NORTHERN LEHIGH HIGH SCHOOL

PROGRAM OF STUDIES

2024- 2025

Living, learning, and leading to make every story better.

Please visit the NLHS site for more information.

Northern Lehigh High School
1 Bulldog Lane
Slatington, PA 18080

Main Office – 610-767-9832
Guidance Office – 610-767-9837
Athletics – 610-767-9840

Administration

Dr. Lori Bali, Principal
Mr. Michael Strohl, Assistant Principal

School Counselors

Mrs. Allison Chruscial (last names starting A-L)
Mrs. Raquel Hoffert (last names starting M-Z)

Director of Special Education

Mrs. Michele Dotta

Director of Athletics

Mr. Bryan Geist
Mr. Joseph Tout, Assistant

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Principal's Message

Dear Students and Families,

We, the staff of the Northern Lehigh High School, have prepared this Program of Studies to help you with the course selection process. Included in this guide is a list of course descriptions which have been designed to help you decide upon your academic program based on your course history, interests, academic ability, motivation, personality and, most importantly, your future career plans. High School students face many difficult decisions and an infinite number of options. Planning a program of studies to meet the varied demands and interests of every student is a challenging task, yet one we take very seriously in revisiting this guide every year. Our goal is to provide you with as much information and assistance as possible to make the proper choices.

The scheduling process that we utilize is a cooperative format that includes input from students, parents, advisors, counselors and teachers and will begin with an online opportunity to choose your courses, then scheduling a personal meeting between you and your school counselor in an effort to discuss your goals, selections and options. Many questions concerning courses and career pathways can be answered in this booklet, however, if additional information is needed, please do not hesitate to contact your school counselor, teachers, or administrators.

We look forward to planning the 2024-2025 school year with you and helping you to achieve your goals!

Respectfully,

Dr. Lori Bali

Dr. Lori Bali, Principal
Northern Lehigh High School
Northern Lehigh School District

Michael C. Strohl

Mr. Michael C. Strohl, Assistant Principal
Northern Lehigh High and Middle Schools
Northern Lehigh School District

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Northern Lehigh School District Mission Statement

The mission of the Northern Lehigh School District is to provide a safe school climate where everyone is valued, respected, and included. Our community promotes a collaborative and supportive learning culture that meets students at their level and challenges all to learn and grow. We prepare and motivate our students for their future endeavors by teaching them essential skills, civic responsibility, and an appreciation for life-long learning. We encourage pride in ourselves, schools, and community. We strive for excellence in all we do.

Northern Lehigh High School's Goal

"To equip students with career ready essential skills while motivating them to set goals, lead by example, network with positive mentors, persevere through challenges, participate in effective teams, and demonstrate mental agility."

Northern Lehigh High School has synthesized a rigorous curriculum, meaningful instruction, and student support with the College/Career for Every Student (CFES) Brilliant Pathways Essential Skills. These essential skills are *Goal Setting, Teamwork, Leadership, Agility, Perseverance,* and *Networking*. Through this approach, the educators at NLHS strive to meet the needs of each individual student and create unique learning opportunities.

More information about CFES can be found at https://brilliantpathways.org/

Mission of Northern Lehigh's School Counselors

The mission of the Northern Lehigh School District Counseling Department is to address the academic, career and personal/social development of all students. The Counseling Department recognizes that every learner's path is different and supports them on their journey by helping to remove barriers so that each student can successfully write their story. Counseling staff collaborate with students, other educators, parents/guardians, postsecondary institutions, businesses, and community agencies to ensure access and equity for all students.

NONDISCRIMINATION POLICY

Northern Lehigh School District is an equal opportunity educational institution and will not discriminate on the basis of race, religion, age, color, national origin, sex, handicap or limited English proficiency in its activities, programs, or employment practices as required by Title VI, Title IX and Section 504. For information regarding civil rights or grievance procedures, contact the superintendent's office, Title IX and Section 504 coordinator, Administration Building, 1201 Shadow Oaks Lane, Slatington, PA 18080 610-767-9800. For information regarding services, activities and facilities that are accessible to and usable by handicapped persons also contact the superintendent's office.

NOTICE TO PARENTS OF HANDICAPPED

In compliance with state and federal law**,** the Northern Lehigh School District will provide to each protected handicapped student, without discrimination or cost to the student or family, those related aids, services or accommodations which are needed to provide equal opportunity to participate in and obtain the benefits of the school program and extracurricular activities to the maximum extent appropriate to the student's abilities. In order to qualify as a protected handicapped student, the child must be of school age with a physical or mental disability which substantially limits or prohibits participation in or access to an aspect of the school program.

These services and protections for "protected handicapped students" are distinct from those applicable to all eligible or exceptional students enrolled (or seeking enrollment) in special education programs.

For further information on the evaluation procedures and provision of services to protected handicapped students, contact Mrs. Michele Dotta at 610-767-9858.

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FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) for parents and students who are over eighteen years of age ("eligible students") provide certain rights with respect to the following:

I. RIGHT TO REVIEW STUDENT RECORDS

The right to inspect and review the student's education records within 45 days of the date the District receives a request for access. Parents or eligible students should submit to the school principal or other appropriate school official a written request that identifies the records they wish to inspect. The principal will make arrangements for access and notify the parent or eligible students of the time and place where the records may be inspected.

II. RIGHT TO REQUEST AN AMENDMENT TO STUDENT RECORDS

Parents or eligible students may ask the Northern Lehigh School District to amend a record that they believe is inaccurate or misleading. They should write to the school principal; clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the District decides not to amend the record as requested by the parent or eligible student, the District will notify the parent or eligible student of the decision and advise either of the right to a hearing regarding the request for the amendment. Additional information regarding the hearing procedures will be provided to the parent or eligible student when notified of the right to a hearing.

III. RIGHT TO CONSENT TO DISCLOSURES

The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interest or assisting another school official in performing his or her task. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the District discloses educational records without consent to officials of another school district in which the student seeks or intends to enroll.

IV. RELEASE OF DIRECTORY INFORMATION

Since Federal law and state regulations do not prohibit schools from sharing class lists and student directories with Armed Forces recruiters, Northern Lehigh High School honors such requests. The law does require, however, that Northern Lehigh notify parents (or eligible students) of their right to restrict the release of this directory information. Therefore, if a person wishes to exercise this right, she/he should contact the high school main office (767-9832). Lists containing students' names, addresses, and phone numbers are classified in the Family Educational Rights and Privacy Act of 1974 as "Directory Information" and are not subject to the same type of confidentiality restrictions as are other portions of the student record.

V. PURGING (See School Board Policy #216)

VI. COMPLAINTS

Parents/guardians have the right to file a complaint with the United States Department of Education concerning alleged failures by the District to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-4605

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COURSE REQUIREMENTS NEEDED FOR GRADUATION

FULL DAY STUDENT CREDIT REQUIREMENTS		½ DAY LCTI COURSE REQUIREMENTS *Based on a student starting at LCTI in 9th grade	
English	4 courses	English	4 courses
Mathematics	4 courses	Mathematics	4 courses
Science	3 courses	Science	3 courses
Social Studies	4 courses	Social Studies	3 courses
Computer Technology Future Ready Skills required	2 courses	*Computer Technology Future Ready Skills required	1 course
Wellness/Fitness	3 courses	Wellness/Fitness	1 course
Arts & Humanities	2 courses	Arts & Humanities	2 courses
Electives	4 courses	Remaining credits received at LCTI	8 courses
Minimum required courses for graduation	**26 courses**	**Minimum required courses for graduation**	**26 courses**
Additional Graduation Requirements	1. ***SCORE PROFICIENT ON EACH KEYSTONE EXAM OR COMPLETE AN ALTERNATIVE PATHWAY AS DEFINED BY PDE & NLSD*** 2. **Implement a Career/Career Portfolio by the end of Junior Year.**		

- **Act 158 Requirement:** Students will be required to complete one of the Graduation Pathways in order to receive a diploma. Flowchart provided on page 59.
- **Act 55 of 2022 Requirement:** Any industry-recognized credential attained by a student shall be included on the student's transcript.

GRADE PROMOTION REQUIREMENTS

SOPHOMORE: Successful completion of 6 courses by the end of grade nine.

JUNIOR: Successful completion of 13 courses by the end of grade ten.

SENIOR: Successful completion of 18 courses by the end of grade eleven.

Note: Successful completion is defined by a student earning an overall average of 60% or higher.

Early Graduation Requirements

Any rising senior who is interested in graduating early, must adhere to the early graduation policy 217.1 Early Graduation. The policy can be found at https://go.boarddocs.com/pa/nleh/Board.nsf/goto?open&id=AYBMBF56035E#. Any student interested in Early Graduation, should speak with their school counselor during scheduling junior year.

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NCAA REQUIREMENTS - DIVISION I AND II COLLEGE ATHLETICS

Students who want to participate in Division I or Division II athletics must receive certification by the NCAA Eligibility Center. This planning should begin during 9th grade and any student interested in playing sports at either of these levels should discuss it with their counselor prior to entering 9th grade.

To be certified, a student must be a high school graduate and meet minimum Grade Point Average (GPA) requirements in a core curriculum of at least 16 academic courses (grades 9-12). Please see the NCAA Eligibility Center website at https://web3.ncaa.org/ecwr3/ for more information.

A list of Northern Lehigh High School's approved courses can be found on the final page of this guide.

COURSE REPLACEMENT POLICY/PROCEDURES

Students may inquire about replacing a required graduation course with another course that is more driven toward their career plan. The requirement for a successful replacement may include, for example, a written examination, project, writing assignment, any combination of these or other evaluative criteria. The specific requirements are determined by the professional staff within the curricular department, administration, and school counselor.

EXAMINATIONS

Final examinations will be administered in all courses unless permission not to administer an end of semester/year final exam is granted by the administration, or if a standing Senior has earned a final exam exemption for meeting certain requirements in the areas of proficiency/advanced on a Keystone Exam. Seniors will be made aware of their exemption status during the first half of their senior year. Furthermore, any student taking an Advanced Placement (AP) course and is scheduled to take the AP exam in May of that year, may be exempt from taking a final exam when that course concludes.

For determining Valedictorian and Salutatorian, NLSD will calculate Class Ranking at the conclusion of senior final exams in June.

GIFTED PROGRAM

Gifted students are identified through objective criteria developed by the Pennsylvania Department of Education. The criteria used to identify the mentally gifted include teacher recommendation, academic achievement, group and individual intelligence testing, and interest inventories. Gifted students are encouraged to take the most challenging classes available to them. If you would like more information please contact your child's school counselor.

INDEPENDENT STUDY

The opportunity for an independent study is offered to students who are in high scholastic standing (GPA of 3.0 or higher) in a particular curriculum area and possess the ability to work independently and accept a high degree of responsibility for individual achievement. **Students selecting this avenue must meet with the subject area teacher to determine whether an independent study project is feasible.** Independent study will only be available to students whose schedules are compatible with a teacher-advisor and if meeting space is available.

STEPS TO SCHEDULE AN INDEPENDENT STUDY

1. Contact the teacher that you are interested in doing an independent study with to see if it is feasible.
2. Obtain an Independent Study Application form from the Guidance Office.
3. Schedule a meeting with the teacher-advisor to finalize the plans for the Independent Study, complete the application form, and sign it.
4. Have a parent/guardian sign the application form.
5. Submit a completed application form with all signatures to the Guidance Department to obtain signatures from your counselor and administration.

Notes:

1. Grades received from an Independent Study course will be reflected in a student's GPA and class rank. Honors credit may be awarded if course is above what is offered at Northern Lehigh (i.e. Honors Physics III).
2. An Independent Study in any particular course will not be approved if the course is offered at Northern Lehigh High School, unless the student is unable to schedule it due to taking courses through LCTI or High School Honors Programs. The purpose of an Independent Study is to pursue advanced study in a curriculum area and not to solve schedule problems

CREDIT RECOVERY

If a student fails a course that is required for graduation and/or to progress to the next grade level, may opt to take credit recovery. Credit recovery may be offered to the student for a fee. Fees will vary by course. Currently, Northern Lehigh High School uses Bulldog Academy, our online program, for credit recovery. All summer coursework for underclassmen must be completed no later than August 15 prior to the start of the new school year. A senior undergoing credit recovery will have until August 31 to successfully complete graduation requirements and earn a diploma. Please note, seniors who do not fulfill graduation requirements will not be eligible to walk at the graduation ceremony with their graduating class.

SCHEDULE CHANGES

Because of the complexity of a master schedule, class sizes, and staff assignment, schedule changes will be limited and considered on a case by case basis. Students will have 3 days at the beginning of each semester to inquire about a drop/add. A drop/add will not be considered to alter the block the course is offered or for a change of teacher assignment. Furthermore, a student may be asked to complete a formal drop/add form before the change would go into effect.

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HONORS, SCHOLARS PROGRAMS AND DUAL ENROLLMENT

LEHIGH UNIVERSITY and DESALES UNIVERSITY HIGH SCHOOL SCHOLARS PROGRAM

Senior students in exceptional standing have the opportunity to apply to the Lehigh University and DeSales University High School Scholars Program. These programs are highly competitive, where selected students are provided the opportunity to take a college course at their respective campus free of charge, with the exception of textbooks, lab fees, and transportation. Applications for these programs become available at varying times each semester so students interested are encouraged to read announcements and check email for more information. Students are encouraged to speak to their school counselor if they have questions.

EMERGING HEALTH PROGRAM

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 healthcare industry and all that it entails throughout their coursework at LCTI. Students interested should attend a presentation, given by the program, at Northern Lehigh High School during their junior year. There is an application process and fee involved.

ANIMAL SCIENCE PROGRAM

The Animal Sciences program provides high school seniors with the opportunity to explore a variety of veterinary and animal-centric careers in a professional setting while taking Lehigh Carbon Community College science courses for college credit. In a typical school week, students spend one half-day immersed in the program curriculum at LCTI, two half days in dual enrollment courses (Fundamentals of Biology, Introduction to Veterinary Technology, and Veterinary Terminology) at LCCC and two half- days shadowing professionals or participating in other activities at Lehigh Valley Zoo and local veterinary clinics. Successful participants complete the program with at least seven readily-transferable college credits. Students also get the chance to earn industry credentials that signal their readiness for higher learning to college admissions officers. Students interested should attend a presentation, given by the program, at Northern Lehigh High School during their junior year. There is an application process and fee involved.

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NLHS LCCC DUAL ENROLLMENT GUIDELINES

In a partnership with Lehigh Carbon Community College, students are offered dual enrollment opportunities that allow them to take college courses for both high school and college credit. Students taking dual enrollment courses must adhere to all guidelines in NLSD's Dual Enrollment Program. For a list of all guidelines, please access Northern Lehigh High School's Guidance page at https://www.nlsd.org/Page/2652 .

- LCCC courses taught by a Northern Lehigh staff member, are available to students in grades 9-12 who meet the prerequisites as determined by LCCC and/or Northern Lehigh School District.
- LCCC courses taught by LCCC staff via on-campus, online, or remote will be available to students in grade 12 who meet the prerequisites as determined by LCCC.
- Cedar Crest Courses taught by Cedar Crest staff via online will be available to students in grades 11 and 12 who meet the prerequisites as determined by Cedar Crest.

IMPORTANT: Any dual enrollment course, not taught by a Northern Lehigh faculty member, will receive 1.0 credit that can be used toward graduation, but the course(s) will not be calculated in class rank or grade point average. This includes all DeSales, Lehigh honors courses, Penn State and LCCC courses taken through Emerging Health or Animal Sciences, and some LCCC dual enrollment courses.
Any dual enrollment course taught by a Northern Lehigh faculty member will receive 1.0 credit that can be used toward graduation and the course will be calculated in class rank and grade point average as an honors level course. Students will receive the quality point for taking these course(s).

****Please refer to the Dual Enrollment pages of this Program of Studies Guide for LCCC courses and Cedar Crest courses that will or will not be calculated in class rank and/or grade point average.**

NOTE: It is the responsibility of the student and/or parent/guardian to consult with the college or university that the student may be attending to determine if dual enrollment credit earned will transfer. NLSD will not be held responsible if dual enrollment credits earned are not transferable.

GRADE POINT AVERAGE (GPA)

A student's GPA is computed at the end of each quarter and a cumulative GPA at the end of each semester on a scale ranging from .00 to 4.00. The GPA for each individual course is determined by converting the final numerical average (0% to 100%) to its 4 - Point Equivalency according to the following conversion scale. Students taking honors, AP, and on-campus dual enrollment classes will receive 1 quality point for each course. Examples are below.

Note: Class rank is based upon the grade point average. The number one ranked student will be the student with the highest grade point average and so forth.

Numerical Average	4-Point Scale Equivalent
93 - 100	4.00
90 - 92	3.66
87 - 89	3.33
83 - 86	3.00
80 - 82	2.66
77 - 79	2.33
73 - 76	2.00
70 - 72	1.66
67 - 69	1.33
63 - 66	1.00
60 - 62	0.66
Below 60	0

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GPA Calculation Example (non-honors):

Course	Numerical Average	4-Point Scale Equivalent	Quality Point	Attempted Credit	Course Points
Academic English I	97	4		1	4
Ac. Algebra I	85	3		1	3
US History III	81	2.66		1	2.66
Wellness/Fitness I	88	3.33		1	3.33

Student GPA = 12.99 (Total Course Points) / 4.00 (Attempted Credits) = 3.25

GPA Calculation Example (honors):

Course	Numerical Average	4-Point Scale Equivalent	Quality Point	Attempted Credit	Course Points
Honors English I	97	4.00	1	1	5
Honors Algebra II	85	3	1	1	4
Honors US History II	81	2.66	1	1	3.66
Wellness/Fitness I	88	3.33		1	3.33

Student GPA = 15.99 (Total Course Points) / 4 (Attempted Credits) = 4.00

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COURSE SELECTION MAPS

COURSE SELECTIONS - 9TH GRADE

***Students will take a course from each of the following academic areas depending on their path of study. 8th grade teachers will verify or give input on student placement and high school counselors will meet with students to discuss future career plans and make course recommendations to help prepare them.**

NLHS FULL DAY		NLHS ½ day & LCTI ½ day	
Course Options	**Credit**	**Course Options**	**Credit**
English - Honors English I, Academic English I, English I	1.00	**English** - Honors English I, Academic English I, English I	1.00
Math– Honors Algebra II, Academic Algebra I, or Algebra I Plus (full year; students will earn 2.00 credits)	1.00 or 2.00	**Math**– Honors Algebra II, Academic Algebra I, Algebra I Plus (full year; students will earn 2.00 credits)	1.00 or 2.00
Science – Environmental Science ***Academic and Honors levels of these courses are also available.**	1.00	**Science** – Environmental Science ***Academic and Honors levels of these courses are also available.**	1.00
Social Studies – Honors US History II, US History II	1.00	***Computer Technology** – Computer Applications, CAD I, Video Production I, Photoshop, Digital Arts & Photography, Principles of Technology I	1.00
Computer Technology – Computer Applications, CAD I, Video Production I, Photoshop, Digital Arts & Photography, Principles of Technology I	1.00	**LCTI** – LCTI Lab.	4.00
Wellness/Fitness – Wellness/Fitness I	1.00	***Students taking Algebra I Plus will not have a technology course this year.**	
Electives – These 2 credits can come from Art, Family Consumer Science, Foreign Language, or any other non-core course. ***Students currently interested in attending college should consider scheduling a foreign language.**	2.00		
Total Credits 9th Grade	**8.00**	**Total Credits 9th Grade**	**8.00**

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COURSE SELECTIONS -10TH GRADE

***Students will take a course from each of the following academic areas depending on their path of study and high school counselors will meet with each student to make course recommendations.**

NLHS FULL DAY		NLHS ½ DAY + LCTI ½ DAY	
Course Options	**Credit**	**Course Options**	**Credit**
English – English II ***Academic and Honors levels of these courses are also available.**	1.00	**English** – English II ***Academic and Honors levels of these courses are also available.**	1.00
Math- Algebra IB or *Geometry ***Academic and Honors levels of these courses are also available.** ***Algebra IB will only be for students who took Algebra IA last year.** **Note:** It may be recommended for students to double up this year with Ac. Algebra II so they are on track to take Calculus senior year. This will be recommended based on individual student pathways.	1.00	**Math**–Algebra IB or *Geometry ***Academic and Honors levels of these courses are also available.** ***Algebra IB will only be for students who took Algebra IA last year.**	1.00
Science – Biology ***Academic and Honors levels of these courses are also available.** **Note:** College-bound students may also try to schedule Chemistry as an elective, if interested and/or recommended.	1.00	**Science** – Biology ***Academic and Honors levels of these courses are also available.**	1.00
Social Studies– *US III or **Honors Civics: Government & Economics ***An honors level of this course is also available.** **** Honors Civics: Government & Economics should be considered only if a student is interested in taking AP US History during their 11th grade year.**	1.00	**Social Studies** – American Studies II @ LCTI	1.00
Wellness/Fitness – Wellness/Fitness II	1.00		
Electives: These 2 credits can come from Art, Family Consumer Science, Foreign Language, Future Ready Skills or any other non-core course *** French, German, or Spanish II is recommended for college bound students**	3.00	**LCTI Lab @ LCTI**	**3.00**
Total Credits 10th Grade	**8.00**	**Total Credits 10th Grade**	**8.00**

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COURSE SELECTIONS - 11TH GRADE

***Students will take a course from each of the following academic areas depending on their path of study and high school counselors will meet with each student to make course recommendations to help prepare them.**

NLHS FULL DAY		NLHS ½ DAY + LCTI ½ DAY	
Course Options	**Credit**	**Course Options**	**Credit**
English – English III or AP Language & Composition ***Academic and Honors levels of English III are also available.**	1.00	**English** – English III or AP Language & Composition ***Academic and Honors levels of these courses are also available.**	1.00
Math - Honors Trigonometry, Academic II/Trig, Algebra II/Trig, Probability/Statistics ***Geometry will be scheduled if not taken in 10th grade**	1.00	**Math**– Honors Trigonometry or *Geometry ***Academic and Honors level of these courses are also available.**	1.00
Science- Integrated Science, *Chemistry, or *Physics *** Honors levels of these courses are also available.** **Note:** Students may also select a Life Science or additional Chemistry or Physics courses as electives.	1.00	**Social Studies** – Civics: Government & Economics (full year)	1.00
Social Studies – *Civics: Government & Economics or AP US History	1.00	**Wellness/Fitness-** Will be taken at LCTI	1.00
Wellness/ Fitness – Wellness/Fitness III	1.00	**LCTI** – LCTI Lab.	3.00
Computer Technology- Future Ready Skills (if not previously taken)	1.00		
Electives – These 2 courses can come from Art, Family Consumer Science, Foreign Language, or any other non-required core course. ***Third year of a language may be recommended depending on what college/university student is looking to attend.**	2.00		
Total Credits 11th Grade	**8.00**	**Total Credits 11th Grade**	**7.00**

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COURSE SELECTIONS -12TH GRADE

***Students will take a course from each of the following academic areas depending on their path of study and high school counselors will meet with each student to make course recommendations to help prepare them.**

NLHS FULL DAY		NLHS ½ DAY + LCTI ½ DAY	
Course Options	**Credit**	**Course Options**	**Credit**
English –*English IV, AP English Literature, LCCC Research & Composition, English IV ***Academic level of this course is also available.**	1.00	**English** – *English IV, AP English Literature, LCCC Research & Composition, ***Academic level of this course is also available.**	1.00
Math– AP Calculus, LCCC Calculus & Analytic Geometry I, Calculus, Honors Trigonometry, Academic Alg. II/ Trigonometry, Alg. II/Trigonometry, or Probability & Statistics **Note:** Some students may not need this credit due to fulfilling the 4 credits during their Junior year. If a 5th math isn't necessary for their future career path, students will take an elective in its place that is more suitable.	1.00	**Math**– AP Calculus, LCCC Calculus & Analytic Geometry I, Calculus, Honors Trigonometry, Academic Alg. II/ Trigonometry, Alg. II/Trigonometry, or Probability & Statistics **Note:** Some students may not need this credit due to fulfilling the 4 credits during their Junior year. If a 5th math isn't necessary for their future career path, students will take an elective in its place that is more suitable.	1.00
Social Studies- *World History, AP European History (if not previously taken) ***Honors level of this course is also available.**	1.00	Social Studies – *World History, *US III, AP European History, AP US History ***Honors level of these courses are also available.**	1.00
Science: Although students fulfilled their 3 credits requirement in 10th grade, it is highly recommended for college-bound students to take four years of a science course, with at least one chemistry course and one physics course.		**Computer Technology**- Future Ready Skills (required)	1.00
Computer Technology: Only if not previously fulfilled		**LCTI** – LCTI Lab.	4.00
Electives – 5-6 remaining credits will come from courses needed to aid them in their career path.	5.00		
Other Options: Dual Enrollment, Early Graduation, ½ day Work Program (School-To-Career)			
Total Credits 12th Grade	**8.00**	**Total Credits 12th Grade**	**8.00**

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LEHIGH CAREER & TECHNICAL INSTITUTE

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 extracurricular 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 ninth through twelfth grade may choose the half-day enrollment option. This 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 coursework 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. This option is suitable for students in grades 11 and 12 who have their own transportation.

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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 I	Algebra I	Principles of Scientific Inquiry	American Studies I	
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	AmericanGovernment/ Civics/Economics Accelerated American Government/Civics/Economics	
LCCC English Course	Calculus	Environmental Science		
	LCCC Academic Courses			

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 retaken. 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 post-secondary 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 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 Certiport. 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 on three different career objectives which are Graphic Design, Sign-Making or Illustration.

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 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. (CAREER & TECHNICAL)

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.

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*

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*

Marketing & Entrepreneurship: 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.

Web Design/Web Programming: Students learn the fundamentals related to web page design and website development, 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*

ENGINEERING & ADVANCED MANUFACTURING

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.

Electronics Technology/Nanofabrication: Students are taught the principles of electronics. From DC Circuits to Semi-Conductive 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.

Engineering Drafting & Design: Students utilize computer-aided drafting and design software to create accurate representations of solutions to engineering design challenges. They hone their skills by designing and then producing three-dimensional models for machine parts, home additions, bridges and more. In the process, students learn to use 3D and wide-format printers, as well as common model-building materials.

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.

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.

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.

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.

HEALTH AND HUMAN SERVICES

Animal Sciences: The Animal Sciences program provides high school seniors with the opportunity to explore a variety of veterinary and animal-centric careers in a professional setting while taking Lehigh Carbon Community College science courses for college credit. In a typical school week, students spend one half day immersed in the program curriculum at LCTI, two half days in dual enrollment courses (Fundamentals of Biology, Introduction to Veterinary Technology, and Veterinary Terminology) at LCCC and two half days shadowing professionals or participating in other activities at Lehigh Valley Zoo and local veterinary clinics. Successful participants complete the program with at least seven readily-transferable college credits. Students also get the chance to earn industry credentials that signal their readiness for higher learning to college admissions officers. This program is only available to senior students.

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.

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.

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 firearms 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.

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.

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.

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 healthcare industry and all that it entails throughout their coursework at LCTI. This program is only available to senior students.

Health & Medical Sciences: Health care is among the nation's fastest growing industries and offers a broad range of professional opportunities. In our Health & Medical Sciences 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.

Teacher Education: 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.

INDUSTRIAL TECHNOLOGY

Auto 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.

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.

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 countertop fabrication. Technology has entered this rewarding construction trade with the addition of CNC router technology.

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.

Diesel Medium & 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.

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.

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.

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.

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.

Painting & Design: 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.

Plumbing & 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.

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.

OTHER PROGRAM OPTIONS

Service Occupations Cluster: Five curricular areas are offered in this program: Auto Specialization Technology, Building Trades Maintenance, Food 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 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** 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.

NLHS PROGRAM OF STUDIES 2024-25

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.

2024 - 2025
COURSE DESCRIPTIONS

CAREER/COURSE PLANNING

For each and every student, effectively planning for the future is of the utmost importance. No matter the student's chosen path--college, trades, military, or workforce--Northern Lehigh High School's faculty, staff, and administration will push to develop career ready skills as part of the comprehensive school counseling curriculum. Along with regular meetings with school counselors, students will take a course emphasizing college/career readiness in *Future Ready Skills*. Additionally, NLHS employs the use of Xello, a nationally recognized planning platform, to aid in career and course guidance. These steps help us ensure that all learners are ready and able to embark on their chosen paths after graduation.

PLEASE NOTE:

***All courses meet daily for one semester (90 days).**

***All students receive 1.00 credit for each class completed with a 60% or higher.**

***All honors, AP, and some dual enrollment courses receive one quality point to their final grades GPA equivalent.**

NONBINDING NOTE:

***Some described courses may not be offered in a given year due to matters such as low enrollment, insufficient staffing, or budgetary constraints.**

ART

ART Courses Offered (level of difficulty)

Fundamentals of Art (NEW)
Theater Arts and Design
Digital Arts and Photography
Studio Painting (renamed; continues to be Painting I curriculum)
2-D Media (NEW)
3-D Media (NEW)
Advanced Studio Painting (renamed; continues to be Painting II curriculum)
LCCC Painting I
Independent Studio Art/Portfolio Design

FUNDAMENTALS OF ART ( )

Do you enjoy art and want to take your skills to the next level? Fundamentals of Art is a stress-free beginner's "how-to" course designed for the student interested in trying something new, expanding on a talent, or starting a hobby. It is an exciting course that focuses on learning the basic principles and techniques of art while developing studio practices. Students will explore both 2-D and 3-D artforms. The course aims to develop students' ability to draw objectively through the study and practice of drawing from direct observation using various techniques such as contour line, expressive line, perspective, technical and gesture drawing. Students will be introduced to basic sculptural techniques developing skills in working "in the round". Various 3-D media will be explored such as ceramics, papier mâché, and plaster. Additionally, students will learn to think critically about their work and understand art in a historical context while being introduced to exemplary works of art.

Some units covered in this course may include: Markers, Pencils (Graphite), Charcoals, Anatomy, Gesture/ Life Drawing, Portraits, Perspective Techniques, Composition, Pen and Ink, Still-life, Sculpture Techniques (Modeling, Carving, Casting, Assemblage), Ceramics, Papier Mache, Plaster, Wire Sculpture.

THEATRE ARTS AND DESIGN (15071)

The "hands-on" theatre arts and design course introduces students to the performance and production of the theatre as an art form. Students will explore the theatre as a means of expression through study of theatre history as well as contemporary theatre arts. Students will also explore the development of stage design including sets, props, and lighting design. Students will explore the safe use of theatrical equipment and its importance to the overall effectiveness of a production. Through studying theatre as an expression of both history and culture, students will explore the way in which theatre affects and is affected by its societal context.

Some units/projects covered in this course may include: Set and Prop Sketching/Design, Costume and Make-up Design, Traditional and Contemporary Performance (Blue Man Group, Mime, etc.), One Act Plays, Play/Script Analysis, Theatrical Equipment, Stage Direction and Management.

NLHS PROGRAM OF STUDIES 2024-25

DIGITAL ART AND PHOTOGRAPHY (15069)

Are you interested in art technologies? This course will focus specifically on the study and creation of artforms that are created and displayed through digital technologies. The graphic arts will be emphasized throughout the exploration of the creative potential, nature, and use of computer imaging, typography, layout, and design technologies as artist's tools. Throughout this course students will use various programs (Adobe Illustrator, Photoshop, Flash) to convert ideas, information, and emotions into successful designs. It is an active course which is designed for students with an interest in learning to develop means of mass producing their artwork while studying, advertising, computer-generated art, photography, and their functions in society today.

Some units covered in this course may include: Basic design principles and how they relate to visual communications including, Typography, Computer Generated Graphics, Advertising/Media Literacy, Mechanical Drawing, Adobe Creative Suite, etc. Photography-Fundamentals of photographic technologies including, Digital Photography, Stop-Motion Animation, Video Art and Projections.

STUDIO PAINTING (15066)

Painting! Painting! …and more painting! After reviewing simple drawing, color, and design concepts, students shall spend class time creating paintings on paper, canvas board, raw canvas, and found objects. This is a stress-free beginner's "how-to" course designed for the student interested in trying something new, expanding on a talent, or starting a hobby. Students will experiment and create artwork using many different paints, brushes, and tools and learn specific techniques with reference to Old and New Masters of Art. After developing painting skills, the student shall be encouraged to express his/her own style in further paintings, both in and out of the studio.

Some units covered in this course include: Color theory and color mixing, Acrylic paints, Oil paints, Watercolor, Mixed Media, Tempera, Brushes, Palette Knives, Impasto and Trompe-l'oeil techniques.

2D MEDIA (___) - **Prerequisite:** 75% or higher in Fundamentals of Art

2D Media is an engaging course that introduces students to the world of artworks on paper with a focus on collage/mixed media and printmaking. This course emphasizes the materials, techniques, processes, history, and language of 2-dimensional art. Students will study how design elements and principles influence perception and personal expression. Analysis of historical and contemporary art, together with exploration in various media and techniques, should give the student experience in conceptualizing, visualizing, and executing 2-dimensional designs.

Some units covered in this course may include: Color Media (Pastels, Colored Pencils, Inks), Mixed Media, Collage, Bookbinding and Paper Making, Typography, Calligraphy, and Printmaking both on (Etching and Collagraph) and off (Relief, Monotype, Silkscreen), the printing press.

3D MEDIA (___) - **Prerequisite:** 75% or higher in Fundamentals of Art

3D Media is a "hands on" course that introduces the disciplines of ceramics, jewelry, fiber, sculpture, and design. The course emphasizes the materials, techniques, processes, history, and language of 3-dimensional art. It is an exciting course which recognizes artworks as serving functional and non-functional needs to society and offers an informal acquaintance with exemplary works of art. Analysis of historical and contemporary art, together with exploration in various media and techniques, should give the student experience in conceptualizing, visualizing, and executing 3-dimensional designs.

Some craft forms covered in this course may include: Design, Ceramics/Clay (on and off the potter's wheel), Sculpture (carving, modeling, casting, assemblage), Papier Mache, Foam, Plaster, Found Object and Recycled Materials, Jewelry, Metalsmithing, Wire Sculpture, Weaving, Fiber Arts, Fabric Design, Installation Art and Laser Cutting.

ADVANCED STUDIO PAINTING (15067) - **Prerequisite:** 75% or higher in Studio Painting

So, you've got the skills, but what's next? This course shall be offered to painters who have completed Painting I and are interested in continuing to explore new techniques while further developing their own style of expression. Combining knowledge, skills, experiences and positive attitude gained in Painting I class, the art student shall create authentic art forms which are representative of integrity, innovation, and insight. Students shall use prior skills and more familiar principles of design in advancing the content of their paintings. Referencing Old & New World Masters, students shall further explore painting with others who have similar skills or interests in the art both indoors and outside the studio classroom.

Some units covered in this course may include: Advanced Color theory and color mixing; Acrylic paints; Oil paints; Watercolor; Mixed Media; Egg Tempera on plaster; Brushes, Palette Knives; Impasto, Trompe-l'oeil, and Fresco techniques; Painting found objects; Studies of Old and New World Masters.

INDEPENDENT STUDIO ART/PORTFOLIO DESIGN (15068) - **Prerequisite:** Teacher recommendation with application submitted for approval. Open to Juniors and Seniors.

This independent study course is specially designed between the student and the instructor to meet the student's specific needs! This is a self-directed curriculum under the watchful eye of the instructor. The student sets goals while creating products that reflect personal talent and interests. Each lesson shall reflect the results of the "planning sessions" with the instructor and the student's thumbnail sketches. Lessons will include the elements and principles of design, rubrics, and an agreed upon deadline. This course is for the student who is highly self-motivated and advanced artists who may be considering art school or continuing art as a serious hobby. Students are encouraged to gather necessary materials to support their own successes. It is a course for the mature student who enjoys art production and is highly self-motivated and talented. This course is recommended for students required to design a portfolio for college admissions.

Some units covered in this course may include: Development of Individual Style; Portfolio design for Art School admissions; **Drawing, Painting, Sculpture, and/or Graphic Arts.**

LCCC PAINTING I (15075) - **Prerequisite:** Highly recommended for grades 11 and 12.
1 High School Credit & 3 LCCC Credit Hours

LCCC Painting I (ART 115) is a foundation course that includes basic instruction in form, color, value, composition, and historical material. The medium is acrylic paint and may also include Oils and Watercolor. Painting I focuses on perceptual and conceptual development with regard to visual problem solving through representational and abstract painting techniques. The emphasis will be on paintings that explore the interpretation of various subjects. Painting I students are encouraged to produce a series of paintings that include personal expression. LCCC maximum class enrollment is 18 students.

Some units covered in this course may include: Advanced Color theory and color mixing; Acrylic paints; Oil paints; Watercolor; Mixed Media; Egg Tempera on plaster; Brushes, Palette Knives; Impasto, Trompe-l'oeil, and Fresco techniques; Painting found objects; Studies of Old and New World Masters.

NLHS PROGRAM OF STUDIES 2024-25

BUSINESS/COMPUTER EDUCATION

Courses Offered (listed by level of difficulty)

Computer Applications
Future Ready Skills **(Graduation Requirement)**
Accounting I
Accounting II

COMPUTER APPLICATIONS (15370)

This course is uniquely designed for students preparing for success in high school, college, and beyond through efficient and proficient use of computer software. Students will experience word processing, desktop publishing, and presentations. This course focuses on database and spreadsheet computer application software in business and daily life. The ability of spreadsheets to properly describe numeric information, show trends, and assist in making future decisions is a key to financial success. Students will analyze and construct databases that can be sorted and queried in multiple ways.

Some units covered in this course include: integration and presentation of spreadsheet and database information. Advanced levels of online research, simulations, and Web 2.0 Applications are current elements that flow naturally into this dynamic, hands-on course.

FUTURE READY SKILLS (15371) - Prerequisite: Open to grades 10,11,12 (Graduation Requirement)

Future Ready Skills is a course designed to benefit all students. This course discusses important topics for everyday living in our challenging and dynamic society. Students will learn more about their role as a consumer, a worker, and a productive citizen using available technologies, such as various web-based applications. With the use of technology, hot topics in Digital Citizenship will be discussed throughout the semester. Other course topics include personal money management strategies, such as how to properly budget and save, how to establish and maintain a good credit standing and how to prepare personal income taxes. Students will explore careers and create a digital Career Portfolio including a resume, letter of application, a letter to request letters of recommendation, and a thank you after an interview. In-depth discussions on careers and the process of finding employment in career areas of study will take place. This career unit will also include guest speakers for career opportunities and current job search trends. This course will also explore the areas of business ownership, financial management and marketing. In covering these topics, students will be presented with real life experiences that will best prepare them to grasp new technological trends for success. This is a practical and necessary Business/Technology course that is **REQUIRED** of **EVERY** student to graduate.

ACCOUNTING I (15636) – Prerequisite: Open to grades 11 and 12.

This beginning accounting course provides a basic knowledge of accounting principles and techniques that will enable the individual to obtain employment in an entry level accounting or bookkeeping position. It also provides for a solid foundation either for those wishing to take the advanced Accounting II course or for those who will further their education in accounting at a business school or college. The appropriate accounting techniques stressing both these areas are emphasized in the Accounting I course. An online Accounting workbook is featured throughout this course. This allows the student experience with online course formats. Because of its wide appeal, the Accounting I course is available to any student.

Some units covered in this course include: Accounting careers and concepts; Starting an accounting system; The effect of business transactions on a business; Analyzing transactions into debit and credit parts; Journalizing business transactions; Posting; Understanding and recording financial statements; Working with six and eight column worksheets; Completing an accounting cycle for a partnership using a combination journal; and Understanding various kinds of journals and the use of ledgers.

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ACCOUNTING II (15637) - **Prerequisite:** Accounting I

This advanced accounting course provides a basic knowledge of accounting principles and techniques with special emphasis on the accountant in a corporation. This course will further enhance the opportunities available to the student who seeks an entry level accounting or bookkeeping position. It also prepares the students who wish to further their education in accounting at a business school or college. The appropriate accounting techniques, stressing both these areas, are emphasized. This course will be taught entirely on a computer to familiarize the student with modern accounting applications in today's offices.

Some units covered in this course include: Recording transactions using special journals; payroll records; payroll accounts, taxes, and reports; federal income tax forms; accounting for uncollectible accounts; accounting for plan assets and depreciation; accounting for notes and interest; a voucher system; end of fiscal period work for a corporation; a petty cash and inventory system.

ENGLISH

Core Courses Offered

9th Grade
English I
Academic English I
Honors English I

10th Grade
English II
Academic English II
Honors English II

Electives Offered
Public Speaking
SAT PREP ERW
Creative Writing
Journalism & Media Studies I
Apocalyptic Fiction & Film
Yearbook

11th Grade
English III
Academic English III
Honors English III
Advanced Placement (AP) English Language

12th Grade
English IV
Academic English IV
LCCC Research & Composition
Advanced Placement (AP) English Literature

Other
Read 180
System 44

ENGLISH I (15113)
ACADEMIC ENGLISH I (15116): Recommended for college-bound 9th graders

English I is designed to prepare students for academic success in grades 10, 11, and 12. English I will develop literature and expression skills. Students will read, analyze, and interpret literature across many genres. Students will demonstrate proficiency in written and spoken expression.

Some units covered in this course include: short stories, novels, mythology, the writing process, and vocabulary development.

HONORS ENGLISH I (15118): **Prerequisite:** Recommendation of Grade 8 English teacher or a grade of 90% or higher in Grade 8 English.

Honors English I is an accelerated version of Academic English I. Reading skills, vocabulary development, and the writing process will be stressed. Reading & discussion of various literary genres will be a major portion of the course. The research paper will be introduced and will be required. Grammar and usage will be covered as the need arises. Written practice for the KEYSTONE will be addressed. Shakespearean drama will be introduced. Summer reading is required.

Some units covered include the following: Short stories; KEYSTONE Preparation; the Writing process; Drama; Reading skills; The Research paper; and the Novel.

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ENGLISH II(15123)

ACADEMIC ENGLISH II (15126): Recommended for college-bound 10th graders.

English II is designed to prepare students for academic success in grades 11 and 12. English II will develop literature and expression skills. Students will read, analyze, and interpret literature across many genres. Students will demonstrate proficiency in written and spoken expression.

Some units covered in this course include: short stories, novels, drama, the writing process, and vocabulary development.

HONORS ENGLISH II (15128): Prerequisite: 90% or higher in Academic English I or 80% or higher in Honors English I.

An accelerated version of academic English I, Honors English II introduces the literary genres of the short story, novel, drama, and poetry. Vocabulary development is stressed along with the writing process and common methods of development. A culmination of these writing skills will be evident in the research paper. Independent reading, research, Socratic seminars, theme analysis and a class play are required. Summer reading is required.

Some units covered in this course include: The Novel; The Short Story; Shakespearean Drama/Histories; Poetry; Nonfiction; The Writing Process; and The Research Paper

ENGLISH III (15132)

ACADEMIC ENGLISH III (15136): Recommended for college-bound 11th graders

Academic English III is a college preparatory course for students who anticipate formal instruction beyond high school. Emphasis is placed on an intensive study of literature and writing with a connection to American history. Students will also read and analyze selected novels, short stories, poetry, and essays. Vocabulary will be studied in preparation for the SAT and for better understanding of the assigned literature. Writing and reading exercises will prepare students for the KEYSTONE examination. In addition, process writing, with emphasis on the literary theme and the five-paragraph essay, will prepare students for the skills necessary to achieve success in future courses and, eventually, college.

Some units covered in this course include: The American Drama; the American Novel; Comprehensive study of American Literature through selected short stories, poems, and essays; SAT Preparation; KEYSTONE Preparation; The Writing Process and Composition.

HONORS ENGLISH III (15138): Prerequisite: 90% or better in Academic English II, 80% in Honors English II.

An accelerated course, Honors English III entails critical analysis of American literature and authors. Students will trace the history of American literature and explore every literary genre and many literary devices. Early in the course, students will write several paragraphs, impromptu and planned, and will eventually work toward a multi-paragraph paper that utilizes specific literary theories and school of criticism (literary analysis). A culmination of student writing skills will be evident in the research paper. Once students are accepted in Honors English, they will be given a summer reading list of at least three major literary works in which they will be evaluated utilizing differentiated instruction.

Some units covered in this course include: Various units based on major literary movements in America; Arthur Miller's The Crucible; Theme writing; Oral expression; KEYSTONE Reading/Writing Preparation; and Vocabulary Enrichment.

ADVANCED PLACEMENT (AP) LANGUAGE AND COMPOSITION (15153): Prerequisites: Students need to show an ability for rigorous study and application. 80% or higher grade in Honors English II or a 90% or higher in Academic English II. An agreement to complete summer reading and writing assignments.

In essence, AP Language and Composition creates the experience of a college-level composition class. Students learn to approach texts with attention to detail and an understanding of purpose. Students will evaluate the effectiveness of arguments and use what they have learned to form their own arguments and positions on controversial topics. Students will also learn how to gather resources on a topic (they will also be given situations where multiple resources are provided) and how to synthesize those resources into informed essays. This course will use some of the same literature selections as other 11th-grade English courses.
AP Language and Composition is a course in part designed to prepare students for the AP Language and Composition test. This test centers on assessing a student's reading and writing skills. This test is designed to assess whether a student has developed college-level applications of these skills. Writing skills focus on three modes: analysis (of argument), open argument, and synthesis. Nonfiction sources are prioritized, but fictional literature is also integral to this course (as a source of ideas for argument.)

ENGLISH IV (15143)
ACADEMIC ENGLISH IV (15146): Recommended for college-bound 12th graders.

In twelfth grade, students move towards academic independence and college-and-career readiness. Students grapple with demanding texts by integrating previously learned skills to analyze and evaluate the writer's premise, purpose, and argument in both informational and literary text. Students conduct sustained research and engage in sharp distinctive writing while making informed decisions, solving problems, evaluating the credibility and accuracy of sources, and noting discrepancies among the resources. Using previously learned competencies, students master skills such as asking their own questions, solving their own problems, and leading their own class discussions. Finally, students continue to develop the skills in reading, writing, speaking, and listening to master purposeful and independent expression.

ADVANCED PLACEMENT (AP) ENGLISH LITERATURE AND COMPOSITION (15149) :

Prerequisite: Students need to show an ability for rigorous study and application. 80% or higher grade in Honors English III or AP English Language or a 90% or higher in Academic English III. An agreement to complete summer reading and writing assignments.

The Advanced Placement Literature and writing course follows the guidelines set forth by the AP English Course Description. The literary genres of prose fiction, drama, and poetry from the sixteenth century to contemporary times will be studied within the structure of this course. Readings and analysis will occur as group discussions and as homework assignments. Written and oral interpretation will also analyze how social and historical values influenced literary forms and language. An exam consisting of both an objective and an essay section will follow each literature unit. A variety of writing modes will include writing to understand, to explain, and to evaluate. Assignments calling for complex analysis involving structure, style, and themes will culminate in a research paper on a literary topic. Other writings will include expository essays, extended analysis, timed in class responses, and a class journal that will allow for informal exploratory activities. Opportunities to revise and rewrite after receiving instructional feedback from your teacher and/or peer editor will be afforded. These revisions will work to improve sentence structure, to achieve coherence, and to maintain a consistent voice. All formal essays will be evaluated on a nine-point AP grading scale. Weekly vocabulary lessons will encourage the use of a rich, varied, and exact vocabulary and will raise an awareness of the resources of language.

LCCC RESEARCH & COMPOSITION (15150) : Please refer to the Dual Enrollment Section of Program of Studies on page 64-66.

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CREATIVE WRITING (15147) : **Prerequisite:** Open to grades 10,11,12; an 80% or higher English grade.

This course provides an environment which fosters creativity and allows students to stretch their imaginations through writing. Students study professionally written work which acts as a model for student projects including poetry, personal memoirs, interview profiles, short stories, art-inspired poetry, etc. In the spirit of creating a community of writers, students are encouraged to publish and orally share their work in the school environment. Students are also required to submit a project to a professional publication for publication. A daily journal is a major requirement for this course as well as reading aloud all final writing samples for peer evaluation.

Some units covered in this course include: Personal Writing; Expressive Writing; Descriptive Writing; Narrative Writing; Column Writing; Critical Review Writing; Literary Writing; Poetry Writing; Persuasive Writing; Memoir Writing; Writing About Literature; and Writing for Publication.

PUBLIC SPEAKING (15168) : **Prerequisite:** Open to grades 10,11,12

Students enrolled in this course will study and apply effective methods of both verbal and nonverbal communication. Different types of speeches and characteristics of effective speakers will be emphasized through use of both original and professional works. Students will give approximately 10 – 12 speeches such as: speech to inform, speech to persuade, speech of presentation, demonstration speech, personal experience speech, speech to entertain, pet peeve, etc. Students are required to maintain a Reflection Log which will be evaluated twice during the semester.

Some units covered in this course include: Perception of self and other; Establishing a Communication Foundation; Interpersonal Communication; Principles Of Speech Communication; Informative Speaking; Persuasive Speaking; Demonstration Speaking; Speaking to Entertain; Speaking to Present; and Interviewing for Information.

SAT PREP ENGLISH, READING, WRITING (15098): **Prerequisite:** Juniors

Meets every other day - .5 Credit

This course is aimed at high school juniors who are planning on taking the SAT exam. Students will learn about the structure and scoring of the SAT exam. Practice SAT exams will be frequently used to gain familiarity with both multiple choice and student-produced response questions. Critical English material needed for the exam will be reviewed by instructors.

JOURNALISM & MEDIA (15171): Prerequisite: Open to grades 10,11,12 who have achieved an 80% or higher in English core classes and electives

Highly recommended for Slate staff members. Recommended for, but not limited to, college-bound students interested in some area of the Journalism field and/or a writing major.

Students will analyze the structure of all media with a focus on newspaper writing, but will also analyze cable news channels, the Internet vs the printing press, and the role of social media in today's world of obtaining nonstop information. The course will cover basic Journalism ~ getting the story *right* before getting the story *first*, and the structure of news writing…how to say as much as you can with as few words possible. We will also put into practice the "inverted pyramid" where the main facts go first and dwindle down to the "nitty gritty." Sectional writing will be covered and practiced (sports, opinion, feature) and a monthly mandatory submission to The Slate, our student newspaper.

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APOCALYPTIC FICTION & FILM (15180): Prerequisite: Open to grades 10,11,12 with an 80% in Academic or Honors English II or III.

Apocalyptic Fiction is a genre-based English elective that contains science, psychology, sociology, and research components and includes various forms of media and text that speculate about a scenario that will either destroy life or, more likely, will drastically alter life as we presently know it.
Students approach material critically in search of overarching themes that transcend a singular text. Students will discuss and debate the psychological and sociological implications of these life-altering scenarios. Students will evaluate how effectively the thematic messages of warning are conveyed and how the genre has evolved with the increase of technology and biological advancements. Students will also analyze how context and culture influence the author's purpose in writing apocalyptic fiction. Students will engage in research of a present-day apocalyptic topic-of-interest and will use that research as a basis for creating their own apocalyptic written piece. This is a novel and media-based course with a large reading component.

Some units/activities covered in this course include: Film critique, historical context analysis, a thematic analysis essay, debates/Socratic seminars, Scholarly research into fields of science, psychology, and sociology, argumentative presentation based on scholarly research, a how-to-survive demonstration speech, and a short story project

YEARBOOK PUBLICATIONS (15076)**: Prerequisite:** 80% or higher English grade, and/or must have scored an 80% or higher in any Computer Graphics / Photoshop / Art electives.

Yearbook Publications will teach the fundamentals of journalism, copywriting, layout/theme design, photography, advertising, marketing, budget creation as well as to chronicle the history of the current school year. Students will assume a role from three different tiers in the class: fundamental helper A or B, or a section Editor. Work will be done through Adobe Photoshop, Canva, and Jostens Yearbook Avenue Digital Classroom.

READ 180 (15803)

Read 180 is a research based, proven program designed to increase students' decoding, fluency, vocabulary, comprehension, and writing skills. The model includes experiences in whole and small group instruction, independent reading, and technology-based learning.

THE CODE

A foundational reading program. It helps students understand that the English language is a finite system of 44 sounds and 26 letters that can be mastered.

Whole and small group instruction is teacher modeled and directed and includes the use of a Chromebook where students read, write, and react. During small group instruction, skills are reinforced and practiced. Read 180 software and System 44 software allows for differentiated instruction and students' specific skill levels. Modeled and independent reading is designed to help students build fluency and reading comprehension skills using paperbacks and audiobooks in their Lexile ranges.

FAMILY AND CONSUMER SCIENCE

Courses Offered (listed by level of difficulty)

Foods
Child Development (will be offered during the 2025-2026 school year)
Food Science
Child Development -The Early Years (will be offered during the 2024-2025 school year)
LCCC Fundamentals of Early Childhood Education

FOODS (15024)

Foods is an introduction course that covers food preparation, food handling and basic food skills. This course is designed to entice all students, boys and girls alike. It is packed with new food preparation experiences and information. Study will begin with basic food preparation and progress to more advanced food techniques and skills. Nutrition education will have a special emphasis and the students will complete labs related to the six main nutrients needed by the body. Canning homemade jams and jellies and tomatoes that will then be used on homemade bread and pizza/stromboli are some of the new and unique labs the students will do. In addition, the students will learn basic baking techniques and will make breads, cookies, cakes and pies.

Units covered in this course include: Kitchen fundamentals; Food budgeting; Cooking terms and techniques; Safety and sanitation principles; Nutrition analysis and the body; Meal preparation and basic baking concepts.

CHILD DEVELOPMENT (15025)

NOTE: THIS COURSE WILL RUN EVERY OTHER YEAR ALONG WITH CHILD DEVELOPMENT: EARLY YEARS

This course is designed for the student who wants to learn about child development and childcare for career opportunities or who may be planning to go into a career that involves working with children. The course will address such issues as prenatal care, stages of labor, physical development in infants, toddlers and preschoolers, and discipline of children to name a few. This course would be a benefit to any student entering college in the fields of education, nursing, early childhood education, and social services. This course can also be beneficial to students who plan on babysitting. Throughout the course, the students will participate in **field trips** to childcare centers and the elementary schools to observe and work with young children. Students will also be required to care for the RealCare Baby simulator as part of the course. **Units covered in this course include: Family Life Cycle; Child Development Theorist; Observing Children and how they learn; Preparing for Parenthood; Prenatal development; Childbirth; Physical, Emotional, Social and Intellectual development of children; Health and Safety.**

FOOD SCIENCE (15023) - **Prerequisite:** 75% or better in Foods.

Are you interested in becoming a food science researcher, a dietitian, or a pastry chef? How about owning your own catering business or do you just want to know more about the principles of cooking? This food science course is designed for students who wish to study advanced nutrition and food science in college or trade school. Cooking more advanced dishes and more emphasis to detail and presentation of food will be studied. Study will begin with a review of the basic foods course content and then progress to more advanced food science concepts.

Units covered in this course include: Advanced Nutrition; Food Supply; Food Evaluation; Career Exploration; Science of Candy Making; Meat and Poultry Cookery; Fruit and Vegetable Cookery; Protein Substitutes; Cooking Skills and Techniques.

CHILD DEVELOPMENT THE EARLY YEARS (15026)

NOTE: THIS COURSE WILL RUN EVERY OTHER YEAR ALONG WITH CHILD DEVELOPMENT: EARLY YEARS

Students will study how children learn, grow, and develop and about childcare career opportunities. The course will review and expand on the topics of physical, emotional, social, and intellectual development of infants, toddler, preschoolers, and elementary children. This course is ideal for students that are thinking of going into any area of education, nursing, or social services. Trips to the elementary schools will be an important part of the course. Students will also be required to care for the RealCare Baby simulator as part of the course.

Units covered in this course include: Discipline; Emotional development; Physical development; Social development; Intellectual development; Toy selection and evaluation; Disabilities and evaluation; and Health and safety.

LCCC FUNDAMENTALS OF EARLY CHILDHOOD EDUCATION (15030) - **Prerequisite:** Must adhere to prerequisites determined by LCCC.

Course offers an analysis of Early Childhood Education through historical, theoretical, current, and future perspectives. Discussion of principles of curriculum models, key theorists, current teaching trends and best practices is included. Emphasis will be on professional organizations, environments, cultural diversity, families, and community resources.

This course is appropriate for students who are interested in working with children in a professional environment. This may include Childcare Provider, Preschool teacher/Aid, Elementary Teacher, School Counselor, Psychologist/Psychiatrist, Behavioral Specialist, Nurse and/or the medical field, etc.

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FOREIGN LANGUAGE

Courses Offered (by level of difficulty)

Spanish I
Spanish II
Honors Spanish III
AP Spanish Language & Culture

SPANISH I (15516)

The emphasis in this course is directed toward the four basic language skills: speaking, listening, reading, and writing. This exciting and useful foreign language is spoken extensively in the classroom to develop skills of comprehension and conversation. These skills are reinforced through conversational activities and cued writing. An emphasis on basic understanding and communication is stressed. Basic grammar and vocabulary are emphasized in the course. Students are expected to complete projects that integrate the use of technology to reinforce writing and vocabulary skills.

Some units covered in this course include: greetings, school, describing people & things, family, weather, present tense, expressing likes/dislikes, asking/answering questions, calendar, telling time, numbers to 1,000,000, and parts of a house.

SPANISH II (15526) - **Prerequisite:** Successful completion of Spanish I.

A basic review of Spanish I is done at the beginning of the course. The four areas stressed in level one are also stressed in level two: speaking, listening, reading, and writing with a grammar emphasis on the preterite and imperfect tenses. Continuing oral instruction and comprehension are developed through the use of interactive group/paired activities and the integration of computer technology. Writing/reading skills are further developed. Evaluation is done by oral and written testing. Spanish II provides the background and skills development necessary to build increasing knowledge of the language. Students are expected to complete projects that incorporate different vocabulary and grammar concepts.

Some units covered in this course include: school personnel, means of transportation, body & health, foods, parts of a kitchen, stores, daily routines, present tense, preterite tense, imperfect tense, commands, making comparisons.

HONORS SPANISH III (15536) - **Prerequisite:** Teacher recommendation and/or 85% or above average in Spanish II.

This course will review previously learned grammar and vocabulary and introduce a variety of tenses and grammar concepts. The students will thoroughly learn the past tenses and their uses by the end of the course. The use of computer technology and listening exercises will support the curriculum. There will be an added emphasis on speaking the language in the classroom. Oral assessment, small group work and dialogue, and short story writing will be used to enhance listening comprehension, grammar, and vocabulary. Students are expected to complete activities which may include creating narratives & dialogues, projects that incorporate different vocabulary and grammar concepts, and various forms of oral assessment.

Some units covered in this course include: volunteering, digital footprint, sustainable living, health and exercise, nationalities, animals, jobs/employment, travel, commands (formal, familiar, and plural), preterite vs. imperfect (past tenses), future, and conditional, present perfect, double object pronouns, and an introduction to the subjunctive.

AP SPANISH LANGUAGE & CULTURE (15546)- Prerequisite: 85% or higher in Honors Spanish III and/or teacher recommendation.

AP Spanish Language and Culture is a rigorous college-level course which is taught almost exclusively in Spanish. It emphasizes communications by applying all three modes (the interpretive mode of communication through podcasts, videos, and readings, and the interpersonal and presentational modes to share thoughts on a variety of topics ranging from literary works to interdisciplinary topics including politics, history, and sociology). This course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (books, music, etc.), practices (patterns of social interactions within a culture and comparing other cultures to one another), and perspectives (values, attitudes, assumptions). This course will be structured around six themes (beauty and aesthetics, contemporary life, families and communities, global challenges, personal and public identities, and science and technology).

FRENCH AND GERMAN LANGUAGE OFFERINGS

Northern Lehigh High School will also offer German and French to all students through Bulldog Academy, our online program. If your student is interested in taking either of these languages, please have them select it at the time of scheduling. Please call the guidance office at 610-767-9837 if you have any further questions.

MATHEMATICS

Courses Offered

Algebra

Algebra IB
Algebra I Plus
Academic Algebra I
Academic Algebra II
Honors Algebra II

Geometry

Geometry
Academic Geometry
Honors Geometry

Trigonometry

Algebra II/Trigonometry
Academic Algebra II/Trigonometry
Honors Trigonometry

Other

Math 180

Calculus

Pre-Calculus
Calculus
LCCC Calculus & Analytic Geometry I
AP Calculus AB

Other Math Courses

Probability & Statistics
SAT Prep Math

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ALGEBRA IB (15317) - Prerequisite: Algebra IA

Due to the increased demands put in place by the Core Curriculum and to prepare students for the Algebra I Keystone Exam, Algebra I will be split into two separate courses. **NOTE: Students who are scheduled for Algebra IA will automatically be scheduled for Algebra IB.**

Units covered in these courses are: Equations & Inequalities, Graphing Linear Equations, Systems of Equations, Polynomials, Rational Expressions, Square Roots, Quadratic Equations, and Data Analysis.

ALGEBRA I Plus (____) - Prerequisite: 8th grade Pre-Algebra; also considered is PSSA scores and teacher recommendation

Note: Students will receive 2 credits for this course because it will run full year.

Due to the increased demands put in place by the Core Curriculum and in order to prepare students for the Algebra I Keystone Exam, Algebra I will be split into two semesters.

Some units covered in this course include: Linear equations; Graphing; Linear inequalities; Linear systems; Factoring; Fractional equations; Rational expressions; and Algebraic expressions (monomials, binomials, polynomials)

ACADEMIC ALGEBRA I (15301) – Prerequisite: 80% in Pre-Algebra; also considered is PSSA scores and teacher recommendation

Academic Algebra is recommended for any student who plans to further their education beyond high school.

Some units covered in this course include: Linear equations; Graphing; Linear inequalities; Linear systems; Factoring; Fractional equations; Rational expressions; and Algebraic expressions (monomials, binomials, polynomials)

ACADEMIC ALGEBRA II (___) – Prerequisite: 80% or better in Academic Algebra I, also considered is Keystone Algebra 1 scores and teacher recommendation.

This course will expand on topics covered in Algebra I. Students will also be introduced to new topics which will provide a foundation for any advanced math courses in high school or college. This course is strongly recommended for students who excel in mathematics and/or intended on pursuing a career that requires a high level of mathematical skills.

Some Units covered in this course include: value involving equations & inequalities; Simplifying Polynomials; Quadratic Equations and Inequalities; Using Formulas; Radicals; Imaginary Numbers; Radical Equations; Rational Expressions; Complex Rational Expressions; Distance and Slope; Parallel and Perpendicular Lines; Linear Functions; Systems of Equations; Dimensional Analysis; sequences and series; quadratic functions; cubic functions; rational fractions; logarithm

HONORS ALGEBRA II (15322) – Prerequisite: 80% or better in 8th grade Algebra I, and/or teacher recommendation.

This course will expand on topics covered in Algebra I. Students will also be introduced to new topics which will provide a foundation for any advanced math courses in high school or college. This course is strongly recommended for students who excel in mathematics and/or intended on pursuing a career that requires a high level of mathematical skills.

Some Units covered in this course include: value involving equations & inequalities; Simplifying Polynomials; Quadratic Equations and Inequalities; Using Formulas; Radicals; Imaginary Numbers; Radical Equations; Rational Expressions; Complex Rational Expressions; Distance and Slope; Parallel and Perpendicular Lines; Linear Functions; Systems of Equations; Dimensional Analysis; sequences and series; quadratic functions; cubic functions; rational fractions; logarithm

GEOMETRY (15323) - Prerequisite: Algebra IB
ACADEMIC GEOMETRY (15303) - Prerequisite: 80% in Academic Algebra IB, Academic Algebra I, or 8th grade Algebra I

Geometry is recommended for students anticipating a formal education beyond high school. It includes the study of both plane and solid figures. Emphasis is placed on logical and sequential development of geometric ideas.

Some units covered in this course include: Basic vocabulary; Postulates; Proofs of theorems; Constructions; Parallel lines; Problem solving using ideas of congruency; Problem solving using ideas of similarity; A study of circles; A study of polygons; Areas-surface areas-volumes; and A study of solids.

HONORS GEOMETRY (15324) – Prerequisite: 90% or better in Academic Algebra IB, 90% or better in Academic Algebra I, or 80% in Honors Algebra II.

This course will cover all the topics in Geometry. The course will cover the topics in greater depth with more emphasis on proofs, applications, using technology and real life. Geometry is recommended for students anticipating a formal education beyond high school. It includes the study of both plane and solid figures.

Some Units covered in this course include: Geometry vocabulary; Proofs of Theorems; Parallel lines; Problem solving using ideas of similarity; a study of circles; Areas-surface areas-Volumes; Postulates; Constructions; Problem solving using ideas of congruency; a study of Polygons; and A study of solids.

ALGEBRA II/TRIGONOMETRY (15338) - Prerequisite: Geometry and Algebra IB
ACADEMIC ALGEBRA II/ TRIGONOMETRY (15307) - Prerequisite: 80% in Academic Geometry and Academic Algebra IB, or Honors Algebra II, or teacher recommendation.

This course is designed for those students anticipating formal education beyond high school. Students contemplating a mathematics, science, or business-related field are urged to complete this course. The Math Department feels that a good background in algebra is essential for success in this course.

Some units covered in this course include: Pythagorean Theorem; The distance formula; The trigonometric functions; Radian and degree measure of angles; Laws of Sines and Cosines; Graphs of the trigonometric functions; Navigations; Linear Functions and Graphs; Trigonometric identities; Finding the line of best fit; Solving Right Triangles; Quadratic Functions and the Parabola; Amplitude, Period, Phase Shift; Relations and Functions; Values of Special Angles; Solving Oblique Triangles; and Exponents and Logarithms.

HONORS TRIGONOMETRY (15339) – Prerequisite: 90% in Academic Geometry or 80% in Honors Geometry and a 90% in Academic Algebra IB or an 80% in Honors Algebra II.

This course will cover all of the topics in Trigonometry. Trigonometry is recommended for students anticipating a formal education beyond high school. It includes the study of trigonometry, functions, relations and graphs.

Some Units covered in this course include: Pythagorean Theorem; Trigonometric function; Laws of Sines and Cosines; The distance formula; Radian and degree measure of angles; Identities; Graphs of trig functions; Right Triangles; Amplitude, Period and Phase Shift; Exponential and Logarithmic functions; Linear functions; Quadratic functions; Relations; Complex numbers; Inverse trigonometric functions; and Graphs of exponential, logarithmic, linear, quadratic, relations and inverse trig functions.

PRE-CALCULUS (15345) - Prerequisite: Algebra II/Trigonometry or Academic Algebra II/Trig

Introduction to Calculus is recommended for students who plan to continue their education beyond high school in a math-related field, but who do not feel they are ready for the calculus course. Students who enroll in this course should be proficient in algebra, geometry, and trigonometry. Introduction to Calculus will review and expand upon some trigonometric and algebraic concepts, and also introduce new concepts including limits of functions and trigonometric functions, conic sections, maximum and minimum problems and related rates.

Some units covered in this course include: Relations and Functions; Composite and Inverse Functions; Symmetry; Families of Graphs; Families of Graphs; Tangent to a Curve; Synthetic Division; Natural Logarithms; Sequences and Series; Limits; Matrices

CALCULUS (15346) - Prerequisite: 85% in Algebra II/Trig. or Academic Algebra II/Trig, or 75% in Honors Trigonometry.

Calculus is designed for the student preparing for higher education and training in engineering, science, or other mathematics-related fields. The Mathematical Association of America and the National Council of Teachers of Mathematics recommend that the calculus course offered in the 12th grade should be treated as a college-level course. These same organizations recommend that students who enroll in a calculus course in secondary school should have demonstrated mastery of algebra, geometry, trigonometry, and coordinate geometry.

Some units covered in this course include: Conic Sections; Relative External; Functions; Graphs of Polynomial Functions; Limits; Continuity, concavity, and asymptotes; The derivative; The Mean Value Theorem; Velocity and Acceleration; Rolle's Theorem; Product, quotient and chain rules; Optimization problems; Implicit Differentiation; Integration; Derivatives of Trig Functions; The definite Integral; Related Rates; and Area under a curve.

LCCC CALCULUS AND ANALYTIC GEOMETRY I (15349) - Please refer to the Dual Enrollment section of the Program of Studies on page 54. (Fall Semester)

AP CALCULUS (15347) - **Prerequisite:** 85% Calculus, 80% LCCC Calculus/Analytical Geometry, or teacher recommendation

This course is designed to prepare students for the AP Calculus AB Exam to be given in May. Students who have demonstrated mastery in algebra, geometry, trigonometry, and a previous Calculus course are eligible for this course. AP Calculus will follow the topics outlined by the College Board, along with additional topics that the instructor deems fit to include. This course will move at a faster pace than the normal Calculus course and require students to utilize and apply previously taught material. By doing this, the course will focus on AP Exam questions, material, and test preparation. Students enrolled in the course are **expected** to sit for the AP Calculus AB Exam in May.

Some units covered include: functions, graphs, limits, derivatives, integrals, and applications of integrals

PROBABILITY AND STATISTICS (15336) - **Prerequisite:** Honors Algebra II or Academic Algebra II

This course will offer students the necessary information in order to work with introductory probability and statistics. Probability and statistics exist in almost every aspect of life and are easily applicable in areas such as sociology, business, ecology, and economics. This course will prepare students for the rigors of college mathematics.

Some units covered in this course include: The Need for Statistics; Probability Concepts; Problem-Solving Methodology; Probability Distractions; Averages; Sampling Concepts; Dispersions; Estimating Parameters; Descriptive Statistics: and Testing Hypotheses.

SAT PREP MATH (15099): **Prerequisite:** Juniors

Meets every other day - .5 Credit

This course is aimed at high school juniors who are planning on taking the SAT exam. Students will learn about the structure and scoring of the SAT exam. Practice SAT exams will be frequently used to gain familiarity with both multiple choice and student-produced response questions. Critical math material needed for the exam will be reviewed by instructors.

Math 180

MATH 180 is a revolutionary math intervention program that addresses the needs of struggling students and their teachers. Its flexible instructional model maximizes instructional time with clear organization for whole-class, group, and individualized learning. The student resources are designed to motivate students, promote active participation, and provide adaptive practice and application. It is built from a carefully sequenced and paced progression of content with high interest themes. The focused instruction helps students make connections while learning to think algebraically. High school students utilize Course 2 Volume 2 for the alternative curriculum for Mathematics in the learning support setting. MATH 180 does this through a combination of workbooks and software tools/ resources.

The student workbook and software resources consist of 5 units, or Blocks, for The MATH 180 Volume/Course 2 path to mastery contains different elements as followed:

- There are 5 units, or Blocks, of instruction in the course/ volume 2 of Math 180. The topic of these Blocks are (in order);
    - Block 5- Proportional Relationship
    - Block 6- Linear Relationship
    - Block 7- Graphs in the Plane
    - Block 8- Functions

o Block 9- System of Equations

• Each Block contains 3 Sub-Topics. Students work through the Topics in 3 zones: Explore Zone, Learn Zone, and Success Zone.

• Students work through 3 lessons in each Topic in the Learn Zone, or may Fast Track through a lesson if they display mastery of the content.

• Each Block includes a Performance Task and an mSkills Assessment

MUSIC

Courses Offered

Concert Band
Concert Choir
Music Theory: Composition and Songwriting

CONCERT BAND (15053/15054) - **Prerequisite:** Some band experience or band director approval

Concert Band is open to all students who enjoy music and who desire to learn music through performance. The band's study and practice include performances such as a winter and a spring concert as well as playing for other school and civic functions. Students are also encouraged to participate in chorus, marching band, jazz band, pep band, Lehigh County Band, District X Band, and the school musical. Students are required to attend one lesson per week on a rotating schedule. As an elective, the course may be used to fulfill a portion of the humanities graduation requirement. **The band performance curriculum is based on Music Literacy, Music Fluency, and Music Artistry.**

Some units covered in this course include: Computer-assisted music theory; playing skills; a variety of music styles; Rhythmic reading and pitch reading; Good tone quality and intonations; Interpretation; Scales; and Small ensemble experience.

CONCERT CHOIR (15051/15052)

Concert Choir is designed for all students who have a love for singing. The Concert choir rehearses and performs a broad selection of excellent literature from Renaissance works through contemporary music. Music includes **everything** from folk songs to major Classical works to Broadway medleys. The student will learn about their voice and the techniques that will enable them to read music and become a stronger singer. Rehearsals take the form of the full-choir, small group sessions, individual lessons, evening dress rehearsals, and public performances. The choir performs at least two major concerts, one in December and one in May, as well as scheduled performances throughout the community. Students are encouraged to participate in Concert Band, Marching Band, and the all-District Musical, Lehigh County Chorus, and District 10 Choir.

Some units covered in this course include: Physical Vocalization Skills; Music Literacy; Sight Reading; Tone Quality and Choral Blend; and Diction.

MUSIC THEORY: Composition and Songwriting (15057)

Have you ever wanted to learn to write a song? This course is designed as a beginning music theory course for those interested in learning strategies for writing music. You do not have to have prior knowledge of music theory to be successful in the class. Students will focus on basic music concepts and apply them to solo and group compositions with the goal of advancing their songwriting abilities.

Music technology will be used to aid in learning and for compositional purposes. For the final project, students will compose a solo song which will be shared with classmates. Students who play instruments will be encouraged to bring them to aid in composition and performances, but the ability to play an instrument is not required.

SCIENCE

9th Grade: Life Science

Environmental Science
Academic Environmental Science
Honors Environmental Science

10th grade: Life Sciences

Biology
Academic Biology
Honors Biology

11th grade: Physical Science

Option One: Chemistry or Honors Chemistry I for college bound students
Option Two: Physics or Honors Physics I for college bound students
Option Three: Integrated Science or Fundamentals of Chemistry for career bound students

Electives within Life Science

Anatomy
Advanced Placement (AP) Biology

Electives within Physical Science

Chemistry I
Honors Chemistry I
Honors Chemistry II
Advanced Chemistry

Physics I
Honors Physics I
Honors Physics II

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ENVIRONMENTAL SCIENCE (15423):

ACADEMIC ENVIRONMENTAL SCIENCE (15426) Prerequisite:80% or higher in grade 8 science

HONORS ENVIRONMENTAL SCIENCE (15422)- Prerequisite: 90% or higher in grade 8 science

This curriculum is the first part of a two semester preparation for the state mandated Pennsylvania Biology Keystone Exam. All 9th grade students are required to take this course. The content of this course corresponds to the state anchors for Biology. A semester exam will be given at the end. Laboratory activities, computer activities and projects are an integral part of this learning experience.

Units covered include: science as inquiry; nature of science; scientific investigation; cell and cell processes; chemical basis of life; basic biological principles of the cell; homeostasis, cellular transport, bioenergetics, ecology, and environmental science.

BIOLOGY I (15426)

ACADEMIC BIOLOGY I (15428) Prerequisite: 80% or higher in Academic or Honors Environmental Science

HONORS BIOLOGY I (15429) - Prerequisite: 90% or higher in Academic Environmental Science or 80% or higher in Honors Environmental Science

This curriculum is the second part of a two semester preparation for the state mandated Biology Keystone Exam. All 10th grade students are required to take this course. The content of this course corresponds to the state anchors for Biology. A semester exam will be given at the end of Semester 2. Computer activities, projects, and laboratory activities are an integral part of this learning experience. Students will be expected to be advanced in all study island topics covered under the Biology Keystone.

Units covered include: cell growth and reproduction, genetics, theory of natural selection

ANATOMY (15432) - Prerequisite: 80% or better in Academic or Honors Biology, 90% or better in Biology, or a written recommendation from the Science Department.

This course is designed for students planning to pursue a health or science related field. Students need to be independently motivated, have strong study skills and well-developed work ethics. Topics to be covered include an orientation to the human body and the structure and function of the body systems. Dissection and lab work are integral components of this course. **Units covered in this course are: Units covered in this course are:** An Introduction to Anatomy and Physiology, The Tissue level of Organization (Histology),The Integumentary System and Function, Skeletal System and Function, Muscular System and Function, Nervous System and Function, Endocrine System and Function, Cardiovascular System and Function, Lymphatic System and Function, Respiratory System and Function, Digestive System and Function, Urinary System and Function, Reproductive System and Function

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ADVANCED PLACEMENT (AP) BIOLOGY 15433) - Prerequisite: 90% or better in Ecology/Cell Processes, Biology I and Chemistry I or science department recommendation. Probability/Statistics is highly recommended.

This is a freshman-level college course involving the life sciences for students who have strong science backgrounds and desire to have advanced college placement/credit or for students planning to major in biology-related curricula. Successful completion of this course may result in the granting of college credit and possibly advanced placement to the student who scores well in the AP exam. Please see the AP Biology instructor for a detailed course description and appropriate consultation prior to finalizing course selections.

Some units covered in this course include: Molecules and cells (structure and function); Genetics and evolution (molecular and Mendelian genetics, heredity, and evolution); Organisms and populations; and Energy in Living Systems (Thermodynamics, enzymes, respiration, and photosynthesis).

INTEGRATED SCIENCE(15420): Open to grade 11

This course is intended for those students who plan on pursuing a career based pathway. There is a strong emphasis on using mathematical formulas and concepts as they relate to the physical sciences.

Some units covered in this course include: Physical Science Basics; Using Thermal Energy; Moving Objects; Machines; Acceleration and Momentum; The Nature of Matter; and Energy.

FUNDAMENTALS OF CHEMISTRY (15438): **Prerequisite:** Successful completion of 10th grade science

This course is recommended for students with a limited background in science and math. This course explores the basic chemical principles and scientific methods used in chemistry through an environmental science lens. After covering the basic chemical principles and mastering basic math skills, students will apply the scientific method and chemical principles to explore matter and energy. This course is not designed to be a preparatory course for other high school chemistry courses.

Some units covered in this course include: elements, compounds and mixtures, metric system, measurements and solving problems, atomic structure, chemical bonding, periodic law, equations, chemical formulas, and elementary Stoichiometry. Student should have a scientific calculator as it will be needed to complete assignments in this course.

CHEMISTRY I (15439) - Prerequisite: Successful completion of the academic or honors freshman year science course. 80% or better in Algebra IB, 75% in Honors Algebra II

This course is recommended for academically oriented students. The student MUST demonstrate adequate problem-solving skills throughout the program. The course stresses the more technical, mathematical approach to the mastery of chemical principles and concepts. The course includes the study of atomic structure, energy, common elements, compounds and mixtures; periodic arrangement of elements and its use in predicting chemical behavior, chemical reactions, equations, Stoichiometry, and some chemical bonding.

Some units covered in this course include: Elements, Compounds, and Mixtures; Metric System; Measurements and Solving Problems; Atomic Structure; Quantum View of the Atom; Periodic Law; Chemical Bonding; Chemical Formulas; Equations; and Stoichiometry. Students should have a scientific calculator and a bound composition book as it will be needed to complete assignments in this course.

HONORS CHEMISTRY I (15440) - Prerequisite: 85% or higher in Academic Algebra IB or Academic Algebra I or 80% or higher in Honors Algebra II and successful completion of 9th or 10th grade honors science course.

Students considering majoring in chemistry, another science or medicine should consider taking Honors Chemistry I and Honors Chemistry II by the end of their junior year. This will enable students to take Advanced Chemistry and/ or apply for Emerging Health during their senior year. Honors Chemistry I and Honors Chemistry II can be taken in consecutive semesters during the same year when Honors Chemistry I is offered in the fall and Honors Chemistry II in the spring with departmental approval.

This course is designed for the student with exceptional background and aptitude in science. It includes an in-depth study of chemical concepts. Emphasis is on developing higher level thinking skills. This course will involve detailed laboratory reporting and analysis. Collection of classroom data is an integral part of this course.

Some units covered in this course include: Elements, Compounds and Mixtures; Metric System; Measurements and Solving Problems; Atomic Structure; Quantum View of the Atom; Periodic law; Chemical Bonding; Chemical Formulas; Equations; Stoichiometry; and Gas Laws. Students should have a scientific calculator and a bound composition book as it will be needed to complete assignments in this course.

HONORS CHEMISTRY II (15442)- Prerequisite: 80% in Chemistry I or 70% in Honors Chemistry I.

Students considering majoring in chemistry, another science or medicine should consider taking Honors Chemistry I and Honors Chemistry II by the end of their junior year. This will enable students to take Advanced Chemistry and/ or apply for Emerging Health during their senior year. Honors Chemistry I and Honors Chemistry II can be taken in consecutive semesters during the same year when Honors Chemistry I is offered in the fall and Honors Chemistry II in the spring with departmental approval.

Chemistry II provides a detailed look at more involved areas of chemistry. This is a more involved laboratory-oriented course which will include detailed laboratory reporting. This course should prove of value for the student planning to enter higher education in the "Physical Science" areas and advanced professions in the "Life-Sciences." This course is designed for the student with exceptional background and aptitude in science. Emphasis is on developing higher level thinking skills.

Some units covered in this course include: Review of Chemistry I concepts; gas laws, Kinetic Theory of solids, liquids and gases; The Solubility Product Principle; Thermochemistry; Ionic Equilibrium of Weak Electrolytes; Electrochemistry and Redox Reactions; Acids, Bases, and Salts; and Chemical Kinetics and Chemical Equilibrium. Students should have a scientific calculator and a bound composition book as it will be needed to complete assignments in this course.

ADVANCED CHEMISTRY (15443)- **Prerequisite:** Successful completion of Honors Chemistry I and Honors Chemistry II. Algebra II/Trigonometry is highly recommended before taking this course.

This course is taught on the level of a first-year college course. It differs from the usual secondary course with respect to the number of topics studied, rate the material will be covered, depth of study, emphasis on calculations, amount of homework and type and variety of lab work completed by the student. Lab work will include the use of sensitive balances, spectrophotometers, and other analytical equipment. Unknowns will be identified through analytical and qualitative chemistry. Each lab report will include a sophisticated analysis of the experiment. Students can expect an hour or more of homework per night. With our block scheduling it will not be unusual to cover a chapter per day or two; students will be expected to have a strong individual work ethic. The instructor will be here, as your mentor and coach, but you will need to accept a strong commitment for your own learning. Remember this is a college course.

Some units covered in this course include: Stoichiometry; Wave functions; Precipitation and Oxidation; Molecular shape; Gas Laws; Rates of Reaction; Thermodynamics; and Equilibrium reactions. Students should have a scientific calculator and a bound composition book as it will be needed to complete assignments in this course.

PHYSICS I (15448) - **Prerequisite:** Successful completion of the academic or honors freshman year science and trigonometry. 80% or better in Algebra II, 75% in Honors Algebra II

This course is recommended for academic students preparing for college. Physics is a course which emphasizes the qualitative study of the relationship between matter and energy. Students will develop logic and reasoning skills while studying this relationship through mathematical modeling, the scientific process and laboratory experiments.

Units covered: mechanics, thermodynamics and electricity

HONORS PHYSICS I (15447) – **Prerequisite:** 85%or higher in Trigonometry. If a student has not taken trigonometry the student must have earned a 90% or higher in Algebra II.

This course is designed for students with an exceptional mathematical and scientific background that are preparing for science-oriented careers. Physics is a course which emphasizes the qualitative study of the relationship between matter and energy. Other aspects include acquiring a vocabulary, transposing theoretical mathematics to application, recognizing the intuitive aspects of physical principles, and acquiring an appreciation of the scientific process. Laboratory experiments will be used throughout the course to reinforce the above aspects.

Units covered: mechanics, thermodynamics and electricity

HONORS PHYSICS II (15449) -Prerequisite: 80% or higher in Physics I or 70% Honors Physics I.

This course is a continuation of Physics I and is highly recommended for students who plan to take Physics in college.

Units covered: circular and rotational motion, light and optics, and quantum mechanics.

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SOCIAL STUDIES

Core Courses Offered

United States History II
Honors United States History II
United States History III
Honors United States History III
Civics: Government and Economics
Honors Civics: Government and Economics
World History
Honors World History
AP US History
AP European History

Electives Offered

Intro. To Psychology/Sociology
Intro. To Economics
Honors Psychology (DE w/ PITT option)
LCCC Intro to Sociology

UNITED STATES HISTORY II (15216) - Prerequisite: Required for freshman students

United States History is the study of the social, economic, and political development of the United States and its people from the Progressive Era to the end of World War II. Through the chronological study of American history and culture, the common ideals and values that give meaning to our national character can be appreciated. The evolution of the American people, their beliefs, and concern for individual human dignity and rights will be given emphasis so as to provide a historical perspective for future decisions.

HONORS UNITED STATES HISTORY II – Prerequisite: 90% in 8th grade social studies courses and 85% in English 8.

Honors United States History II is a fast-paced, in-depth survey course that will give the student a thorough understanding of the economic, political, and social development of the United States and its people from the end of the Reconstruction era to the conclusion of World War II. Through the chronological study of American history and culture, the common ideals and values that give meaning to our national character can be appreciated. The evolution of the American people, their beliefs, and concern for individual human dignity and rights will be given emphasis to provide a historical perspective for future decisions. This course is largely class discussion and lecture format. The use of primary source readings and other secondary essays will complement the main text. **This course will introduce the student to writing in a social studies course.**

UNITED STATES HISTORY III (15226) - Prerequisite: Required for sophomore students

United States History III is the study of the social, economic, and political development of the United States and its people from the end of World War II to the turn of the twenty-first century. Through the chronological study of American history and culture, the common ideals and values that give meaning to our national character can be appreciated. The evolution of the American people, their beliefs, and concern for individual human dignity and rights will be given emphasis so as to provide a historical perspective for future decisions.

HONORS UNITED STATES HISTORY III (15228) - Prerequisite: 90% in previous academic social studies course or 85% in the honors level.

This challenging course, designed for the student with an exceptional background and aptitude in American History, is especially recommended for those students who are planning to major in History in college. This college preparatory course provides an in-depth examination of American History from the end of World War II to the turn of the twenty-first century. The use of primary sources and other collateral readings will be emphasized.

CIVICS: GOVERNMENT AND ECONOMICS (15246): Prerequisite: A non-freshman course

Civics: Government and Economics is a survey course that will give the student a basic understanding of the functions and the services of democratic and economic systems. To facilitate such understanding, we will engage in a topical study of our economy and our government. First, we will define the meaning of American citizenship. Second, we will examine how our democratic system developed. Third, we will investigate the specific rights guaranteed to each citizen by our Constitution. Fourth, we will explain the election process and the party system. For the economics portion of the semester, we will examine our economy. The course will examine the basics of our economic system. Additionally, we will examine the role of money and banking in our American society. If time permits, the course will investigate the criminal and juvenile justice systems. **This course is a graduation requirement of all students.**

HONORS CIVICS: GOVERNMENT AND ECONOMICS (15250) – Prerequisite: 90% in previous academic social studies course or 85% in the honors level.

Honors Civics: Government and Economics is a fast-paced, in-depth survey course that will give the student a thorough understanding of the functions and the services of democratic and economic systems. This course is largely class discussion and lecture format. To facilitate such understanding, we will engage in a topical study of our economy and our government. First, we will define the meaning of American citizenship. Second, we will examine how our democratic system developed. Third, we will investigate the specific rights guaranteed to each citizen by our Constitution. Fourth, we will explain the election process and the party system. For the economics portion of the semester, we will examine our economy. The course will examine the basics of our economic system. Additionally, we will examine the role of money and banking in our American society. If time permits, the course will investigate the criminal and juvenile justice systems. **This is a writing intensive course.**

WORLD HISTORY (15236) – Prerequisite: US History II and US History III

World History is a comprehensive study of the culture, geography, and lasting effects of historical events on our world today. As a survey course, it will focus on four major eras in world history beginning with the Renaissance and ending in the modern era following the events of World War II. The geography of a nation can often determine the course of its history and the evolution of the culture of its people throughout time. Students will be able to clearly identify historical events which shaped the world they live in today, on a local and global scale. Through the chronological study of trade and interactions between groups, students will observe the global influence on our values, beliefs and rights as American citizens. The class will focus greatly on both lecture as well as in-depth class discussion. Students will be encouraged to discover for themselves the parallels between their lives and the lives of important figures throughout time.

***For Juniors and Seniors only. Students must have taken US History II and III prior to this class.**

HONORS WORLD HISTORY (15239)-Prerequisite: 90% in previous academic social studies course or 85% in the honors level.

Honors World History is a challenging, comprehensive study of the culture, geography, and lasting effects of historical events on our world today. As a survey course, it will focus on broad overarching topics throughout world history. It is based upon four major eras in world history beginning with the Age of Exploration and ending in the modern era following the events of World War II. The geography of a nation can often

determine the course of its history and the evolution of the culture of its people throughout time. Students will have the opportunity to analyze world events by focusing on causality and global consequences. Students will be able to understand the value of diplomacy among nations and endeavor to predict possible outcomes of diplomatic action based upon cultural, ethnic, and religious divides. Through the chronological study of trade and interactions between groups, students will observe the global influence on our values, beliefs and rights as American citizens. The class will focus greatly on both lecture as well as in-depth class discussion. Students will be encouraged to discover for themselves the parallels between their lives and the lives of important figures throughout time.

ADVANCED PLACEMENT UNITED STATES HISTORY (15229)- Prerequisites: Students should be able to read a college-level textbook and write grammatically correct, complete sentences; 90% average in academic social studies classes or an 85% average in previous honors social studies classes

The College Board's Advanced Placement Program (AP) enables students to pursue college level studies while still in high school.

In AP United States History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

AP United States History concludes with a college-level assessment developed and scored by college and university faculty as well as experienced AP teachers. AP Exams are an essential part of the AP experience, enabling students to demonstrate their mastery of college-level course work. Most four-year colleges and universities in the United States and universities in more than 60 countries recognize AP in the admission process and grant students' credit, placement, or both based on successful AP Exam scores.

AP United States History is designed to be the equivalent of a two-semester introductory college or university United States history course.

ADVANCED PLACEMENT EUROPEAN HISTORY (15240)- Prerequisite: Students should be able to read a college-level textbook and write grammatically correct, complete sentences; 90% average in academic social studies classes or an 85% average in previous honors social studies classes.

AP European History focuses on developing students' understanding of European history from approximately 1450 to the present. In this course, students will investigate the content of European history for significant events, individuals, developments, and processes in four historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions or power; and individual and society) that students explore throughout the course in order to make connections among historical developments in different times and places. This will be a challenging, college level course, culminating in the AP European History exam. Students interested in the course must be able to read and interpret a college-level textbook and possess the skills necessary to write according to academic standards. European History has similar prerequisites to Honors World History and counts towards students' world history graduation requirement. United States History II and III are prerequisites.

HONORS PSYCHOLOGY (15254)- Prerequisite: 85% or higher in previous social studies class

Meets daily- 1 Credit, with optional enrollment for PITT Dual Enrollment credit

Honors Psychology will focus on the scientific study of the behavior and mental processes of human beings. You will learn psychological facts, principles and phenomena within the various fields of Psychology. This course may also be taken for college credit through **The University of Pittsburgh.**

- Students will think critically about the world of Psychology and their relationship to it.
- Students will learn about Psychologists, their experiments and theories, over the past century.
- Students will assess differing theories of Psychologists such as Psychoanalytic, Behavioral, Cognitive, Humanistic, Biological and they will explore socio-cultural perspectives.
- Students will demonstrate an understanding of how Psychologists think and the ethical ways in which they test their hypotheses.
- Students will be able to relate Psychological theories to current events, think critically and draw their own conclusions

INTRODUCTION TO PSYCHOLOGY/SOCIOLOGY (15255)- Prerequisite: Sophomore, Junior, and Senior

This course will be a combination of Psychology- the scientific study of behavior and mental processes and Sociology- the scientific study of groups of people. Students will be introduced to major theories and concepts associated with Psychology and Sociology. The Psychology portion of class will include the study of: Historical and Modern Psychological Theorists, Sensation and Perception, States of Consciousness, Memory, Abnormal Psychology, and Social Psychology. The Sociology portion of class will include the study of: Historical Theories, Social Structure, Cultural Diversity, Adolescence and Adulthood, Crime and Deviance, and Class Systems. Students will be given a broad overview of both Psychology and Sociology.

INTRODUCTION TO ECONOMICS (15252) - **Prerequisite:** Successful completion of Civics: Government & Economics

Introduction to Economics is an academically challenging elective that is recommended for any student planning to attend a four-year college or university or any student planning a post-high school career in economics or business. This course, which meets state and national standards, focuses on the study of economic behavior and decisions in a nation's whole economy. Students will explore the importance of money, banking, and finance in our economic system, as well as topics such as economic growth, unemployment, inflation, taxes, government spending, the national debt, the Federal Reserve System, international trade, and globalization.

LCCC INTRODUCTION TO SOCIOLOGY (15102)- Prerequisite: 85% or higher in previous social studies class

This course introduces students to the scientific study of society. We examine the way our society is structured and the social inequalities that shape the lives of different classes, racial and ethnic groups, and genders. We explore how social institutions create these inequalities and how they teach us to understand and take action in our world. We study some of the consequences of globalization for work, wealth, inequality, migration, and social change.

TECHNOLOGY EDUCATION

Courses Offered

Photoshop
Home Improvement and Maintenance
Product Design
Video Production
Television Studio
Computer-Aided Drafting Technology I (CAD I)
Principles of Technology I
Computer-Aided Drafting Technology II (CAD II)
Principles of Technology II
Video Production II

PHOTOSHOP (15360)

This course will introduce students to Adobe Photoshop, the world's leading imaging and graphic design software. Students will gain experience with the software interface and various functions of Photoshop's toolbar, adjustments, and filters to create stunning images that integrate the technical aspects of computer software with the fundamental elements and principles of design. Whether it's career readiness or simply a fun hobby, students will gain valuable skills, techniques, and experience with this powerful, industry-standard software technology.

Areas of concentration include: Photoshop basics (toolbar, menus, layers, palettes); software basics (cut, copy, paste); maintaining an organized hard drive; filetypes & extensions; file sizes; pixel and resolutions; using Advanced Search features; color profiles; cropping and image, resizing, changing a canvas size, setting guides; incorporating elements of design; color theory; retouching/restoring; digital coloring of hand-draw illustrations

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HOME IMPROVEMENT AND MAINTENANCE (15033)

Do you plan to own a home or rent an apartment on your own? Then it's tool time for you! This semester-long course will introduce you to the basics of maintaining, fixing and even upgrading your personal living space as well as introduce you to the tools necessary to do so. Taking this course will teach students the major systems that exist in a home, in order to differentiate between problems and projects that require professional help or problems and projects that can be completed with a little intuition and knowhow. No experience with tools is necessary and proper tool use and safety will be covered as part of the class.

Some units covered include: Introductions in the areas of wall structures and coverings, residential painting, basic residential electrical circuits, plumbing, HVAC systems, flooring, tool use and safety and more.

VIDEO PRODUCTION I (15377)

Throughout the video production course, students will explore the history of video technology and concepts associated with visual storytelling, as well as gaining experience with recording equipment and professional-grade non-linear editing and motion-graphics software to create their own video presentations.

TELEVISION STUDIO (15379)- **Prerequisite:** 85% or higher in Video Production.

The Television Studio curriculum will expose students to the challenges of producing a live daily television broadcast. Students will gain experience with broadcasting equipment including cameras, microphones, video switchers, audio boards, teleprompters, and studio lighting. Students will also become familiar with professional editing and graphics software, such as Adobe Photoshop, Adobe Premiere, Adobe After Effects, Adobe Audition, Pinnacle Studio, MirrorScript Pro, and Microsoft PowerPoint. Additionally, students will gain valuable journalism experience by writing and conducting school-related news reports, interviews, sports coverage, and other student-interest segments. Students will write, plan, budget, direct, film, edit, and create graphics for their own news segments, a multi-step process which allows for interdisciplinary connections to nearly all Common Core subject areas.

COMPUTER-AIDED DRAFTING TECHNOLOGY I (CAD I) (15043)

Students will learn to use drafting and design computer software programs and apply them to a variety of drawing and design situations. After a computer hardware/software orientation, students will learn to read and draw several types of technical drawings. This information will then be applied in the design process as students work individually on a number of architectural and mechanical design activities. Students will play the role of professional designers and planners who create design solutions to the given problems.

Some units covered in this course include: Use of the computer in drawing; Use of printers and plotters; Use Auto Cad Programs for design, drawing, and problem-solving.

PRODUCT DESIGN (15034) - **Prerequisite:** CAD I with a minimum of 75%

Ever wonder how new products go from an idea scribbled on a napkin to an actual finished product? This class will walk you through the process of taking an idea and turning it into something you can hold. Students in the class will work with the instructor and other students to identify practical needs and develop designs that meet those requirements. Students will use CAD Software to create a design, identify the procedures necessary for making the product and incorporate the use of traditional machines (Radial Saw, Band Saw, Table Saw, etc.) and advanced manufacturing machines (CNC Router) in the shop to create the designed product.

Some units covered include: Technological Design Process and Problem Solving, Drafting and Design (2d and 3D), Basic and Advanced machine use (Safety instruction and demonstrations will be provided for all machines and students must pass a Safety Test for each), Manufacturing, CNC programming, Jigs and Fixturing, Analyzing, Summarizing and Presenting practices related to real world experiences.

COMPUTER-AIDED DRAFTING TECHNOLOGY II (CAD II) (15044)-**Prerequisite:** CAD I

Students will continue their computer-aided drafting experience. Course will allow students to work at their own individual level with the Auto-Cad Program. Advanced level will include AutoCad 3D, a 3-D drawing program and architectural drafting is available. Design and critical analysis is highlighted.

Some units covered in this course include: Advanced Drawing Applications; Architectural Drawing; and 3-D Solid Modeling.

PRINCIPLES OF TECHNOLOGY I (15041)

Students will be introduced to advanced problem-solving methods. The focus of the course is to develop a means of designing solutions to technical problems through brainstorming, analysis, prediction, construct testing and test result evaluation. Students will be presented with hypothetical or actual problems and proceed in small groups or individually, to create solutions. Presentation and analysis are culminating activities.

Some units covered in this course include: Communications; Transportation; Power Technology; Construction; Research Applications; Word Processing; and C. A. D.

PRINCIPLES OF TECHNOLOGY II (15042)- **Prerequisite:** Principles of Technology I

Principles of Technology II is the second course in a sequential series in the technology curriculum. Students will be introduced to STEM (Science, Technology, Engineering, and Math) while working on a project as a group or individually. A number of STEM activities will be applied to help students as they design and build a fully working electric guitar. This exciting project can be done as a group, where a guitar will be built for a school organization or local business or individually, where the student will purchase the kit and build the guitar. No guitar playing experience is necessary for this class, but certainly is welcomed.

Some units covered include: woodworking, engineering, 3D design (solid works), prototyping, electronics, guitar setup, science and mathematics that apply to guitar use and design, research applications, word processing.
*****If a student would like to build his or her own guitar, there will be a cost involved. This is not a requirement and arrangements will be made for a student to build a guitar for a group or organization, at no cost to them.*****

VIDEO PRODUCTION II (15089)- Prerequisite: 85% or higher in Video Production

The Video Production II curriculum will build upon the foundation established in Video Production, delving deeper into production (filming) processes and post-production (editing) concepts using Adobe Premiere Pro. Students will also be introduced to motion, graphics, animation, and special effects through the use of Adobe After Effects. In addition, the school's Television Studio, teleprompters, and green-screen will be a valuable resource as students expand their experience with the various facets of Video Production.

Video Production II will focus on advanced aspects of the production process and will require a more independent and self-disciplined approach on behalf of the students. Over the course of the semester, students will produce multiple projects that incorporate advanced filming techniques, editing concepts, and visual effects processes, each of which allow for interdisciplinary connections to nearly all PA Core subject areas.

WELLNESS AND FITNESS

Wellness/Fitness I: All Freshmen
Wellness/Fitness II: All Sophomores
Wellness/Fitness III: All Juniors

Wellness and fitness are essential for the healthy development of each student and our community as a whole. The well-being of our students will largely determine the quality of life they will have throughout their lifetime. To thrive in our ever-changing world, our students will acquire and use knowledge, skills and habits necessary to promote individual, family, and community wellness and fitness. During our students' three-year participation in wellness and fitness, they will focus on completing outcomes in concepts of health, healthful living, safety and injury prevention, physical activity, and concepts, principles, and strategies of movement.

Units in these courses include: CPR/AED/First Aid, Nutrition, Drugs and Addiction, Human Growth and Development, Strength Training, Lifetime Fitness, Fitness Testing, and Sports related physical activity including skill development and game strategy.

IMPORTANT: If a student successfully completes Wellness/Fitness I, II, and III they will not take a gym course during their senior year.

DUAL ENROLLMENT OFFERED AT NORTHERN LEHIGH

****LCCC RESEARCH & COMPOSITION (15150)- Prerequisite:** Students will have successfully passed LCCC's placement exam or other qualifying factors as determined by LCCC.

Meets daily – 1 Honors English Credit - 3.0 College Credits Cost: TBD

In this course, 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. A minimum of 12 students must be registered for this course to be offered.

****LCCC CALCULUS AND ANALYTIC GEOMETRY I (15349)- Prerequisite:** Students will have passed Trigonometry (Honors or Academic) and met the appropriate prerequisites required by LCCC to register for this course.

Meets daily – 1 Honors Math Credit - 3.0 College Credits Cost: TBA

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

****LCCC PAINTING I (15075)– Prerequisite:** Recommended for 10, 11, 12 grade

Meets daily – 1 Honors Humanities Credit - 3.0 College Credits Cost: TBA

This course includes basic instruction in form, color, value, composition, and historical material. The media will include oil and acrylic. Students are encouraged to create works driven by personal expression.

****LCCC FUNDAMENTALS OF EARLY CHILDHOOD EDUCATION (16221) - Prerequisite:** Students must have taken and passed Child Development and/or Child Development the Early Years and must be in 11th or 12th grade.

Meets daily – 1 Honors Humanities Credit - 3.0 College Credits Cost: TBA

Course offers an analysis of Early Childhood Education through historical, theoretical, current, and future perspectives. Discussion of principles of curriculum models, key theorists, current teaching trends and best practices is included. Emphasis will be on professional organizations, environments, cultural diversity, families, and community resources.

This course is appropriate for students who are interested in working with children in a professional environment. This may include Childcare Provider, Preschool teacher/Aid, Elementary Teacher, School Counselor, Psychologist/Psychiatrist, Behavioral Specialist, Nurse and/or the medical field, etc.

****LCCC INTRODUCTION TO SOCIOLOGY (15102)-Prerequisite:** Students will have successfully passed LCCC's placement exam or other qualifying factors as determined by LCCC.

Meets daily – 1 Honors Social Science Credit - 3.0 College Credits Cost: TBA

This course introduces students to the scientific study of society. We examine the way our society is structured and the social inequalities that shape the lives of different classes, racial and ethnic groups, and genders. We explore how social institutions create these inequalities and how they teach us to understand and take action in our world. We study some of the consequences of globalization for work, wealth, inequality, migration, and social change.

NLHS PROGRAM OF STUDIES 2024-25

IMPORTANT INFORMATION REGARDING DUAL ENROLLMENT COURSES:

1. **Any dual enrollment course that is preceded with (**) WILL BE calculated in the student's grade point average (GPA) as an honor's course and class rank. Any dual enrollment course that DOES NOT have asterisks WILL NOT be calculated in the student's grade point average and class rank.**
2. **Students interested in enrolling in these courses must follow all guidelines established between Northern Lehigh and LCCC. These guidelines can be found on the Northern Lehigh High School Guidance page at www.nlsd.org/srhsnlsd/**
3. **Students will be given instructions on how to enroll in these courses through the guidance department.**
4. **Course descriptions can be found at www.lccc.edu/academics/course-search**
5. **LCCC College Research and Composition offers Block 4 one semester and Block 1 the other semester. Class will run two days a week, which will be determined prior to each semester and students will be notified. No classes will be held on Friday. If a student does not have a class scheduled during one of these days during the time that the course is offered, they will be required to leave campus. This will result in students finding their own method of transportation.**
6. **We are also partnered with Cedar Crest College to provide asynchronous courses. Your student must work with their school counselor to decide if this is the right option for them.**

NLHS PROGRAM OF STUDIES 2024-25

NCAA APPROVED COURSES

ENGLISH
15116 Academic English I
15118 Honors English I
15126 Academic English II
15128 Honors English II
15136 Academic English III
15128 Honors English III
15146 Academic English IV
15149 AP English Literature & Composition
15153 AP English Language & Composition
15168 Public Speaking
15147 Creative Writing

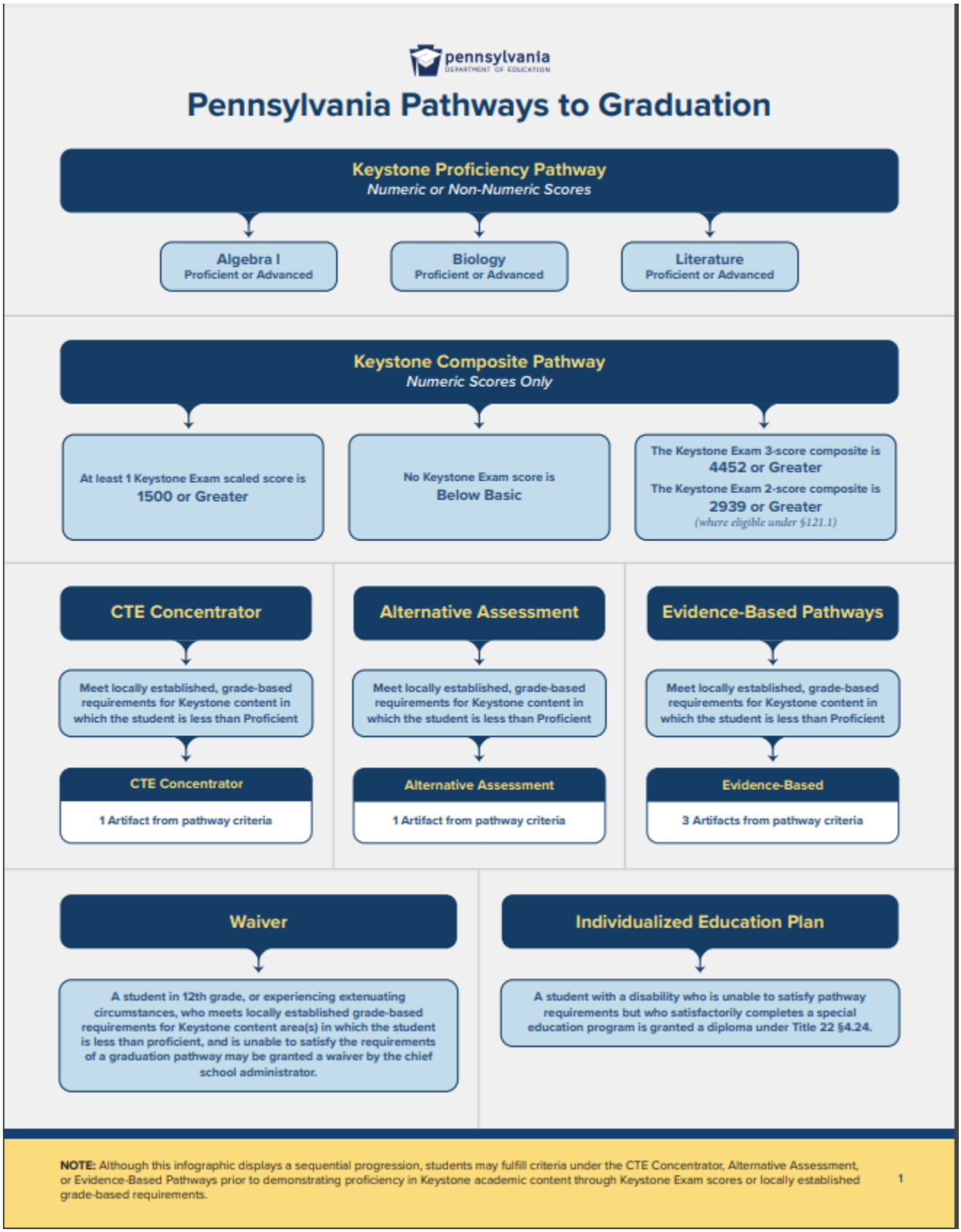
SOCIAL STUDIES
15216 US History II
15218 Honors US History II
15226 US History III
15228 Honors US History III
15236 World History
15239 Honors World History
15230 The Second World War
15237 Psychology
15248 Sociology
15252 Intro. To Economics
15246 Civics: Govt & Econ
15250 Honors Civics:Gov & Econ
15254 Honors Psychology
15229 AP US History
15240 AP European History

FOREIGN LANGUAGE
15516 Spanish I
15526 Spanish II
15536 Honors Spanish III
15546 AP Spanish Language and Culture

MATHEMATICS
15301 Academic Algebra I
15302 Academic Algebra IB
15303 Academic Geometry
15307 Academic Algebra II/Trig.
15322 Honors Algebra II
15324 Honors Geometry
15339 Honors Trigonometry
15336 Probability & Statistics
15345 Intro Calculus
15347 Calculus
15348 AP Calculus

SCIENCE
15420 Honors Integrated Science
15422 Honors Ecology/Cell Processes
15429 Honors Biology I
15418 Academic Integrated Science
15426 Academic Ecology/Cell Processes
15428 Academic Biology I
15432 Anatomy
15433 AP Biology
15439 Chemistry I
15440 Honors Chemistry I
15442 Honors Chemistry II
15443 Advanced Chemistry
15447 Honors Physics I
15448 Physics I
15449 Honors Physics II

ELECTIVES
15041 Principles Technology I
15042 Principles Technology II


pennsylvania
DEPARTMENT OF EDUCATION
Pennsylvania Pathways to Graduation
Keystone Proficiency Pathway
Numeric or Non-Numeric Scores
Algebra I
Proficient or Advanced
Biology
Proficient or Advanced
Literature
Proficient or Advanced
Keystone Composite Pathway
Numeric Scores Only
At least 1 Keystone Exam scaled score is
1500 or Greater
No Keystone Exam score is
Below Basic
The Keystone Exam 3-score composite is
4452 or Greater
The Keystone Exam 2-score composite is
2939 or Greater
(where eligible under §121.1)
CTE Concentrator
Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient
CTE Concentrator
1 Artifact from pathway criteria
Alternative Assessment
Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient
Alternative Assessment
1 Artifact from pathway criteria
Evidence-Based Pathways
Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient
Evidence-Based
3 Artifacts from pathway criteria
Waiver
A student in 12th grade, or experiencing extenuating circumstances, who meets locally established grade-based requirements for Keystone content area(s) in which the student is less than proficient, and is unable to satisfy the requirements of a graduation pathway may be granted a waiver by the chief school administrator.
Individualized Education Plan
A student with a disability who is unable to satisfy pathway requirements but who satisfactorily completes a special education program is granted a diploma under Title 22 §4.24.
NOTE: Although this infographic displays a sequential progression, students may fulfill criteria under the CTE Concentrator, Alternative Assessment, or Evidence-Based Pathways prior to demonstrating proficiency in Keystone academic content through Keystone Exam scores or locally established grade-based requirements.
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pennsylvania
DEPARTMENT OF EDUCATION

Pathway Criteria

CTE Concentrator

1 Artifact

- Industry-based competency certification
- Likelihood of industry-based competency assessment success
- Readiness for continued engagement in CTE Concentrator program of study

Alternative Assessment

1 Artifact

- Attainment of one alternative assessment score or better: ACT (21), ASVAB AFQT (31), PSAT/NMSQT (970), or SAT (1010)
- Attainment of Gold Level or better on ACT WorkKeys
- Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient
- Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient
- Successful completion of concurrent enrollment course(s) related to each Keystone content area in which less than Proficient
- Successful completion of a pre-apprenticeship program
- Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4yr program for college-level coursework

Evidence-Based

3 Artifacts consistent w/student goals

ONE or more from Section One
No more than TWO from Section Two

Section 1

- Attainment of 630 or better on any SAT Subject Test
- Attainment of Silver Level or better on ACT WorkKeys
- Attainment of 3 or better on any AP Exam
- Attainment of 3 or better on any IB Exam
- Successful completion of any concurrent enrollment or postsecondary course
- Industry-recognized credentialization
- Acceptance into accredited, non-profit Institution of Higher Education (IHE) for college-level coursework in an other-than-4yr program

Section 2

- Attainment of Proficient or Advanced on any Keystone Exam
- Successful completion of a service-learning project
- Letter guaranteeing full-time employment or military enlistment Completion of an internship, externship, or cooperative education program
- Compliance with NCAA Division II academic requirements

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