Grade 12 Year .5 5 Periods 0.5 Credit No. 240A

Students will analyze current economic issues including budget deficits; inflation; unemployment and trade imbalance as well as the role of monetary and fiscal policies in pursuing the goal of growth and stability. Emphasis will be placed on the recognition of the value of cooperation among interdependent nations regardless of ideology on the level of economic development. Students prepare to take the College Board's Macroeconomics Advanced Placement Examination.

United States History – AP* Grade 11 Year 1 5 Periods 1.0 Credit No. 250A

This course is designed to prepare students for the College Board's American History Advanced Placement Examination. The enhancement of college skills, including the ability to use critical analysis in thinking and writing, is emphasized. Students will utilize a variety of materials, including primary sources, to analyze and interpret the interrelationship among social, cultural, political, and economic developments in American History.

State and Local Government – DE* No. 235DE

LCCC – State and Local Government PSC142

Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits

A study of the organization and functions of state and local governments (as exemplified in Pennsylvania) and their place in our federal system. Topics studied include state, county, township, borough and city government; metropolitan cooperative/consolidation efforts; special purpose districts; and the contributions that active citizens can make in their state and communities.

Economics Grade 12 Year .5 5 Periods 0.5 Credit No. 241

Economics traces the development of the American economic system and its functions. Government efforts to resolve the recurring problems of inflation and unemployment will be examined. Opportunities will also be provided to investigate other relevant issues, including the legal and economic implication of private property, money and banking, consumer protection and financial security. Students will be introduced to the competing economic systems of Capitalism, Socialism, and Communism.

Psychology Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 282

Psychology provides an introduction to the behavioral sciences. Psychology deals with elementary principles of the discipline and with personality development. Consideration will be given to abnormal and social psychology. Studies will be presented to illustrate specific instances of wholesome and unwholesome behavior.

Psychology – AP* Grade 10,11, 12 Year 1 5 Periods 1.0 Credit No. 282A

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Students prepare to take the College Board's Psychology Advanced Placement Examination.

Introduction to Psychology – DE* No. 282DE

LCCC – Introduction to Psychology PSY140

Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits

This introductory course will provide students with an overview of the current body of knowledge and methods of the science of psychology. With an emphasis on empirical examination, this course focuses on the historical and contemporary foundations of psychology, cognition, emotions, learning, memory, consciousness, human development, biological bases of behavior, personality, psychological disorders, therapy and social behavior. Emphasis will be placed on the application of psychology to diverse human endeavors and on the students' ability to recognize and cope with uncertainty and ambiguity in human behavior.

Introduction to Sociology – DE* No. 283DE

LCCC - Introduction to Sociology SOC150

Prerequisite: COLLEGE SUCCESS Test, minimum score 79
Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits

Sociology studies how we define our social world, create and learn rules for interacting with one another, establish and maintain institutions such as the family, school, and church, divide and distribute work and wealth among ourselves, struggle for power and prestige, and adjust to new ideas and technologies. This course introduces students to the conceptual tools needed to explore these issues and to develop a critical understanding of the social world.

Sociology — Grade 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credit — No. 283

Sociology provides students with background information about modern societies and social institutions. This course emphasizes analysis of problems that individuals and institutions encounter as they attempt to adjust to the ever-changing conditions that exist in the world today. Topics for examination include social organization, cultural and social change, and social problems.

Human Growth and Development – DE* — No. 284DE

LCCC - Human Growth and Development PSY145

Prerequisite: 282 DE Introduction to Psychology

Grade 12 — 1 Semester

1.0 ASD Credit — 3.0 College Credits

This course offers an overview of development throughout the entire life cycle. Developmental themes that emerge in and across different stages of life, including physical cognitive, social and emotional factors are surveyed. The role of heredity, culture, personal experience and the environment are discussed.

Modern Social Problems – DE* — No. 286DE

LCCC – Modern Social Problems SOC151

Grade 12 — 1 Semester

1.0 ASD Credit — 3.0 College Credits

This course offers a sociological approach to the study of social problems. Students will examine how a problem comes to public attention, how it is defined, how data are used or misused in the presentation of a problem, and how political ideology affects what solutions are offered for a problem. Course materials will give special attention to the role of the media in highlighting certain problems and in shaping an audience's perspective on those problems. Students will investigate the social-structural conditions that produce particular problems and explore the ways in which a variety of problems are connected to one another. They will look at the political and economic interests that are tied to those social structures and consider how those interests affect policy. Throughout the course, students will evaluate "solutions" put forward by various advocates and agencies and identify ways in which individuals can become involved in shaping policy debates and/or taking political action. The particular problems addressed will vary, but may include: poverty, heterosexism, violence, substance use/abuse, access to health care, educational disparities, environmental pollution, war and genocide, and/or the exploitation of labor.

Art Electives

Introduction to Art History — Grade 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credit — No. 709

This course is designed to the student interested in the history of art from the Paleolithic period through the art of the 20th century. Theories of art history, aesthetics, historical contexts of art movements, as well as styles of art and stylistic influences on artists are studied.

Introduction to Art – DE* — No. 711DE

LCCC – Introduction to Art ART101

Grade 12 — 1 Semester

1.0 ASD Credit — 3.0 College Credits

ART 101 surveys painting, sculpture, architecture and other related art forms of Western culture with the consideration of the aesthetic, historical, and technical significance of major artistic achievements.

Art I — Grade 9, 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credit — No. 711

Art I is a foundation program in studio art emphasizing the basic skills of drawing, design, and color. Work experiences include basics in two-dimensional artwork.

Art II — Grade 9, 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credit — No. 712

Prerequisite: Art I

Art II is a continuation of the foundation program in studio art that expands the student's skills in two-dimensional areas. A broad variety of techniques and materials will be explored.

Art III Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 713

Prerequisite: Art II

Art III includes problem-solving units in design, printmaking with an emphasis on drawing and painting. Three-dimensional units may be included such as clay, jewelry, and construction.

Art IV Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 714

Prerequisite: Art III

Art IV is an expansion of Art III with the addition of aesthetics, art appreciation and philosophy.

Studio Art – AP* No. 720A

Grade 11,12 Year 1 10 Periods (Dieruff) 1.0 Credit

Grade 11,12 Year 1 5 Periods (Allen) 1.0 Credit

Prerequisite: Art I and Art II

Studio Art Advanced Placement is a course for the highly motivated student interested in the serious study of Art. Every student will be expected to develop a quality portfolio and meet the standards of evaluation as described in the CEEB Advanced Placement Program. Students are required to keep an art journal reflecting on their ongoing work and statement of intent with an oral and visual presentation. Students prepare to take the College Board's Studio Art Advanced Placement Examination. This course is run in conjunction with Visual Arts II at Allen and Art III/IV at Dieruff.

Computer Graphics I Grade 10,11,12 Year .5 5 Periods 0.5 Credit No. 726

This course develops an awareness of the various photo editing, digital imagery, and creative designing to the work of advertising and publishing as well as in the production of fine art. Students will be introduced to the most commonly used programs: Adobe Photoshop using the elements of art and principles of design combined with their personal style. Various assignments will be given in which students will need to apply their learned knowledge of the digital and designing skills. An intermediate knowledge of basic computer processes is required

Computer Graphics II Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit.. No. 726I

This course is an extension of Computer Graphics I. It develops an awareness of the various photo editing, digital imagery, and creative designing standards to the work of advertising and publishing as well as in the production of fine art. Students will be introduced to the most commonly used programs: Abode Photoshop using the elements of art and principles of design combined with their personal style. Various assignments will be given in which students will need to apply their learned knowledge of digital and designing skills. The prerequisite course of Computer Graphics I is required.

The Art Experience – Two-Dimensional Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 7261

Two-Dimensional design is an introductory level course in art that focuses on the basics of design, drawing, and painting. A variety of two-dimensional techniques will be explored such as drawing, painting, collage, and printmaking. This course is intended to give an introduction to art. This course is offered during Early Bird period (pre-homeroom and homeroom) at Allen.

The Art Experience – Three Dimensional I Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 727

Dieruff Only

The course is an entry level to three-dimensional design I, focusing on clay, glass, metals, and construction. These experiences will develop intermediate to advanced skills in the creation of three-dimensional forms and pottery. With emphasis on studio production, this course is designed to develop higher level thinking, art related technology kills, art criticism, art history, and aesthetics.

Art History – AP* Grade 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 731

This course is designed for the highly motivated student interested in the history of art from the Paleolithic period through to art of the 20th century. Theories of art history, aesthetics, historical contexts of art movements, as well as styles of art and stylistic influences on artists are studied in depth. Students are required to complete readings and write papers out of class as assigned. Students prepare to take the College Board's Art History Advanced Placement Examination.

The Art Experience – Three Dimensional II Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 728

Dieruff Only

This course is an extension to three-dimensional design I, focusing on clay, glass, metals and construction. These experiences will develop intermediate to advanced skills in the creation of three-dimensional forms and pottery. With emphasis on studio production, this course is designed to develop higher level thinking, art related technology skills, art criticism, art history, and aesthetics.

Business Electives

Computer Applications for Career Planning Grade 9 Year .5 5 Periods 0.5 Credit No. 601

This course is designed to introduce students to practical uses of computer software using Microsoft Office. Students will become familiar with word processing, spreadsheets, databases, presentations and the Internet for information acquisition. Students will use computer applications to explore potential careers.

Introduction to Computer Applications– DE* No. 601DE

LCCC – Introduction to Computer Applications CIS105

Grade 11, 12 1 Semester
1.0 ASD Credit 3.0 College Credits

Intended for students with little or no previous computer experience. The topics presented in this course include a survey of computer hardware, application and system software, data communications and networks, the societal impacts of computerization, and ethics in the context of digital information. Students will have hands-on experience with popular spreadsheet, word processing, database, presentation, and web design software packages in a networked environment. Students will also consider the criteria used to evaluate computer equipment for personal as well as organizational purchase.

Computer Applications Grade 9 Year .5 5 Periods 0.5 Credit No. 604

This course is offered for eligible students whose primary identified need is to learn functional skills. This course is designed to introduce students to practical application uses of computer software using Microsoft Office. Students will become familiar with basic word processing, databases, and the Internet for information acquisition. Students will use computer applications to explore potential careers.

Creating Computer Presentations Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 602

Prerequisite: Computer Application for Career Planning

This course focuses on advanced use of PowerPoint. Students will learn to prepare computer presentations for future use in school-related and work-related projects. Included is use of color schemes, backgrounds, clip art, organization charts, tables, sound, and formatted text.

Internet/Multimedia Applications Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 603

Prerequisite: Computer Application for Career Planning

This course guides students in their exploration of the Internet and multimedia technology. The course will provide students with the skills necessary for searching and interfacing media including sight and sound.

Web Page Design Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 605

Prerequisite: Computer Application for Career Planning

This course focuses on creating web pages that communicate the appropriate message and attract an audience using a variety of methods and software. It includes critical analysis of web page organization, design and functionality.

Work Theory Grade 10, 11, 12 Year 1 1-2 Periods 0.5 – 1.0 Credits No. 651

This course is designed for eligible students whose primary identified need is to learn functional skills. This course introduces the students to the fundamental attitudes, behaviors, and habits needed to obtain and maintain employment in their career choice. Students are presented with simulated work situations to problem solve successful outcomes. Students continue to develop and update their personal resumes, complete job applications, and participate in mock interviews.

Work Experience Grade 11, 12 Year 1 15 Periods 3.0 Credits No. 652

This course is designed for eligible students whose primary identified need is to learn functional skills. This course is for eligible eleventh and twelfth grade students who may already be gainfully employed within the community. The instructional day is tailored to the working hours of the student. Monitoring of their job performance/attendance is made on a weekly basis.

Work Based Learning Grade 10, 11, 12 Year 1 2-15 Periods 1 - 3 Credits No. 653

This course is designed for eligible students whose primary need is to develop and expand their transition skills, especially in the area of employment. Students participate in authentic work-based learning opportunities provided within both the school and outside community settings with job coaching support. This course allows students to develop and apply skills generic to all career majors with a focus on: reliability, social interactions, constructive feedback, team work, accuracy, time management, safety, problem solving, stamina and endurance.

Technology Electives

Electricity/Electronics I Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 831

Electricity/Electronics I is designed to introduce students to the practical concepts of electricity and electronics. Primary areas of study include the use of electrical/electronic equipment in industry and the home. Each student will have the opportunity to test, repair, and construct electrical apparatus. A segment of the course will be devoted to the construction of a motorized vehicle and the study and experimentation of electrical motors.

Technology & Electronics (Dieruff) Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 835

Prerequisite: Algebra I

Technology & Electronics teaches students preparing for a career in technology, fundamentals of analog and digital electronics as well as basic circuitry. Students build electrical projects and do many hands-on activities. Computer aided instruction will be used extensively for the study of fundamental analog electronics. Students interested in the Information Technology Academy are encouraged to take this course.

Visual Communication (Dieruff) Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 861

Visual Communication emphasizes computer graphic design, introductory mechanical drawing concepts and silk screening procedures.

Computer Architecture (Dieruff) Grade 10 Year 1 5 Periods 1.0 Credit No. 881

Prerequisite: Computer Application for Career Planning

Computer Architecture involves the study of computer hardware, operating systems, and introductory networking. Students build and upgrade computers and learn operating systems. Students interested in the Information Technology Academy are encouraged to take this course.

Computer Networking (Dieruff) Grade 11, 12 Year 1 5 Periods 1.0 Credit No. 882

Prerequisite: Computer Architecture and/or teacher approval

This course involves the study of computer networks. Students learn networking terminology and configurations of both local area and wide area networks.

Dance Electives

Dance I (Allen) Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 737

Dance I is a course for students with any degree of experience in dance. The principles, elements and protocol of dance will be introduced. Students will learn proper body alignment. Conditioning,
flexibility, techniques and vocabulary of basic movements in ballet, modern, jazz, and musical theatre will be experienced and performed. Students will gain knowledge through written assignments and active participation.

Dance II (Allen) Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 738

Prerequisite: Dance I

Dance II will expand on the concepts and techniques learned in Dance I. Students will learn combinations in ballet, jazz, and modern dance through floor and center exercises. Students will further develop their ability to use the body as an expressive tool and to assess their own strengths and needs in dance training. Students will gain knowledge through written assignments and active participation.

**Dance credit can be applied for Physical Education in grades 9, 10, 11, 12 or Arts credit in 9, 10, 11, and 12*

English To Speakers of Other Languages Program

ESL Newcomer English — Grade 9, 10, 11, 12 — Year 1 — 15 Periods — 3.0 Credits — No. 100

This is a fundamental English course for newcomers only. Essential content level and survival vocabulary are stressed. All four domains (listening, speaking, reading and writing) are taught with an emphasis on establishing literacy skills for success in high school. Students who take this course satisfy one of the four English units required for graduation.

ESL English 9 — Grade 9 — Year 1 — 10 Periods — 2.0 Credits — No. 101

This course provides instruction in English as a second language across the 4 domains of listening, speaking, reading and writing. Students work at the appropriate language proficiency level to develop academic and social proficiency in vocabulary, language forms and functions, literacy and writing. Reading skills and strategies with both authentic literature and content texts are stressed. Students who take this course satisfy one of the four English units for graduation.

ESL English 10 — Grade 10 — Year 1 — 10 Periods — 2.0 Credit — No. 111

This course provides instruction in English as a second language across the 4 domains of listening, speaking, reading and writing. Students work at the appropriate language proficiency level to develop academic and social proficiency in vocabulary, language forms and functions, literacy and writing. Reading skills and strategies with both authentic literature and content texts are stressed. Students who take this course satisfy one of the four English units for graduation.

ESL English 11 — Grade 11 — Year 1 — 10 Periods — 2.0 Credits — No. 121

This course provides instruction in English as a second language across the 4 domains of listening, speaking, reading and writing. Students work at the appropriate language proficiency level to develop academic and social proficiency in vocabulary, language forms and functions, literacy and writing. Reading skills and strategies with both authentic literature and content texts are stressed. Students who take this course satisfy one of the four English units for graduation.

ESL English 12 — Grade 12 — Year 1 — 10 Periods — 2.0 Credits — No. 131

This course provides instruction in English as a second language across the 4 domains of listening, speaking, reading and writing. Students work at the appropriate language proficiency level to develop academic and social proficiency in vocabulary, language forms and functions, literacy and writing. Reading skills and strategies with both authentic literature and content texts are stressed. Students who take this course satisfy one of the four English units for graduation.

Family & Consumer Science Electives

Foods & Nutrition — Grade 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credits — No. 803

This multi-disciplinary course aims to prepare students to make wise choices in the purchasing, preparation and consumption of food. Real life practices in the application of science, technology, engineering, art, and math skills will allow students to explore the resources of time, money, health, safety, and creativity in relation to meal planning. Hands-on lab experiences will be offered. STEM careers to food science and nutrition will be introduced through guest speakers and student research projects.

Life Care Planning — Grade 9, 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credits — No. 808

This course is designed for eligible students whose primary identified need is to learn functional skills. This course teaches and reinforces personal safety, self-advocacy, communication skills, personal relationships, problem solving, self-determination, and establishing life goals. The students learn how to identify and articulate post-school goals, personal strengths and needs, and the ability to ask for assistance in order to facilitate increased independence.

Adult Living — Grade 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credits — No. 811

This course will provide students with the opportunity to clarify values, set SMART goals and practice the decision-making process. Interpersonal relationship skills and a variety of communication techniques will be taught. Career readiness and strategies for success in the world of work, including job applications, resume building, and interviewing skills will be explored. Personal finance basics such as creating a budget, banking, credit, insurance and financial planning for the future will be introduced.
Students will be given the opportunity to try their hand at planning for and sampling healthy and economical food choices as well as demonstrating basic food preparation skills.

Parenting Grade 10, 11, 12 Year .5 5 Periods 0.5 Credits No. 812

This course educates students about the importance of the parenting decision. Students explore the responsibilities of parenthood, the cost of child rearing, prenatal care, pregnancy, childbirth and newborn care. In addition, influences on child development, play and learning, child health and nutrition, safety in the home and discipline techniques will be investigated. Students will be given the opportunity for hands-on experience with a Real Care Baby. Students will be introduced to careers relating to children, parenting and families.

Independent Living Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credits No. 818

This course is designed for eligible students whose primary identified need is to learn functional skills. This course teaches the students how to maintain and care for their personal home environment. Students learn how to maintain their living arrangements by developing independent living skills related to budgeting, cooking, cleaning, safety, minor household repairs, and home maintenance.

Pre-Vocational Skills Grade 9, 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 828

This course is designed for eligible students whose primary identified need is to learn functional skills. This course provides hands-on exploration and training in basic vocational skills in real-work careers. In addition, the students will focus on exploring and developing their individual strengths, work-related problem-solving skills, appropriate work behaviors and career interests.

Community Involvement Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credits No. 838

This course is designed for eligible students whose primary identified need is to learn functional skills. The students learn how to make choices, select, and plan appropriate recreational activities. This course will provide the student an opportunity to explore an array of life-long recreational, leisure, and volunteer activities.

Social Behaviors Grade 9, 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 848

This course is available to eligible students. This course allows the students to continue to develop appropriate and acceptable interpersonal and social behaviors across all social settings. This course teaches skills that will enable the student to maintain employability and appropriate interactions as a citizen of the community. It includes individual rights and responsibilities afforded to productive community members.

Health and Physical Education Electives

Physical Education – Boys/Girls Grade 9, 10, 11, 12 Year 1 3 Periods 0.5 Credits No. 903/923

Physical Education is required for graduation and includes instruction in lifetime sports, physical fitness and conditioning, rhythmic movement, aquatics and adaptive physical education. Students will be expected to wear, for health and safety reasons, the Allentown School District approved physical education uniform.

Physical Education – Boys/Girls Grade 9, 10, 11, 12 Year .5 4 Periods 0.5 Credits No. 904/924

Physical Education is required for graduation and includes instruction in lifetime sports, physical fitness and conditioning, rhythmic movement, aquatics and adaptive physical education. Students will be expected to wear, for health and safety reasons, the Allentown School District approved physical education uniform.

Physical Education – Boys/Girls Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credits No. 905/925

Physical Education is required for graduation and includes instruction in lifetime sports, physical fitness and conditioning, rhythmic movement, aquatics and adaptive physical education. Students will be expected to wear, for health and safety reasons, the Allentown School District approved physical education uniform.

Adapted Physical Education Grade 9, 10, 11, 12 Year 1 2 Periods 0.5 Credits No. 908/928

Physical Education is required for graduation and includes instruction in lifetime sports, physical fitness and conditioning. Adapted Physical Education fulfills the required Physical Education credit for eligible students, who require a curriculum that offers significant adapted physical education instruction.

Physical Education* – DE No. 913DE

LCCC – Physical Education 1.0 Credit PED143

Physical education courses are oriented toward lifetime and are elective in nature. They may not be repeated for credit.

Health Education — Grade 9 — Year .5 — 5 Periods — 0.5 Credits — No. 931

Health Education provides an understanding of the human body systems and substance abuse with an emphasis on human sexuality. The curriculum explores positive daily life skills that include wellness, nutrition, first aid and community health.

Music Electives

Music Theory – AP* — Grade 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 750A

A course for those interested in the serious study of music. Components include the study of musical terminology, score analysis and notational, compositional, and aural skills. Students prepare to take the Advanced Placement Examination in Music Theory.

Instrumental Activities — No. 756

Grade 9, 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credits

Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit

Fall: For players of wind and percussion instruments the course begins in August with preparation for the Marching Band season and continues through Sept. & Oct. during Early Bird (pre-homeroom and homeroom) with early a.m. practice. String players not in Marching Band will meet as a string ensemble during Early Bird period. Approximately Nov. 1, all instrumentalists will be assigned by instrument and ability level to various ensembles. All band front students must enroll in Instrumental Music Activities. Spring: Instrumentalists will be assigned to ensembles by instrument and ability level for public concert presentations. Membership is by audition.

Choral Activities — No. 757

Grade 9, 10, 11, 12 — Year .5 — 5 Periods — 0.5 Credits

Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit

Choral Activities is a study, through rehearsal and public performances, of all aspects of the choral art: classical, pop, jazz, and show choir. This course, which offers an opportunity for anyone who wishes to learn
and sing all types of music and perform on stage, is open to all students with or without experience. Competitive, travel and social opportunities are offered.

Band — Grade 9, 10, 11, 12 — Year 1 — 3 Periods — 0.6 Credits — No. 761

Band includes the study and performance of works representative of the major forms (suite, overture, rhapsody, march, etc.) from baroque through contemporary periods of composition. Preparation for band performances includes participation in summer and after school rehearsals. Marching Band season begins in August and concludes in October. Concert Band begins following the football season and continues throughout the remainder of the school year.

Instrumental Instruction — Grade 10, 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 764

Instrumental Instruction offers an individual or group development of comprehensive musicianship through careful attention to tone quality, accurate pitch, good blend and balance, sight-reading, and musical expression. Students may enroll in this course to receive individual help. (Continuing string and wind instrument players are especially encouraged to enroll.)

Voice I — Grade 10, 11, 12 — Year 1 — 5 Periods — 0.5 Credits — No. 765

Voice I is a course for beginners with little or no previous experience in singing. Any student may elect this course. No audition is required. Students must be willing and able to sing alone and with others. Students will study correct posture, breath control, enunciation and phrasing, tone production and control, and interpretation.

Piano I — Grade 9, 10, 11, 12 — Year 1 — 5 Periods — 0.5 Credits — No. 767

Piano I is a course designed for students who have no previous piano experience. This course is the study of the basic skills involved in reading music and playing the keyboard, including varied types of music, from pop to classical. Each student will have his/her own practice instrument.

Theatre Electives

Improvisation Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 741

This course will provide students with the very important skill of thinking quickly. Students will learn and participate in "stage" and "character" situations that offer the opportunity for the actor to participate in scenes that maintain a good level of intensity. Warm-ups and whole group activities will also allow the student an opportunity to explore their leadership and the team building skills. The prerequisite course, Theatre I, may be taken concurrently.
Note: this course may be repeated for additional credit.

Theatre Stagecraft Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 746

This course will provide students with practical and hands-on experience in the behind-the-scenes phases of theatrical production. Students will learn and participate in designing, constructing and decoration sets; creating and maintaining props; stage management; lighting, rigging, and sound design; and recording shows. Participation in the school's after-school theatre activities is expected (either as a performer or stagehand). The prerequisite course, Theatre I, may be taken concurrently. Note: This course may be repeated for additional credit.

Theatre I Grade 9, 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 747

Theatre I introduces students to theatre as a vital, exciting art form. Students will have the opportunity to explore and participate in pantomime, improvisation, acting, scene design, stagecraft, lighting, costuming, and makeup. The history, development, and elements of theatre will be examined. Students may have the opportunity to attend theatrical productions.

Theatre II Grade 9, 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 748

Prerequisite: Theatre I

Theatre II students will continue to develop and polish skills learned in Theatre I. They will be introduced to dramatic characterization, emotional control, vocal techniques, and body movement as they relate to the actor. Script analysis, historical periods, and styles of acting will be emphasized. Performance in a prepared scene will be required. Students will have the opportunity to explore and participate in advanced forms of improvisation, as well as acting, lighting, stagecraft, scene design, costuming, and makeup.

Theatre III Grade 10, 11, 12 Year .5 5 Periods 0.5 Credit No. 749

Prerequisite: Theatre I & II

Theatre III will provide students with practical, hands-on experience in all phases of theatrical production. Students will be required to participate in some aspects of the school's dramatic activities: play/musical selection and analysis; stage management; scene, lighting and costume design; makeup; set construction and décor; publicity; or acting and directing. Note: This course may be repeated for additional credit

World Language Electives

Level I (All Languages)

Emphasis is placed on developing the four basic language skills; listening, speaking, reading and writing. Proper language habits are fostered through basic dialogues and through pattern practices of various kinds. Reading and writing involves material previously learned on the listening and speaking level. An understanding is developed of the heritage of the language, government, history, and the art of countries where the target language is spoken.

Level II (All Languages)

Prerequisite: Completion of level one

Work continues on the four basic skills. Grammatical structure is more complex. Class conversation arises from the reading lessons expanding into real-life situations. Use of oral language is increased. Cultures of various countries are explored.

Level III (All Languages)

Prerequisite: Completion of level two

Stress on reading and writing is now equal to that of listening and speaking. Reading delves more deeply into cultural materials. Writing exercises include autobiographical descriptions and picture descriptions. Language production, in speech or in writing, reflects a greater measure of student independence but emphasis is placed on using only those patterns that are thoroughly controlled.

Level IV (All Languages)

Prerequisite: Completion of level three

The program is similar to the third level but with a higher degree of difficulty. Listening and speaking receive the attention due, but reading and writing take to the foreground. Readings are more ambitious and may include such materials as newspapers and magazines. Writing becomes more spontaneous and free, and paragraphs of reasonable sophistication and competence are expected.

Level V (All Languages)

Prerequisite: Completion of level four and teacher recommendation in German and Spanish.

Reading selections for the Advanced Placement courses are those suggested as preparation for the Advanced Placement Examinations. Students are introduced to the techniques of literary analysis and criticism as they apply both to poetry and to prose. A thorough review of the grammar and syntax of the language is also provided.

German I	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 511
German II	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 512
German III	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 513
German IV* – Advanced	Grade 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 514
German Language and Culture*- AP	Grade 12	Year 1	5 Periods	1.0 Credit	No. 515A

The AP Language and Culture courses emphasize communication applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. These courses strive not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the courses are taught almost exclusively in the target language. The AP Language and Culture courses engage students in an exploration of culture in both contemporary and historical contexts. The courses develop students' awareness and appreciation of cultural products, practices and perspectives.

Spanish for Spanish Speakers (Levels I, II, III) Grade 9, 10, 11, 12 Year 1 5 Periods 1.0 Credit

At each of the first three levels of Spanish, a separate course is offered to students who speak and understand Spanish as a native. The courses concentrate less on listening and speaking and focus more on reading and writing. These courses are intended for students who already have an oral proficiency but need instruction in structure and grammar. All students who are native Spanish speakers must enroll in one of these three courses.

Spanish I	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 521
Spanish I for Spanish Speakers	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 521N
Spanish II	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 522
Spanish II for Spanish Speakers	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 522N
Spanish III	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 523
Spanish III for Spanish Speakers	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 523N
Spanish IV – Advanced*	Grade 9, 10, 11, 12	Year 1	5 Periods	1.0 Credit	No. 524

Spanish Language and Culture – AP* Grade 12 Year 1 5 Periods 1.0 Credit

No. 525A

The AP Language and Culture courses emphasize communication applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. These courses strive not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the courses are taught almost exclusively in the target language. The AP Language and Culture courses engage students in an exploration of culture in both contemporary and historical contexts. The courses develop students' awareness and appreciation of cultural products, practices and perspectives.

Spanish – DE* No. 524DE

LCCC – Spanish SPN205

Prerequisite: requires two years of high school language

Grade 10, 11, 12 1 Semester

1.0 ASD Credit 3.0 College Credits

This course is the first semester of the second year of two years of Spanish studies and therefore, a continuation of study of grammar and vocabulary of the Spanish language. Spanish-speaking cultures and speaking, listening, reading, and writing skills are emphasized.

French – DE* No. 534DE

LCCC – French FRN105

Grade 10, 11, 12 1 Semester

1.0 ASD Credit 3.0 College Credits

This course is offered to beginners and to some non-beginners who have had perhaps one year of French in high school, but who feel that their preparation is inadequate for an intermediate course at the college level. The basic communication skills are systematically developed: listening and speaking skills are emphasized in the classroom and expanded with participation in a language tape program. Reading and writing skills are progressively developed through various creative exercises, activities, and assignments. Cultural readings and materials are adapted to provide the student with the opportunity to practice communication skills, while at the same time discovering aspects of both daily life and traditional culture of Francophones all over the world and within the United States.

Louis E. Dieruff High School - AFJROTC

Air Force Junior Reserve Officer Training Corps Program Courses

The mission of the AFJROTC program is to build better citizens for America. Program goals are to instill values of citizenship, service to the United States, personal responsibility and a sense of accomplishment in the students. AFJROTC objectives are to educate students in citizenship, promote community service, instill character and discipline, and provide instruction in air and space fundamentals. Teaching materials, textbooks and uniforms are supplied by the United States Air Force.

The AFJROTC program explores the civilian, industrial and military aspects of Aerospace Science. Extracurricular activities of cadets are varied and interesting. The unit offers educational field trips to Air Force bases, airports, aerospace industries, and museums. Air Force JROTC carries no military obligation. There are tangible benefits for cadets that complete the course: cadets who attend college may receive special consideration for Air Force ROTC scholarships and they may receive credit for a full year of Air Force ROTC. Cadets who enlist in the military directly after high school may enter two pay grades higher than other enlistees.

	AFJROTC CURRICULUM Four-Year Program				
Grade 9	**AS History**	The Heritage of Flight	Development of Air Power	Toward Military Aerospace	Contemporary Aviation
	LE I	Heritage, Organization, and Traditions	Individual Self-Control	Citizenship in the United States	Wellness, Health, and Fitness
Grade 10	**AS Science**	The Aerospace Environment	Human Requirements of Flight	Principles of Aircraft Flight	Principles of Navigation
	LE II	Effective Communication Skills	Understanding Individual Behavior	Understanding Group Behavior	Basic Leadership Concepts
Grade 11	**AS Space**	The Space Environment	Space Programs	Space Technology	Manned Spaceflight
	LE III	Choosing Your Path	The Job Search	Financial Planning	Career Opportunities
Grade 12	**AS Options**	Option 1 – Management of Cadet Corps			
		Option 2 – Advanced Program – Ground School			
		Option 3 – Aerospace Careers		Lab Manual	Survival
				Geography	Policy and Organization
	LE IV	Management Techniques	Management Decisions	Management Functions	Managing Self and Others

AS – Aerospace Science
LE – Leadership Education

AFJROTC I — No. 951

AFJROTC I (Early Bird) — No. 955

Grade 9, 10 Year 1 5 Periods 1.0 Credit

AFJROTC II — No. 952

AFJROTC II (Early Bird) — No. 956

Grade 10, 11, 12 Year 1 5 Periods 1.0 Credit

AFJROTC III — No. 953

AFJROTC III (Early Bird) — No. 957

Grade 11, 12 Year 1 5 Periods 1.0 Credit

AFJROTC IV — No. 954

AFJROTC IV (Early Bird) — No. 958

Grade 12 Year 1 5 Periods 1.0 Credit

A student may enroll in an ROTC program at Building 21, William Allen or Dieruff High School regardless of where he or she lives in the district. The student should work with the guidance department of his/her home middle or high school to arrange placement. A written parental request for transfer approval must be submitted to the Director of Community & Student Services by the first week of August

William Allen High School - NJROTC

Naval Junior Reserve Officer Training Corps Program Courses

An elective program, Navy Junior ROTC offers students opportunities to grow as citizens. Students learn through classroom academic classes and hands-on field work. Each week includes two academic classes, a drill period, and one physical fitness period. Students are provided uniforms at no cost. The courses and concurrent extracurricular activities support development of community service, self-discipline, and patriotism. Courses are offered during academic periods including Early Bird. Courses are sequential, but upper class may start as Naval Science I students. Participation in NJROTC incurs no military service obligation, but offers many advantages to those who decide to enlist or enter an officer commissioning program after graduation. New enlistees gain accelerated advancement and increased pay. If qualified, NJROTC graduates can be awarded a nomination to the United States Naval Academy and other service academies. NJROTC graduates also earn an advantage in competition for Navy ROTC scholarships to attend colleges and universities.

Naval Science I — No. 961
Naval Science I (Early Bird) — No. 965

Grade 9, 10, 11, 12 Year 1 5 Periods 1.0 Credit

This course presents an introduction to naval organization. Instruction includes basic first aid, naval history, and seamanship. Students learn basic drill and proper wear of the uniform.

Naval Science II — No. 962
Naval Science II (Early Bird) — No. 966

Grade 10, 11, 12 Year 1 5 Periods 1.0 Credit

This course introduces meteorology, naval weapons, leadership, survival skills, and citizenship. Moving beyond NS I material, students will expand knowledge in areas of seamanship, shipboard organization, and naval history.

Naval Science III — No. 963
Naval Science III (Early Bird) — No. 967

Grade 11, 12 Year 1 5 Periods 1.0 Credit

This course continues to build knowledge in leadership, naval history and naval organization. Students explore electronics, astronomy, sea power, and practical leadership.

Naval Science IV — No. 962
Naval Science IV (Early Bird) — No. 968

Grade 12 Year 1 5 Periods 1.0 Credit

This course offers continued study of citizenship, naval history, naval organization and electronics. It also offers advanced work in leadership, examining ethical behavior and organizational psychology. As seniors lead underclassman in activities, they learn from practical experience.

A student may enroll in an ROTC program at Building 21 Allentown, William Allen or Louis E. Dieruff High School regardless of where he or she lives in the district. The student should work with the guidance department of his/her home middle or high school to arrange placement. A written parental request for transfer approval must be submitted to the Director of Community & Student Services, by the first week of August.

The Allentown School District has established specialty academies to provide high school students the opportunity to select electives in a concentrated field of study. The virtual academies provide students with the opportunity to enroll in elective, core, and credit recovery courses.

The student should work for placement with the guidance department of the middle or high school in which he or she is enrolled. Students transferring from their home high school for an academy must stay one semester before having the option to transfer back to their home school. For the Arts and Informational Academies, transportation will be provided between the high schools. Students are required to go to their home school for pick-up.

The following academies are offered:

The ASD Virtual Academy
Grades 9 – 12

The Allentown Academy of the Arts
at William Allen High School
Grades 11 – 12

The Academy of Information Technology
at Louis E. Dieruff High School
Grades 11 – 12

Allentown School District Virtual Academy

Academy Purpose
Allentown School District (ASD) is a leader in K-12 for preparing our students for the 21st Century. The ASD Virtual Academy offers high quality, Internet-delivered high school courses that equip students to thrive in the complex life and work environment of the 21st Century.

Program Description
A virtual school can be defined as a location where students can complete their coursework online, while the student and teacher work together from a distance. In a virtual environment, students work at their own pace (within broad deadlines) and complete a combination of assignments; tests; quizzes; projects; and assessments that permit a teacher to follow the educational progress of the student. The ASD Virtual Academy offers the hallmarks of truly effective traditional education programs – quality teachers, quality curriculum, and frequent student-teacher interaction. All courses are taught by ASD teachers and meet national, state and ASD School District curriculum standards.

In addition to rigorous course content that meets state and district performance standards, ASD Virtual Academy's online learning environment fosters creativity, critical thinking, communication, and collaboration, as well as mastery of information, media, and technology skills--all of which are essential for preparing students for the future.

The ASD Virtual Academy High School offers students the ability to complete all their high school courses online with support from ASD teachers and guidance counselors. ASD students can enroll in the ASD Virtual Academy High School full-time or take certain courses at their home school during their school day. For high school students to enroll in credit recovery online course options, they must work with the guidance office at their home school to determine if this program is appropriate for their learning style. Current ASD high school students can enroll in blended on line courses, which are available during the first or last period of the school day. To apply, students must work with their guidance office to schedule courses that are academically appropriate. The students and parents/guardians must attend the orientation before the students can take the course(s).

Virtual Academy Courses

Core Courses

Course ID	Course Title	Credits	Duration
English			
VA101/VA101AD	English Language Arts 9 (Regular/Advanced)	1.0	1 Year
VA111/VA111AD	English Language Arts 10 (Regular & Advanced)	1.0	1 Year
VA121/VA 121AD	English Language Arts 11 (Regular & Advanced)	1.0	1 Year
VA131/VA131AD	English Language Arts 12 (Regular & Advanced)	1.0	1 Year
Math			
VA314	Math Foundations 1	1.0	1 Year
VA315	Math Foundations 2	1.0	1 Year
VA301	Algebra I	1.0	1 Year
VA321	Geometry	1.0	1 Year
VA322	Applied Geometry	1.0	1 Year
VA311	Algebra II	1.0	1 Year
VA350	PreCalculus	1.0	1 Year
VA245	Financial Math	1.0	1 Year
VA341	Trigonometry	.5	.5 Year
VA390	Statistics and Probability	1.0	1 Year
VA385	Personal Finance	.5	.5 Year
VA312	Foundations of Algebra II	1.0	1 Year
VA381	Survey of Math	1.0	1 Year
Science			
VA401	Biology	1.0	1 Year
VA411	Chemistry	1.0	1 Year
VA466	Environmental Science	1.0	1 Year
VA464	Introduction to Physical Science	1.0	1 Year
VA421	Physics	1.0	1 Year
Social Studies			
VA201	US History I	1.0	1 Year
VA221	US History II	1.0	1 Year
VA211	World History	1.0	1 Year
Course ID	**Course Title**	**Credits**	**Duration**
VA231	Civics and Government	.5	.5 Year
VA242	Economics	.5	.5 Year
Health/Physical Education			

VA910	Lifetime Fitness (Gym)	1.0	1 Year
VA931	Contemporary Health	.5	.5 Year
AP Options			
VA360	Calculus AB	1.0	1 Year
VA120A	English Language & Composition	1.0	1 Year
VA130A	English Literature & Composition	1.0	1 Year
VA466A	Environmental Science	1.0	1 Year
VA282A	Psychology	1.0	1 Year
VA525A	Spanish Language & Culture	1.0	1 Year
VA230A	US Government and Politics	1.0	1 Year
VA250A	US History	1.0	1 Year
VA210A	World History	1.0	1 Year
Electives			
VA521	Spanish 1	1.0	1 Year
VA522	Spanish 2	1.0	1 Year
VA523	Spanish 3	1.0	1 Year
VA501	French 1	1.0	1 Year
VA502	French 2	1.0	1 Year
VA503	French 3	1.0	1 Year
VA551	Chinese 1	1.0	1 Year
VA511	German 1	1.0	1 Year
VA512	German 2	1.0	1 Year
VA531	Latin 1	1.0	1 Year
VA711	Intro to Art	.5	.5 Year
VA282	Psychology	.5	.5 Year
VA283	Sociology	.5	.5 Year
VA132	Expository Reading and Writing	1.0	1 Year
VA171	IDEA Writing	1.0	1 Year
VA165	Online Learning & Digital Citizenship	.5	.5 Year
VA198F	Keystone Literature Module Fiction	.5	.5 Year
VA198N	Keystone Literature Module Non-Fiction	.5	.5 Year
VA3981	Keystone Algebra Module 1	.5	.5 Year
VA3982	Keystone Algebra Module 2	.5	.5 Year
VA498A	Keystone Biology Module A	.5	.5 Year
VA498B	Keystone Biology Module B	.5	.5 Year
VA601	Introduction to Information Technology Part 1	.5	.5 Year

VA6012	Introduction to Information Technology Part 2	.5	.5 Year
VA631	Computer Applications: Office 2010 Basics 1	.5	.5 Year
VA632	Computer Applications: Office 2010 Basic 2	.5	.5 Year
VA181	Career Explorations Semester 1	.5	.5 Year
VA182	Career Explorations Semester 2	.5	.5 Year
VA652	Career Planning and Development	.5	.5 Year

** Advanced Placement and AP are registered trademarks of the College Board*

Credit Recovery Courses

Course ID	Course Title	Credits	Duration
VACR101	English 1	1.0	1 Year
VACR111	English 2	1.0	1 Year
VACR121	English 3	1.0	1 Year
VACR131	English 4	1.0	1 Year
VACR301	Algebra 1	1.0	1 Year
VACR311	Algebra 2	1.0	1 Year
VACR 321	Geometry	1.0	1 Year
VACR322	Applied Geometry	1.0	1 Year
VACR401	Biology I	1.0	1 Year
VACR411	Chemistry I	1.0	1 Year
VACR464	Physical Science	1.0	1 Year
VACR466	Environmental Science	1.0	1 Year
VACR201	US History 1	1.0	1 Year
VACR211	World History	1.0	1 Year
VACR221	US History 2	1.0	1 Year
VACR231	US Government & Politics	1.0	1 Year

Course descriptions available through the on-line Edgenuity program.

Allentown Academy of the Arts at William Allen High School

Academy Purpose

The Allentown Academy of the Arts is dedicated to providing high school students with maximum opportunities to grow and develop through a high quality, comprehensive and integrated education in music, theatre, dance, and the visual arts. We are committed to furthering students' academic abilities and performing talents while preparing them to pursue their arts interest in life, college, or career.

Program Description

The Allentown Academy of the Arts believes that the arts constitute one of the five fundamental components of basic education, along with language, mathematics, natural sciences, and social studies. We further believe that strong arts programs should be an

essential part of every school system and that arts programs within the school should be suited to the needs of the students. Therefore, the Allentown Academy of the Arts believes that high school students who have a strong interest and potential for success in the arts must be identified and provided an opportunity for artistic growth.

We further believe that artistic young people have special needs and abilities, and those talented students should be provided opportunities to develop their talents through intense study in their artistic disciplines. They should also be taught to evaluate, analyze, and interpret their art form through studies in technique, creative expression, and craftsmanship. Additionally, students should be afforded performance opportunities that will serve as vehicles for self-expression, artistic growth, and pre-professional training. These talented students should also be provided artistic exposure to all fine arts areas in order to further their knowledge of an appreciation for all art forms.

The Allentown Academy of the Arts believes that providing talented students with specialized training will enhance their appreciation and understanding of all art forms. It will provide them an advantage in post-secondary arts studies; it will teach essential socialization, organizational, and leadership skills; it will provide them a strong advantage in work-related, college, and scholarship opportunities; and it will enhance their enjoyment of the arts throughout their lives.

Academy of the Arts Recommended Curriculum

Grade 11	Grade 12
English III	English IV
United States History II	United States Government
Mathematics (on level)	Physical Education **
Science	Focused Electives (Early Bird)
Physical Education**	Studio I & II (2 Periods)
Focused Elective (Early Bird)	Elective(s)
Studio I & II (2 Periods)	
Elective	

Academy of the Arts - Dance, Music, Theatre & Visual Arts

Dance Studio Concepts — Grade 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 733AA

Prerequisite: Dance I

Dance Studio Concepts students will study how dance elements and techniques influence movement and personal expression. Students will demonstrate advanced levels of ballet, jazz, and modern techniques. The course will also emphasize elementary dance composition, and help students gain a clear understanding of the physics of dance. Students will be required to perform mini solos in front of their classmates. Analysis and technique should give the student experience in demonstration, conceptualization, and dance execution. An additional semester arts elective is required.

Dance Studio I — Grade 11, 12 — Year 1 — 10 Periods — 2.0 Credit — No. 734AA

Dance Studio I is an intermediate technique course which will include vocabulary, movement concepts, positions and combinations in ballet, modern, and jazz dance. Dance history and composition will also be studied. Performance is required. Audition and teacher recommendations are required.

Dance Studio II — Grade 12 — Year 1 — 10 Periods — 2.0 Credit — No. 735AA

Prerequisite: Dance Studio I or Dance Studio Concepts

Dance Studio II is for advanced students and continues to expand and develop the concepts and techniques learned in Dance Studio I. There will be extensive work on composition and the creation of an exit project. Performance is required. An audition and teacher recommendations are required

Music Arts Concepts — Grade 11, 12 | Year 1 | 5 Periods | 1.0 Credit | No. 753AA

Musical Arts Concepts students will experience the elements of music including melody, harmony, form, and color from a theatrical and practical perspective. Students will also gain music literacy skills as they learn to play the piano. In addition, the class will study the different types of music from around the world. Students will have the opportunity to gain first-hand musical experience through in class performances. An additional semester arts elective is recommended.

Instrumental and Vocal I — Grade 11, 12 | Year 1 | 10 Periods | 2.0 Credit | No. 754AA

Instrumental and Vocal-I students will further develop their understanding of music theory, literature/history, aural studies, keyboard skills and performance techniques. An audition and teacher recommendation is required.

Instrumental and Vocal II — Grade 12 | Year 1 | 5 Periods | 1.0 Credit | No. 755AA

An audition and teacher recommendation is required. This course is run in conjunction with Music Theory - Advanced Placement.

Music Theory – AP* — Grade 12 | Year 1 | 5 Periods | 1.0 Credit | No. 750AA

Prerequisite: Instrumental and Vocal I

Music Theory AP is designed for the highly motivated student interested in the serious study of music. Components include the study of musical terminology, score analysis and notational, composition, and aural skills. Students prepare to take the Advanced Placement Examination in Music Theory. This course runs in conjunction with Instrumental and Vocal II.

For Allentown Academy of the Arts music students, this level of courses will include:

Music Theory

Students will participate in a thorough study of advanced chromatic harmonies and modulations, composition in various forms (Theme and Variation, Fugue, and Sonata-allegro), basic concepts in standard orchestration techniques and a survey of 20th century composition techniques and trends.

Music Literature and History

Students will complete further analysis of form of all style periods, study of comparative performance practices and styles. A survey of the history of jazz, American folk music, rock and musical comedy (operetta and Broadway) is also part of this activity.

Aural Studies

Students will work toward further mastery of techniques in sight singing with advanced chromatic and modulatory material with an emphasis on harmonic dictation. Aural recognition of modes, meters, performance media, forms and styles in relation to historical periods will be stressed.

Performance

In addition to their personal private instrumental or vocal studio work, included will be solo performance and recital seminars, master classes, ensemble experience and coaching.

Acting Studio Concepts — Grade 11, 12 | Year 1 | 5 Periods | 1.0 Credit | No. 743AA

Prerequisite: Theatre I or Acting Studio Integrated

Students will explore theatre through partner scene work and solo monologue work. Different concepts will be explored such as method acting, sense memory, and emotional recall, along with improvisation and relation techniques. A unit on musical theatre will be investigated. Students will be asked to write their own scene and direct it.

Acting Studio I — Grade 11, 12 | Year 1 | 10 Periods | 2.0 Credit | No. 744AA

Acting Studio I is for the serious acting student. Students will gain hands on experience by being involved in the inter-workings of the theatre, from scene shop and costumes to the technical aspect of lights and sound, acting techniques and the marketing of productions. Dramatic literature and theatre history will be studied and analyzed. Involvement in the fall play and the spring Main Stage Musical at Allen is required. An audition and teacher recommendation is required. (Auditions can be a monologue, a scene with a partner, or a vocal audition with a Broadway show tune.)

Acting Studio II — Grade 12 | Year 1 | 10 Periods | 2.0 Credit | No. 745AA

Prerequisite: Acting Studio I or Acting Studio Concepts

Acting Studio II is for the advanced acting student. This course will build on the skills and techniques developed in Acting Studio I with the addition of a group project of writing a short One Act play and performing it. Students will be responsible for sets, lights, costumes, directing and performing the piece. Involvement in the fall play and the spring Main Stage Musical at Allen is required. An audition and teacher recommendation is required. (Auditions can be a monologue, a scene with a partner, or a vocal audition with a Broadway show tune.

Studio Art – AP* — Grade 12 | Year 1 | 5 Periods | 1.0 Credit | No. 720AA

Prerequisite: Visual Arts I

Studio Art Advanced Placement is a quality oriented studio course. Included is concentrated theme and media development. An individualized professional portfolio will be finalized, meeting the standards of evaluation and described in the College Entrance Examination Board Advanced Placement Program. This course prepares the student to take the Advanced Placement Examination in Studio Art. A portfolio review and teacher recommendation is required. This course is run in conjunction with Visual Arts II.

Visual Arts Integrated — Grade 10 — Year 1 — 5 Periods — 1.0 Credit — No. 722AA

Prerequisite: Art I

This course is focused foundation program in studio art that emphasizes integrating the arts historically through World Cultures and English II. This course is designed to develop strong drawing and design skills by working with a variety of media A student sketchbook is required.

WAHS: Work completed can be used as the portfolio to apply to the Arts Academy at the end of the sophomore year. Students interested in the Arts Academy are encouraged to take this course.

Visual Arts Concepts — Grade 11, 12 — Year 1 — 5 Periods — 1.0 Credit — No. 723AA

Prerequisite: Art I or Visual Arts Integrated

Visual Arts Concepts extends experiences in drawing, composition, color, and design to provide experiences with techniques and idea development involving various drawing and painting mediums as well as relief printing, photography, computer graphics, ceramic design, fibers, wood, metal, and glass. A student sketchbook is required and an additional semester arts elective is recommended.

Visual Arts I — Grade 11, 12 — Year 1 — 10 Periods — 2.0 Credit — No. 724AA

Visual Arts I is for those students interested in an intense preparation for future study of the visual arts. Studio experiences involving drawing, painting, printmaking, photography, sculpture, metals, glass, fibers, communication design, and computer graphics. A working knowledge of techniques, principles of design, personal course concepts, and media culminate in a portfolio review at year's end. This course prepares the student for the presentation and continued development of a professional portfolio. A portfolio review and teacher recommendation is required.

Visual Arts II — Grade 12 — Year 1 — 5 Periods — 1.0 Credit — No. 725AA

Visual Arts II is for advanced students who wish to continue to expand and develop the concepts and techniques learned in Visual Arts I. This course is run in conjunction with Studio Art – Advanced Placement

Academy of Information Technology at Louis E. Dieruff High School

Academy Purpose

The purpose of the Academy of Information Technology is to provide instruction and experiences, which will lead to technology-based careers in the 21st century

Program Description

Students can follow one or parts of five threads of career pathways in the academy: computer operating systems and networking; computer applications; computer graphics; computer programming; and electronics.

Academy of Information Technology Recommended Curriculum

Course Requirements:

Course	Credit
Computer Architecture (recommended for grade 10)	1.0
Web Page Design/Desktop Publishing	0.5
Computer Graphics	0.5
Computer Programming I	0.5

3.0 courses on left and 1.0 credit for the courses below.	
Course	**Credit**
Computer Networking	1.0
Advanced Web Page Design & Multimedia Imaging	0.5
Computer Programming II	0.5
Internet Applications	0.5

Students must earn a 2.0 grade point average, have satisfactory attendance and school citizenship. They will also receive an Acknowledgement of Skills Certificate for high achievement in any of the areas of computer technology, networking, programming, web page design, computer graphics and electronics.

Grade 11	Grade 12**
English III	English IV
Mathematics (on level)	United States Government
Science (on level)	Mathematics (on level)
Physical Education	Physical Education
Computer Programming I	Databases
Computer Graphics	Elective(s)
Elective(s)	

Computer Programming I Grade 11, 12 Year .5 5 Periods 0.5 Credit No. 371

Prerequisite: Algebra I

In this course, Java introduces students to the capabilities of computers and provides a fundamental knowledge of programming structures. By writing programs, students will use microcomputers as a problem-solving tool and learn techniques that are transferable to other programming languages.

Computer Programming II Grade 11, 12 Year .5 5 Periods 0.5 Credit No. 372

Prerequisite: Computer Programming I

This course is designed to extend students' knowledge of Java, explore, and compare it to the languages of Scheme and Visual Basic. Students will have writing object-oriented programs with a project-based approach.

Computer Science Principles – AP* Grade 10, 11, 12 Year 1 5 Periods 1.0 Credit No. 375

Prerequisite: Algebra II and Geometry

Advanced Placement Computer Science Principles is designed to be equivalent to a first-semester introductory college computing course. Students will develop computational thinking vital for success across multiple disciplines. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while exploring using computer software and other technology. Working individually and collaboratively they will also develop effective communication skills through discussions and in writing. This course is designed to prepare students to take the Advanced Placement Computer Science Principles examination.

Web Page Design Grade 11, 12 Year .5 5 Periods 0.5 Credit No. 605

Prerequisite: Computer Application for Career Planning

This course focuses on creating web pages that communicate the appropriate message and attract an audience using a variety of methods and software. It includes critical analysis of web page organization, design and functionality.

Advanced Web Page Design & Multimedia Imaging No. 606CT

Grade 11, 12 Year .5 5 Periods 0.5 Credit

Prerequisite: Web Page Design, Computer Graphics

Advanced Web Page Design & Multimedia Imaging is intended for students who have a strong interest in web page design, desktop publishing, multimedia imaging and as a career. Students will explore advanced HTML,
XML, and Java Script along with the use of Macromedia Flash to create animations along with 2 dimensional and 3 dimensional imaging.

Computer Graphics Grade 11, 12 Year .5 5 Periods 0.5 Credit No. 726

Computer Graphics develops an awareness of the various creative desktop designing and publishing software standard to the world of advertising and publishing. Students will be introduced to the most commonly used programs: Adobe PhotoShop and PhotoShop by Design. Flash will be available to those students who complete the two previous programs. An intermediate knowledge of basic computer processes is required.

Computer Architecture Grade 11, 12 Year 1.0 5 Periods 1.0 Credit No. 881CT

Prerequisite: Computer Application for Career Planning

Computer Architecture involves the study of computer hardware, operating systems, and introductory networking. Students build and upgrade computers and learn operating systems.

Computer Networking Grade 11, 12 Year 1.0 5 Periods 1.0 Credit No. 882CT

Prerequisite: Computer Architecture and/or teacher approval

Students in this course will learn networking, terminology and configuration of both local area and wide area networks

building21 ALLENTOWN

passion · agency · impact

The mission of Building 21 is to empower networks of learners to connect with their passions and build agency to impact the world. Our learning model allows students to learn at their own pace, to engage with content and curriculum that they find interesting and relevant, and to apply and further develop their skills in real-world environments. At Building 21, you will experience:

Relationships *at the Core*

Every student is known and understood - this provides the motivation, safety, and confidence that students need to discover and pursue their passions.

All students at Building 21 are assigned to an advisory that loop with them through graduation. Advisory focuses on personal development through our Habits of Success competencies, building relationships with adults and peers, and supports the development of our students' Personalized Learning Plans.

Support in developing and managing ***Personalized Learning Pathways and Real World Learning Experiences***

Students' own strengths, interests, and passion shape their pathway across foundation and design years towards college and career readiness.

We base our elective coursework around student interest using career inventories. Our five pathways are focused on careers in:

1. Business
2. Healthcare
3. Public Service
4. Science, Technology, Engineering, and Mathematics
5. Visual Arts

Students receive opportunities in their foundational years (years 1 & 2) to be exposed to these career pathways through our Foundations course and choice studios. Students learn through real-world application and career exposure as we work alongside our community partners in designing our studios.

Students begin to design their pathway during their design years (years 3 & 4) diving deeper into the electives that pertain to their passions. Alongside this course work, students have opportunities for:

- Dual Enrollment / Advanced Placement Courses
- Internships / Fellowships
- Work Experience
- Project Development and Implementation
- Building an ePortfolio for post-secondary preparation

Problem-based *Instruction*

Learning is organized into studios that last for 6-8 weeks. Studios provide students the opportunity to integrate content and apply their skills and knowledge to solve real-world problems. Each studio ends with an impact module where students get to implement their project/product/solution for an authentic audience.

Competency-based *Assessment*

Learning in the core content areas (English, Math, Science, Social Studies, Health, Art, Physical Education) is aligned to a set of skills that students must master in order to graduate.

The core element of a competency-based approach is that students progress to more advanced work upon demonstration of mastery, not their age or grade.

- Students work at levels that are appropriately challenging.
- Students are assessed on performance or the application of the skills.
- Some students may complete courses more rapidly than others. Students can be at different performance levels – such as 10th level in an English portfolio and 8th level in a math portfolio.
- Teachers guide students to produce sufficient evidence to determine proficiency.

In addition to the core content areas, coursework is aligned to a set of competencies that are targeting and assessing 21st Century Skills (NextGen): Collaboration, Project Quality, Presentation, and Written Communication in the Workplace. Students receive feedback to hone these skills with equal importance to our core content areas.

Students also complete a checklist of experiences to complete their Wayfinding portfolio including but not limited to: completion of personality and career inventories, developing a post-secondary plan, writing a resume, participating in a mock interview.

The compilation of our portfolios support students in making informed choices for their post-secondary plan while preparing them with the skills necessary to be successful for college or career.

HEALTHCARE

932 Exploration of Healthcare Occupations I	SCI	.25, .5, or 1
935 Exploration of Healthcare Occupations II	SCI	.25, .5, or 1
936 Exploration of Healthcare Occupations III	SCI	.25, .5, or 1
937 Exploration of Healthcare Occupations IV	SCI	.25, .5, or 1

DIGITAL MEDIA

726 Digital Media Technology I	ART	.25, .5, or 1
727 Digital Media Technology II	ART	.25, .5, or 1
728 Digital Media Technology III	ART	.25, .5, or 1
729 Digital Media Technology IV	ART	.25, .5, or 1
723 Audio/Visual Production	ART	.25, .5, or 1

ART

718 Photography I	ART	.25, .5, or 1
719 Photography II	ART	.25, .5, or 1
720 Photography III	ART	.25, .5, or 1
721 Photography IV	ART	.25, .5, or 1
715 Fashion Design	ART	.25, .5, or 1
771 Exploring Music	ART	.25, .5, or 1
701 Creative Art - Drawing and Painting	ART	.25, .5, or 1
746 Drama/Theater (Theater Arts I)	ART	.25, .5, or 1
751 Graphic Design	ART	.25, .5, or 1

BUSINESS

606 Entrepreneurship I	BUS	.25, .5, or 1
606 Entrepreneurship II	BUS	.25, .5, or 1
606 Entrepreneurship III	BUS	.25, .5, or 1
606 Entrepreneurship IV	BUS	.25, .5, or 1
244 Banking and Finance	BUS	.25, .5, or 1

HUMANITIES

813 Teaching Profession	FCS	.25, .5, or 1
814 Humanities Workplace Experience	FCS	.25, .5, or 1
815 Humanities Ind. Study	FCS	.25, .5, or 1
819 Exploration of Public Service Careers	FCS	.25, .5, or 1

INFORMATION TECHNOLOGY

371 Computer Programming I	MATH	.25, .5, or 1
371 Computer Programming II	MATH	.25, .5, or 1
371 Computer Programming III	MATH	.25, .5, or 1
371 Computer Programming IV	MATH	.25, .5, or 1
605 Webpage Design	BUS	.25, .5, or 1
608 Information Support and Services	BUS	.25, .5, or 1

LANGUAGE ARTS

164 Media Print I (Yearbook)	ENG	.25, .5, or 1
165 Media Print II (Yearbook)	ENG	.25, .5, or 1
166 Media Print III (Yearbook)	ENG	.25, .5, or 1
171 Creative Writing	ENG	.25, .5, or 1
193 Literature (Other)	ENG	.25, .5, or 1
194 Literature of a Theme	ENG	.25, .5, or 1
175 Public Speaking	ENG	.25, .5, or 1
179 Speech/Debate	ENG	.25, .5, or 1
161 Journalism I	ENG	.25, .5, or 1
162 Journalism II	ENG	.25, .5, or 1
163 Journalism III	ENG	.25, .5, or 1

LAW

298 Law Studies	SOC	.25, .5, or 1

HEALTH/PE

909 Off-Campus Sports	HEALTH/PE	.25, .5, or 1
913 Lifetime Fitness Education	HEALTH/PE	.25, .5, or 1
911 Health and Fitness	HEALTH/PE	.25, .5, or 1
912 Safety and Fitness	HEALTH/PE	.25, .5, or 1

SOCIAL JUSTICE

291 Civil Justice	SOC	.25, .5, or 1
838 Community Involvement	FCS	.25, .5, or 1

STEM

422 Physics (Other - Nanotechnology)	SCI	.25, .5, or 1
856 Engineering Design and Development	SCI	.25, .5, or 1
832 Electricity/Electronics General	TECH	.25, .5, or 1

TRADES

833 Electricity/Electronics Workplace Experience	TECH	.25, .5, or 1
854 Manufacturing – Other	TECH	.25, .5, or 1
804 Exploration of Hospitality	TECH	.25, .5, or 1

OTHER

990 Study Seminar	DNR	.25, .5, or 1
610 Work Experience	BUS	.25, .5, or 1

Career and technical education, or CTE, helps students get more out of high school. Specifically, more opportunities to master practical skills, secure industry credentials, earn college credit, win scholarships, explore careers, develop leadership ability and gain real-world experience. That's why Lehigh Career & Technical Institute is the smart choice for students who want to be college and career ready when they graduate.

Operating with the support of all nine Lehigh County school districts, LCTI offers dozens of CTE programs taught by industry experts in five areas of study: Arts & Humanities, Business & Communication Technology, Engineering & Advanced Manufacturing, Health & Human Services and Industrial Technology.

We are the largest career and technical school in Pennsylvania and, thanks to the support of our education and industry partners, among the best equipped nationwide. LCTI's campus is adjacent to Lehigh Carbon Community College in the Schnecksville section of North Whitehall Township and boasts a 450,000-square-foot facility outfitted with the latest software, tools and equipment

ENROLLMENT OPTIONS

Academic Center: The Academic Center provides students in **grades 10-12** with the option of taking both their academic and career & technical course work at LCTI as full-day students. These rigorous academic courses will satisfy graduation requirements as well as complement the career & technical major of each student. Students will still graduate from their resident school districts and are encouraged to participate in extra-curricular activities back at their sending school. Students will be able to register for the full-day program during their school district's regular course registration time.

Half-day enrollment: Students in **grades 9-12 may** choose the half-day enrollment option. The half-day option provides students with career & technical education at LCTI and the required academics at their respective school districts. Students are encouraged to take high-level course work at the sending district which will provide the academic background necessary to be successful in today's highly technical careers.

Flex time enrollment: Another option that may suit students' individual needs is the flex-day program. The flex program is designed to provide students with technical coursework on a limited schedule. Students may choose to come to LCTI for one or more periods per day depending upon their needs. Students may attend one or both semesters and may attend for multiple years. Many students use this technical educational training as a jump start to a technical degree in a four-year institution. Both the half-day and flex-day options may be chosen during the regular course registration process**.**

ACADEMIC CENTER COURSE OFFERINGS

All courses in the LCTI Academic Center are college-preparatory and meet graduation requirements. Courses are assigned based on classes completed at the sending district prior to attending LCTI. All science courses are lab-based and a graduation project is required for all Academic Center students. The courses offered in the Academic Center are listed below.

English	Mathematics	Science	Social Studies	Other
ELA II	Geometry	Biology	American Studies II	Wellness/ Fitness 11
ELA III Accelerated ELA III	Algebra II	Chemistry	World Cultures	Wellness & Fitness 12
ELA IV Accelerated ELA IV	Pre-Calculus	Physics I Physics II	American Government/Civics/Economics Accelerated American Government/Civics/Economics	
LCCC English Course	Calculus	Environmental Science		
	LCCC Academic Courses			

Grades	Semester I	Semester II
10	Math	Math
	Science	Science
	ELA II	ELA II
	American Studies II	American Studies II
11	Math	Math
	Science	Science
	ELA III	ELA III
	*Wellness/Fitness or World Cultures	*World Cultures or Wellness/Fitness
12	ELA IV	ELA IV
	American Government/Civics/Economics	American Government/Civics/Economics
	Wellness & Fitness	Wellness &Fitness
	Math or Science	Math or Science

*Semester Course

LCTI ACADEMIC OPTIONS FOR HALF-DAY STUDENTS

Lehigh Career & Technical Institute (LCTI) provides academic courses to some half-day students who attend the school. It is very important for students to be successful in both their academic and technical course work. The courses taken at LCTI are necessary to meet the student's graduation requirements. If a student does not complete an academic course with a passing grade, the course must be re-taken. LCTI does not offer a summer school; however, this option may be available through the sending high school. It may also be possible for courses to be made up during the students' senior year; however, make up courses scheduled in the senior year can cause the student to lose the opportunity for a Cooperative Education job placement. If the coursework is not made up, graduation from high school may be jeopardized.

The following academic courses for half-day students may be required while attending LCTI.

American Studies II
The American Studies II course addresses the development of the United States throughout the twentieth century. This course is aligned to the Pennsylvania Core Standards for Social Studies as well as Reading, Writing, and Listening and Speaking. Through various activities and lessons, these standards will be met to understand the development of the United States as a world power; focusing on economic and industrial development, political trends, society and cultural problems and achievements. The students will develop an understanding of the progress of technology and social groups. They will be expected to evaluate the changes of culture in society and analyze the political contributions of individuals and events of the periods studied. American Studies assignments also include the integrated concepts between this history course and various Career & Technical Labs. Students will be assessed formally and informally to determine mastery of the content for the duration of the academic year.

Wellness & Fitness
Course Overview: The Wellness Program provides students with life-changing information on nutrition and various techniques on stress management that they can use throughout life. The most common mental disorders will be researched and students will receive training on suicide prevention. During nutrition, students will investigate the harmful ingredients found in the foods they eat on a daily basis, analyze products served by several fast food chains and research healthy alternatives.

The Fitness Program is designed to acquaint students with the benefits of physical activity in their lives and to promote life-long wellness and fitness. The course, which is held in the state-of-the-art LCTI Fitness Center, will feature various strength and conditioning principles, such as specificity, progression and overload, along with multiple training techniques, such as CrossFit, Tabata, Yoga, and an assortment of technology-based exercises.

LCTI CAREER & TECHNICAL EDUCATION OPTIONS

At Lehigh Career & Technical Institute, students learn by doing. Teachers guide students from instruction to action, helping them tackle projects that mirror on-the-job challenges as they develop the knowledge and skill necessary to secure industry credentials, earn college credit or both. For example, marketing students manage a store on their way to earning National Retail Federation certification. Programs are identified as either Program of Study (POS) or TECH PREP which designates the type of postsecondary credit options available. Students who participate in the POS programs have the ability to earn advanced college credits through SOAR (Students Occupationally and Academically Ready) or through articulation credit with a specific post-secondary school. Tech Prep programs only offer articulation credit where available.

LCTI's programs fall into five areas of study:

ARTS AND HUMANITIES

Advertising Design/Commercial Art: Students will learn the latest Adobe graphic design software currently used in the professional workplace. The emphasis of the program is based on Adobe Photoshop, Illustrator and InDesign Creative Cloud and creating a printed and electronic portfolio of work produced through these programs. Students are able to receive certification for Adobe Photoshop, Illustrator and InDesign through Adobe endorsed Train Simple. In addition to the Adobe Creative Cloud, students will learn traditional illustration skills such as pencil drawing and shading, water color, color pencil, scratch board and various other mediums. Photography for advertising is used in class and students will learn the use of a Digital Single Lens Reflex camera and the setup of strobe lights. Students are able to concentrate in three different career objectives which are Graphic Design, Sign-Making or Illustration. **(POS)**

***Commercial Photography/Electronic Imaging*:** Students who select this specialty will receive training in photography both in the studio and on location using the latest digital camera techniques and digital computer technology for processing and printing images. The course includes professional lighting techniques and design elements for a wide variety of subjects including wedding and portraiture, products for advertising, as well as photojournalism and editorial markets. **(TECH PREP)**

BUSINESS AND COMMUNICATION TECHNOLOGY

Computer Information Technology: Students will be at the forefront of cyber-security related issues as a means to safeguard sensitive data and preserve confidentiality. Computer Information Technology will challenge students to develop meaningful business solutions through computer programming in Visual Basic, C+, C#, and Java. Students will learn to work with data in order to produce relevant information that will help to drive the direction of organizations and solve real problems.*This program participates in the IT Academy* **(POS)**

Computer & Networking Technology: Students are prepared for advanced network training and the industry standard CompTIA ***A+*** and ***Network+*** Service Technician certifications. The program takes students from basic PC hardware through operating systems and networking. Students will also learn the MS Office Suite, customer service and support, and advanced network support. Students have the opportunity to participate in dual enrollment coursework for college credit; additionally, satisfactory completion of the program may grant college course credit through articulation agreements with LCCC. . *This program participates in the IT Academy* **(POS)**

Emerging Digital Media & Social Communications: Social media is big business and video content is king. In our Emerging Digital Media program, students learn about the creative and technical processes that drive video production for multimedia platforms ranging from Snapchat and TikTok to YouTube and Netflix. They also explore deejaying and electronic dance music production as they master a variety of concepts, software and skills.

Marketing and Business Education: Students learn about finance, retail marketing, banking, entrepreneurship, promotions and other important aspects of marketing through virtual business software and retail experience in the school's store. They examine what is necessary to run a business, promote a product or manage a department. Practical experience is available through the student-managed school store and by participating in community internship opportunities. **(POS)**

Print Technology/Graphic Imaging: Students creatively design printed materials such as full-color books, posters, packaging, displays, stationary, as well as specialty items like mugs and shirts. Using the most current versions of Adobe Creative Cloud software on Apple Macintosh computers, students then reproduce their attractive projects on state-of- the-art copiers, printing presses, and bindery machines in a real production environment. **(POS)**

Web Design/Web Programming: Students learn the fundamentals related to web page design and website devel- opment, graphics, multi-media and HTML coding. Students are taught the tools for rapid web page production and basic server-side programming techniques to handle everything from forms transmittal to building dynamic interactive web pages, intranet, extranet and e-commerce applications. . *This program participates in the IT Academy* **(POS)**

ENGINEERING & ADVANCED MANUFACTURING

Computer-Aided Drafting & Design: Students combine their industrial and mechanical interests with creativity and work toward successfully moving into mechanical, architectural or civil engineering careers. Drawing techniques, architectural plans, advanced AutoCAD, and engineering, open the world of CAD to students. This solid foundation assists Drafting/CAD students who wish to pursue further education and professional careers. **(POS)**

Electromechanical/Mechatronics Technology: Students learn an innovative curriculum which combines hands-on training with real world industrial equipment and software. Students get a solid background in industrial, electrical and electronic systems, A.C. and D.C. motors, motor controls, power distribution systems, programmable controllers, hydraulics, pneumatics, mechanical drives, transformers, process control systems and troubleshooting. **(POS)**

Electronics Technology/Nanofabrication: Students are taught the principles of electronics. From DC Circuits to Solid State Devices they learn to design, build, and test electronic circuits. LCTI has a fully functioning Class 1000 fabrication room (cleanroom) where students create the silicon chips that are the foundation of the information age and the heart and soul of modern electronics. **(POS)**

Precision Machine Tool Technology: LCTI's Precision Machine lab is recognized as a Haas Technical Education Center and incorporates lessons and demonstrations, as well as extensive applications training in reading blueprints, operating a digital lathe, milling machine, drill press and other machine shop operations in the curriculum. Students train on state-of-the-art CNC machine tools placed in the lab by Haas Automation. **(POS)**

Pre-Engineering & Engineering Technology: This pre-engineering program is a sequence of courses which, when combined with traditional mathematics and science courses, introduces students to the world of engineering. Students study the principles of engineering, engineering design, digital electronics and computer integrated manufacturing. **(POS)**

***Supply Chain Management & Logistics Technology*:** Students learn inventory control, purchasing, receiving, shipping, equipment operation and maintenance in a state-of-the-art 17,000 square foot distribution center. Students train with current industry technology including handle-held track pads and computers, vertical and horizontal carousels, a computer-controlled conveyor and a computer-integrated warehouse management system. Students explore the supply chain of products from their global origin to the consumer including modes of transportation. **(POS)**

Welding Technology: This course teaches students shielded metal arc welding, gas metal arc welding, flux cord arc welding, welding inspection, testing, and safety/emergency procedures. The program operates under entry level certification authorization by the American Welding Society and a special arrangement with Lehigh Carbon Community College permits students to earn a national skills certificate and an Associate Degree. **(POS)**

INDUSTRIAL TECHNOLOGY

Auto Body/Collision Repair Technology: Students learn about the tools and equipment associated with the collision repair industry, while learning welding, non-structural and structural damage analysis, estimating, and repair techniques, along with paint preparation and refinishing systems used on todays' technologically advanced automobiles. This comprehensive course of study and the volume of exposure students receive allows them to step into the workforce immediately following graduation or continue studies at the post-secondary level. **(POS)**

Auto Technology: Students in this program are prepared to diagnose and repair automobile systems including electrical systems, ignition and emission systems, engine cooling and lubrication, front ends, air conditioning, brakes, transmissions, engines and drive trains. Students participate in the nationally recognized Automotive Youth Education Systems (AYES) industry partnership. The program teachers are Master Certified ASE Technicians who utilize state-of- the-art equipment to prepare students to become automotive technicians. **(POS)**

Cabinetmaking & Millwork: Cabinetry, wood products design and layout and construction open the world of cabinetmaking & millwork to students. Students are taught to read blueprints, make shop drawings, and produce components with trade-related hand and power tools and machinery. The newly expanded lab and curriculum provides knowledge of lumber products adhesives, fastener, finishing, 32mm cabinets and counter top fabrication. Technology has entered this rewarding construction trade with the addition of CNC router technology. **(POS)**

Carpentry: Blueprints, site work, construction footings, framing floors/walls/ceilings/roofs, radon control, insulation and power tools are some of the areas taught in Carpentry. Students participate in the LCTI Student House Project where a home is built and sold at auction upon its completion. Students learn how the building industry works, its standards, and what is required to complete a project on time and at cost. **(POS)**

Diesel/Medium and Heavy Truck Technology: Students gain experience with drive trains, clutch assemblies, transmissions, diagnostics, steering and other aspects of this industry. Students also study suspension, diesel engines, gasoline engines, bearings and seals. The trucking industry needs professionals to service the truck fleet that keeps industry and commerce moving in the United States. LCTI can provide students with the necessary expertise they need to succeed in this industry. **(POS)**

Electrical Technology: Students learn residential, commercial, and industrial electrical wiring, as well as fluid power technology planning and wiring. Students are taught to install duplex and split wired duplex receptacles, single pole switches, 3-way and 4-way switches and Ground Fault Circuit Interrupters. **(POS)**

Heating/Air Conditioning & Refrigeration: Students learn to install, troubleshoot and repair air conditioning, heat pumps, commercial refrigeration units and gas and oil heating equipment. Skilled technicians are proficient in reading electrical diagrams, diagnosis of electrical problems, air distribution designs, copper and steel pipe cutting, soldering and fabricating fiberglass and sheet metal duct systems. **(POS)**

Heavy Equipment Operations & Preventive Maintenance: As a student in this fast-paced and diverse program, you will learn the safety, maintenance and operating techniques for a wide variety of earthmoving equipment. Students will also receive instruction in soils, erosion and sediment control, site preparation, aggregate production, concrete and asphalt paving, surveys and grades, and utility installation. In addition, students will have the opportunity to learn machine systems, parts identification and ordering, and preventative maintenance techniques in a state-of-the-art facility. **This program is not available to ninth grade students. (TECH PREP)**

Masonry: Students will learn various layouts and pattern designs using brick, concrete masonry units, stone and ceramic tile. This comprehensive program teaches students how to correctly use the necessary tools and equipment to build simple wall structures, fireplaces and brick sculptures. Ceramic tile installation and thin stone veneer applications are also included in the curriculum. Students also participate in the student-built house project. (POS)

Painting and Decorating: Students learn to refresh and highlight interior and exterior spaces (residential and commercial) as well as improve and restore historical buildings. Painting, wallpaper hanging, furniture refinishing, line striping, staining and spraying are among some of the topics emphasized in this program.**(TECH PREP)**

Plumbing and Heating: In this high priority occupation program, Students will learn the basic to the advanced skills of Plumbing & Pipe Fitting. Repairing and installation of items such as, but not limited to; Faucets, Bathtubs, Toilets, Sump Pumps, Sewage Pumps, Water Heaters, Boilers, Water Softeners, Well Pumps, Solar Heating Systems, Chilled Water, Air Conditioning and Radiant Heating Systems. This lab will teach skills such as but not limited to; brazing, soldering, threading, pressed, rolled/grooved, flared, pipe fitting and measurement and fused joints. Students will work with PEX, Copper, Steel, Cast Iron, PP-R, PVC and CVPC Pipe and Tubing. This program incorporates a multi-level and fast paced, technology enriched learning environment. **(POS)**

Small Engines/Recreational Vehicle Repair: Students will learn to diagnose and repair lawn mowers, chain saws, jet skies, motorcycles and go-karts. Students will learn about the small engine and the vital components to effectively make the engine perform to maximum efficiency. Students will also learn about brake systems, transmissions, hydraulics, hydrostatics and drive systems. Students will learn skills that involve welding, cutting with a torch, cylinder honing and boring. **(POS)**

HEALTH AND HUMAN SERVICES

Applied Horticulture: This program, a combination of general horticulture (plant science) and hands-on applications, prepares students to produce, process and market plants and flowers used for ornamental and aesthetic purposes as well as establishing, maintaining and managing various horticultural businesses. Instruction emphasizes knowledge, understanding and applications important to the success of businesses such as floriculture (floral design), greenhouse and nursery operations and management, and landscape technology. **(POS)**

Commercial Baking: Cake decorating, breads, rolls, sweet goods, pastries, pies, doughnuts and nutrition are all part of this course. Students learn the fundamental principles and procedures of operating a fully functioning bakery and retail bake shop, including preparation, display and management. With attention to both theory and practice, this course is designed to prepare students for entry-level positions in the commercial baking industry. LCTI's program is certified by the American Culinary Federation and is nationally recognized as exemplary in all areas of the curriculum. **(POS)**

Cosmetology: Students learn hair styling, hair cutting, hair coloring, chemical texturizing, nail/skin care and salon business operations. Students learn these skills through clinical practices offered at the school salon. Preparation for the Pennsylvania State Board Examination will enable students to become licensed as a cosmetologist and will allow them to work in a challenging and creative profession. **(TECH PREP)**

Criminal Justice: Students learn Pennsylvania criminal and traffic laws, the legal use of force, search/seizure/evidence procedures, arrests and other aspects of law enforcement. Students also train in a fire arms simulator and conduct mock disaster drills to gain practical emergency skills. The program includes opportunities to earn Emergency Medical Responder (EMR) and Emergency Medical Technician (EMT) certifications. ***(POS)***

Culinary Arts: Stocks, soups, sauces, appetizers, desserts, main dishes, menu planning and nutrition are just some of the aspects of this program. Students learn front of the house and back of the house skills working in the school restaurant. LCTI's program is certified by the American Culinary Federation and is nationally recognized as exemplary in all areas of the curriculum. **(POS)**

Dental Technology: Students who enroll in this program learn a variety of skills that will enable them to become a dental assistant, dental laboratory technician, and/or pursue a career as a dental hygienist. The major areas of study in the course include: dental radiology, oral pathology, chair-side dental assisting, anatomy and physiology, dental materials, sterilization, and dental office business procedures. **(POS)**

Early Care & Education of Young Children: Students studying childcare will learn child and staff health, child development, early childhood education, elementary education, special education, discipline and guidance of children, childcare program development and professional development. **(POS)**

Emerging Health Professionals: The Emerging Health Professionals Program provides high school seniors with an opportunity to experience a variety of health care careers in a hospital setting and take Penn State/Lehigh Carbon Community College science courses for college credit. Students spend one day a week rotating among various departments of a hospital. Students will experience these departments throughout the three Lehigh Valley Hospital & Health Network facilities, St Luke's University Health Network Allentown Campus, Country Meadows, and Good Shepherd Rehabilitation Network. The hospital portion of the program provides students with observational experience that enables students to observe various health care professionals as they work with patients. Also, students have the opportunity to meet various health career professionals during presentations within the LVHN community. In addition to these experiences, students are given an overview of the health care industry and all that it entails throughout their coursework at LCTI. **This program is only available to senior students. (POS)**

Exercise Science & Rehabilitation Services: Health care is among the nation's fastest growing industries and offers a broad range of professional opportunities. In our Exercise Science & Rehabilitation Services program, students learn about the practical applications of medical science as they explore careers in physical therapy, athletic training and comparable fields. Students can earn CPR, AED and other certifications through the American Heart Association and may pursue internship and co-op positions at local health care facilities. ***(POS)***

OTHER PROGRAM OPTIONS

Service Occupations Cluster: Five curricular areas are offered in this program: Auto Specialization Technology, Building Trades Maintenance, Food Service, Hospitality Services, Indoor/Outdoor Maintenance, and Supply Chain Management & Logistics Technology. Each area is designed to help the student transition from basic entry-level skill development to more advanced technical training or directly into the workforce. A skills screening will be done to determine the readiness and interest of the student. Results of the screening will be provided to the student's IEP team.

Career Academy Program: Provides the nine participating school districts of Lehigh County an alternative for at-risk students to receive a high school diploma and work toward a career goal in their program of choice. Selected technical programs at LCTI are available to Career Academy Program (CAP) students. They receive academic instruction in English, mathematics, social studies, science, health/wellness, physical education, job readiness, and enrichment coursework. The program operates on a three-day rotation schedule with two out of three days focused on Career & Technical Education Programs. Programs include: Applied Horticulture, Building Trades Maintenance, Electrical Technology, Graphic Communications, Health Occupations/Health Related Technology, and Office Systems Technology.

School-To-Career

- ***Job Shadow*** Students accompany employees through part of a typical day and learn about the varied aspects of their job and skills required to work in the field.

- ***Internship*** Students may participate in a business match program that allows them to spend a period of time working in their field of study.

- ***Cooperative Education*** Students in 11th and 12th grade may participate in a business match program that allows them to spend a portion of the school year working in their field of study. Students pursue their academic coursework on a half-day schedule and report to their place of employment for the remainder of the day.

DUAL ENROLLMENT PROGRAM
Did you know you can take college classes while attending LCTI?

Opportunities to earn college credit while still in high school

You won't have to break the bank to attend college. Each credit course at Lehigh Carbon Community College (LCCC) costs about half the regular tuition rate and less than a fourth of the cost for a comparable credit course at any one of Pennsylvania's State universities.

What is a placement test? A placement test is given to students who are interested in taking college courses at LCCC. Students must obtain a minimum score to be eligible for college classes. More information regarding placement testing can be found on lccc.edu.

Dual Enrollment requirements? Students must be Level II or higher in their lab programs and maintain a minimum of a "B" average to participate in Dual Enrollment. Students must also have good attendance and no discipline referrals. The tuition and associated costs for dual enrollment courses must be paid by the student/parent.

Want to see if Dual Enrollment is right for you? Our free, one credit course **"The College Experience"** is an opportunity to explore dual enrollment. In **"The College Experience"** you'll learn what to expect if you go to college, as well as what will be expected of you. Upon completion of the course, students have the option of taking a placement test to determine eligibility for future classes at a reduced rate paid by the student/parent.