

PROGRAM OF **STUDIES** 2025 - 2026

APPROVED BY SAUCON VALLEY SCHOOL BOARD DIRECTORS

The Program of Studies is a School Board approved document that represents the policies and procedures involved in scheduling students at Saucon Valley High School. The ultimate goal of the Saucon Valley High School curriculum is to provide challenging educational opportunities for all students as they prepare for a future in college and the workplace. While different career aspirations will result in different course pathways during the high school years, SVHS remains steadfast in its commitment to educate a future workforce capable of successfully competing in the global economy for the 21st century. Student enrollment in courses will be based upon the appropriateness of the coursework to future career goals, whether those goals include post-secondary education at a two- or four-year college or technical school, entrance into the military service, or gainful employment in a vocational setting.



610-838-7001



www.svpanthers.org

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The Saucon Valley High School Program of Studies is your guide to understanding the courses and opportunities available for students as they plan their high school journey. It's designed to help students and families navigate course selection, aligned with individual goals, whether that path leads to college, technical school, the military, or the workforce. With a commitment to providing challenging and meaningful learning experiences, our curriculum prepares students for success in the 21st-century global economy. By exploring the Program of Studies, you can identify courses that support your future plans and make the most of your high school experience.

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### **SVHS Information & Services**

#### COUNSELING SERVICES

The high school counselors support the school district's mission to, "empower growth, inspire creativity, and embrace diversity through an engaging and challenging educational experience, locally and globally," and work to ensure "students become effective, responsible citizens and productive members of the workforce, while addressing their unique academic and career pathways." The counselors are consultants, collaborators, and advocates for students focusing on academic, career, and personal/social issues. Every year, the counselors meet with each student on their caseload. During this appointment, the counselors concentrate on checking credits for graduation and discuss important academic issues, including current performance, course selection for the upcoming year, and post-secondary planning. The counselors also review students' extracurricular activities and interests.

Contact your counselor at 610-838-7001 ext. 2720

#### Counselors

Katie Fisher ext. 2706 Students with the Last Name A - L Matthew Dezzi ext. 2714 Students with the Last Name M - Z

Angela Rohrbaugh ext. 2715 Mental Health Counselor - Student Support

### **Graduation Requirements**

### **COURSE CREDIT REQUIREMENTS**

Each student must earn a minimum of 21 credits in grades 9 through 12 and demonstrate proficiency on the Algebra I Keystone Exam, Biology Keystone Exam, and Literature Keystone Exam in addition to the Career Indicator requirements.

Units of Credits Required per Department for Graduation:

- 4.0 English
- 3.0 Mathematics
- 2.5 Science
- 2.0 Social Studies United States History (1 credit), World History (.5 credit), and Government (.5 credit)
- 1.0 Physical Education/Health
- 8.5 Elective

#### **GRADUATION CREDIT FOR MIDDLE SCHOOL COURSES**

Generally, graduation credits are those earned by completing courses while enrolled in Saucon Valley High School. The numbers of graduation credits earned for regular high school courses are noted in the Program of Studies guide. The Program of Studies also notes the number of graduation credits required to graduate from high school.

Planned courses taken at Saucon Valley Middle School will be considered for graduation credit if equivalent to the Saucon Valley High School course requirements. Courses for such consideration may include but are not limited to: Algebra I, Geometry, and World Languages I. The credit granted for middle school course completion would count as subject credit.

#### COURSE SELECTION CONSIDERATIONS FOR ALL STUDENTS

Careful course planning is essential when trying to develop the best possible program for each student. Students are expected to read through the content of the course selection guide prior to submitting course requests. Particular

attention should be made to all details of a course, including the course description, course prerequisite requirement(s), and departmental grade recommendations. Selecting a course of study is a serious undertaking and students are more successful when they carefully review the course offerings, communicate with parents, teachers, and school counselors with any questions, and consider priorities and extracurricular commitments which impact their daily lives. Additional considerations for students may include:

- Particular academic strengths, weaknesses, and interests
- Past academic performance
- Demonstrated work ethic and future educational and vocational goals
- Realistic evaluation of time demands from commitments and extracurricular activities

#### COURSE LEVEL DESCRIPTIONS

All levels at Saucon Valley High School provide the skills and abilities to prepare students for colleges, universities, and other postsecondary career opportunities. Content mastery, critical thinking, communication, creativity, collaboration, and citizenship are fundamental practices incorporated into all instructional levels. A range of courses is provided to meet students' diverse academic needs, with placements based on test scores, prerequisite grades, and teacher recommendations. All students are encouraged to take courses suited to their ability level; opting for a lower level for convenience is not allowed. Special Education Department recommendations are required for courses outside these levels.

#### **CORE COURSES**

These courses prepare students for life after high school, with a curriculum designed to build essential skills and independent learning. They are paced to ready students for post secondary education and the workplace, with unweighted grades.

#### **HONORS COURSES**

Honors courses offer an accelerated pace and more complex content for college-bound students, requiring a strong foundation and self-motivation. They are rigorous, with weighted grades to reflect the challenge. A considerable amount of outside work is expected. Students must exhibit a willingness to accept the challenge of a rigorous academic curriculum.

Characteristics and Expectations of an Honors-Level Student

- Demonstrates independence and develops conceptual thinking skills
- Shows strong intellectual curiosity, motivation, and ability to work independently
- Commits to completing outside research, nightly assignments, and engaging in class discussions
- Seeks to develop cognitive skills, with a focus on analyzing, synthesizing, and evaluating complex concepts

#### **ADVANCED PLACEMENT (AP) COURSES**

AP courses follow College Board guidelines, providing a college-level experience for motivated students. These courses demand independent learning, often include pre-course work, and are weighted. Students are encouraged to take the AP exam, which may lead to college credit. Students should carefully consider the workload if enrolling in multiple AP courses due to their high expectations and rigorous requirements.

Characteristics of an AP Student

- Highly motivated with a strong desire to be challenged by advanced content
- Willing to explore topics in depth and engage in scholarly research
- Embraces a college-like, inquiry-based learning style
- Prepared to handle a demanding workload, including independent reading, writing, problem-solving, and critical thinking
- Actively contributes ideas and demonstrates creativity
- Works consistently to build conceptual understanding and shows independence

#### Expectations for Students in an AP Course

- Engages in an accelerated pace and enriched content to develop higher-order thinking skills
- Contributes intellectually and creatively to the course
- Maintains a college-level effort throughout the course
- Manages time effectively to meet the course's increased workload and independence requirements

#### **DUAL ENROLLMENT**

Saucon Valley students can earn college credits for taking certain courses while also fulfilling Saucon Valley's graduation requirements. Credits earned can be applied to a degree from the colleges/universities with whom we have partnered and may also be considered for transfer to other institutions of higher learning. Some courses are taught at the high school by a Saucon Valley teacher and others by a college professor on or off campus. Tuition fees vary by institution, and students and their families are responsible for all costs and any travel (for off campus offerings) associated with these courses. In addition, if a student is interested in transferring these credits to another institution of study, students and their families are responsible for contacting their schools of interest to determine if credits will be accepted at these schools.

#### FINANCIAL RESPONSIBILITY

Students taking a dual enrollment course (i.e., one which offers to provide both credit for District high school purposes and college credit), must pay all of the cost required to attain the college credit. High school credit for the dual enrollment course will still be awarded even if the student elects not to pay for and receive the college credit.

Students taking an AP course must pay all of the cost for taking the AP examination. High school credit for the AP course will still be awarded even if the student elects not to pay for and take the AP examination and thus not receive any associated college credit and/or college course acceleration.

If a student participates in an online course which is arranged or approved by the district as part of the student's education in order to provide acceleration for the student within the scope of the district's curriculum, the district will pay all of the costs of the online course. (SVSD Policy 215.1 Acceleration)

#### **COURSE ADVANCEMENT**

Course advancement is one form of acceleration. Students and/or parents/guardians requesting course advancement shall submit the request on the District's Request for Acceleration Form.

When considering a request for course advancement, the acceleration evaluation team will consider whether the student meets the following criteria specific to course advancement:

- 1. Whether the student has maintained an average of at least 85% (B) in all prior courses of the academic discipline in which the challenged course resides; if no prior courses exist, this criterion is waived.
- 2. Students seeking subject credit/exemption for physical education pursuant to this policy must (1) demonstrate a history of participation in a particular sport/activity at an appropriate level, (2) obtain certification from a coach/advisor that the student completed the season/activity, and (3) receive a passing score greater than or equal to 70% (Qualification No. 1 above, does not apply) on the written exam.
- 3. For all other courses, the student must attain a score of at least 85% (B) on the final examination for the challenged course; the final exam will be constructed on the content standards deemed appropriate for the course by the principal and/or his/her designee. The exam taken must meet the prerequisites for the next level course. Keystone required courses must be taken by students. (SVSD Policy 215.1 Acceleration)

NOTE: Subject credit earned by exam will not yield graduation credit but will fulfill the specific course requirement.

#### ADVANCEMENT GUIDELINES

If a student successfully advances, no credit will be assigned for the eliminated course nor will the eliminated course be used for ranking purposes; the student simply advances to the next level course. If no course exists, the principal will assign an independent study except in the case of physical education, where the student will be required to choose any available elective. The advanced course will then be counted toward graduation credit.

Students who wish to advance out of a course must take the examination twenty (20) school days prior to the beginning of the semester in which the challenged course is offered. The principal must be notified twenty (20) school days prior to the scheduling of the examination.

A student may advance out of only one (1) course per semester.

Courses with a laboratory, shop, or performance component cannot be challenged unless a similar component is included in the examination.

Alternative experiences may be considered by the principal and his/her designee, e.g., extracurricular activities, work experience, etc. However, some form of examination must occur during which the student demonstrates s/he successfully meets course standards at an 85% level of performance.

In courses for which no appropriate final examination exists, the principal has the discretion to conduct his/her own assessment and determine whether or not a student can be advanced. (SVSD Policy 215.1 Acceleration)

#### **GRADING SCALE & CALCULATIONS**

Grade Point Average (GPA) will be calculated at the end of each marking period and will be printed on the official transcript. Some post-secondary institutions often use the combination of the student's GPA and score on the SAT or ACT along with other selection criteria unique to the institution in making admissions decisions.

Students who receive a letter grade of "A", "B", "C" or "D" in a weighted course will be awarded additional grade points. The table below represents the weighted and non-weighted point values for full-credit courses. Dual Enrollment (DE) courses allow a student to earn college and high school credit; however, DE courses taken off-campus do not count in GPA or class rank. (SVSD Policy 215.1)

GRADE	NUMERIC RANGE	STANDARD GRADE POINTS	HONORS GRADE POINTS	AP GRADE POINTS
A+	97-100	4.33	4.83	5.33
Α	93-96	4.00	4.50	5.00
A-	90-92	3.67	4.17	4.67
B+	87-89	3.33	3.83	4.33
В	83-86	3.00	3.50	4.00
B-	80-82	2.67	3.17	3.67
C+	77-79	2.33	2.83	3.33
С	73-76	2.00	2.50	3.00
C-	70-72	1.67	2.17	2.67
D+	67-69	1.34	1.84	2.34
D	65-66	1.00	1.50	2.00
F	55-64	0.00	0.00	0.00
F-	54 or less	Not eligible to attend	Summer Learning Aca	demy

#### **KEYSTONE PATHWAYS TO GRADUATION**

In addition to the above listed graduation requirements, students must demonstrate mastery of the PA Core Standards. Senate Bill 1095, which was signed into law by Governor Tom Wolf in 2018, shifts Pennsylvania's reliance on high stakes testing as a graduation requirement to provide alternatives for high school students to demonstrate readiness for postsecondary success. Pennsylvania Department of Education (PDE) provides five (5) pathways for students to demonstrate proficiency in order to graduate:

- 1. Keystone Proficiency Pathway Score Proficient or Advanced on all three Keystone exams (Algebra 1, Biology, and Literature).
- 2. Keystone Composite Pathway Score Proficient or Advanced on one of the three exams (Algebra 1, Biology, and Literature) without scoring Below Basic in either of the other two, with a combined score of at least 4452 out of 5400 possible points.
- 3. Career and Technical Education Concentrator Pathway Students must enroll in a CTE program and pass at least half of the courses in the program, earn passing grades in any content area in which the student did not pass the corresponding Keystone exam, and either attain an industry-based CTE certification, demonstrate a high likelihood of success on an industry-based competency exam (the NOCTI or the NIMS), or earn a passing score on either a NOCTI pretest or, for courses with no corresponding NOCTI test, the final exam for a CTE-related course.

- 4. Alternative Assessment Pathway Students must earn passing grades in any content area in which the student did not pass the corresponding Keystone exam, and either: earn a specified score on a comprehensive alternative assessment (e.g., SAT); OR pass an alternative assessment (e.g., AP exam) or a dual-enrollment class for each subject they did not score proficient or advanced in on the corresponding Keystone exam; OR complete an approved pre-apprenticeship program; OR gain acceptance into a four-year higher education program.
- 5. Evidence-based Pathway Students must earn a passing grade in coursework corresponding to any Keystone exam the student did not pass, and demonstrate three approved pieces of evidence of aptitude in areas that could help the student achieve success in life after high school.

#### Click here for a <u>visualization of the different Keystone Pathways</u>.

#### **Keystone Exams**

Keystone Exams are taken as an end-of-course exam when the student is enrolled in Algebra 1, Literature, and Biology. If a student does not receive an "Advanced" or "Proficient" on an exam, the student is permitted to re-test during designated windows established by PDE until the end of their junior year of school.

Keystone Exam & Score Range	Below Basic	Basic	Proficient	Advanced
Algebra 1	1200-1438	1439-1499	1500-1545	1546-1800
Biology	1200-1459	1460-1499	1500-1548	1549-1800
Literature	1200-1443	1444-1499	1500-1583	1584-1800

#### INDEPENDENT STUDY

#### School Board Policy 118

Through Independent Study students may expand their knowledge of a particular subject of personal interest beyond the scope of the regular curriculum. The student's self-directed inquiry, investigation, and/or production will enable them to support or refute whatever hypotheses they have developed with the help and advice of a faculty mentor.

- Students who wish to undertake Independent Study should first contact their school counselor at least one quarter before the proposed project would take place.
- The Independent Study cannot replace a required course and must be beyond the scope and sequence of the regular curriculum.
- The student is responsible for engaging a faculty member as their sponsor and creating a proposal that includes: credit value, methods of assessment, timelines and milestones, and a department chairperson review.

The counselor will provide the student with specific details and feedback. All proposals must be approved by the building principal, superintendent, and school board

### NCAA ELIGIBILITY REQUIREMENTS

In recognition of its responsibility to ensure that student-athletes have every chance to get an education, the National Collegiate Athletic Association (NCAA) has implemented a series of increasingly strict academic standards. A student who wants to compete in either Division I or II sports must complete 16 core academic courses (ten of which must be completed by the end of junior year) and achieve a core-course grade point average. The minimum GPA you can have to be considered an early academic qualifier for D1 is a 2.3 GPA. You will need a 2.2 GPA to be eligible at the D2 level. The NCAA Eligibility Center will evaluate your academic and athletic experiences based on information you provide through your eligibilitycenter.org account.

Students who want to be an athlete at either a Division I or II school must register with the NCAA Eligibility Center. Students can register online at: <a href="https://web3.ncaa.org/ecwr3/">https://web3.ncaa.org/ecwr3/</a>. Students should complete the registration process by the end of their junior year in high school. The high school counselors will submit transcripts to the NCAA Eligibility Center for juniors who are registered with the NCAA as of the last day of that school year.

#### **COLLEGE AND CAREER READINESS**

To help make sure that all students in Pennsylvania are prepared for life after high school, the PDE has added a measure of students' career exploration and readiness in the Future Ready PA Index, which is part of the state and federal accountability system under the Every Student Succeeds Act (ESSA). This Career Readiness Indicator recognizes efforts to provide students with access to activities that help them explore different careers and prepare for their futures. These activities are standards-based and designed to help students create a career portfolio that outlines their interests, goals, and potential pathways after high school. SVHS has identified a wide variety of curricular and extracurricular opportunities that students can complete throughout grades 9-11 and incorporate into the Career and College Readiness Portfolio. Students will use SmartFutures and Google Classroom to store individual artifacts.

#### **Career & Technical Programs**

#### **Bethlehem Area Vocational Technical School (BAVTS)**

Saucon Valley High School partners with Bethlehem Area Vocational Technical School (BAVTS) to expand course options and provide students with hands-on, career-focused skills across various fields. First-year students attend in the morning, while second- and third-year students attend in the afternoon. For more information, visit the <a href="BAVTS">BAVTS</a> Program of Study.

#### **Project Lead the Way (PLTW)**

PLTW is a leading Science, Technology, Engineering, and Math (STEM) program offering a hands-on curriculum in STEM. Through activities, projects, and problem-solving, students develop critical thinking, creativity, and innovation skills while tackling real-world challenges. PLTW courses prepare students for college and careers in STEM fields, exposing them to studies and skills that support future success.

### **Academics and Programming**

#### SCHEDULING

#### **Course Availability Statement**

This booklet provides information on all courses offered at Saucon Valley High School. Please note, however, that some courses may be canceled or postponed due to low enrollment, limited facilities, or teacher availability. After the initial schedule is created for each student, counselors review it to ensure accuracy. Occasionally, a student's first-choice course may not be available because it's full, doesn't fit their schedule, or isn't running. In these cases, the counselor will help the student choose an available course for that time slot.

It's essential that students carefully consider their course selections during registration, as these choices are a commitment for the upcoming school year. Accurate course counts during registration help determine the number of sections offered and teacher assignments, so thoughtful planning is key to ensuring a smooth scheduling process for everyone.

#### **Schedule Change Process**

Our goal is to ensure each student has a schedule that supports their success and growth. Once the master schedule is set, there are fewer options for changes, so we encourage students to select courses carefully. If a change is needed due to changing circumstances, students should reach out to their counselor to discuss options. Changes made before the school year begins should be made in coordination with their teacher and counselor to determine the best possible fit. The expectation is that students will follow their selected schedules, and only changes with an educational basis will be considered.

#### **Key Points for Schedule Changes**

• Students have the first *five days* of a course to withdraw and add an alternate course for credit, pending approval. Withdrawals within the first five days are allowed.

- After the *fifth class* meeting, courses may not be dropped.
- Year-long courses require a meeting with the student's teacher, counselor, and parent to consider the impact on credits.

If a student needs to withdraw after the *fifth day*, they must select an alternate course available at the same time, pending approval. A "WP" (Withdrawal/Passing) will be recorded on the transcript if the student is passing the course with a 65% or better. A "WF" (Withdrawal/Failing) will be recorded on the transcript if the student is failing the course with a 64% or less. No credit is awarded for WP or WF.

#### SPECIAL PROGRAMS & SCHEDULING OPPORTUNITIES

#### English as a Second Language | School Board Policy 138

SVSD shall provide an appropriate planned instructional program for identified students whose dominant language is not English. The purpose of the program is to increase the English language proficiency of eligible students so that they can attain the academic standards adopted by the board and achieve academic success.

#### **Gifted Education | School Board Policy 114**

The purpose of gifted programming in Saucon Valley School District is to support the academic and social-emotional needs of gifted and advanced students by providing learning opportunities, which are more in-depth and may be presented at a faster pace. In keeping with the PDE Chapter 16 regulations, a Gifted Individual Education Plan (GIEP) will be developed annually for students who are identified mentally gifted. A student is identified as mentally gifted if they have a full-scale IQ of 130 or above, or if multiple criteria strongly indicate gifted ability. Specifically Designed Instruction for students with a GIEP primarily takes place in the regular education classrooms. There are a variety of rigorous courses designed to provide an academic challenge and depth of learning appropriate for many gifted students.

#### **Special Education | School Board Policy 113**

Each student with a disability who is a resident of the district shall be provided quality education programs and services that meet the student's needs for educational instructional, transitional and related services. The special education program is designed to integrate the programs of special education with the regular instructional program of the school, consistent with the interests of the student with the disability. Students with disabilities shall be identified, evaluated, and provided with appropriate educational services, in accordance with federal and state laws and regulations.

#### Academic Coaching and Intervention | Credit - 0.5 per Semester

This course is designed for students with individualized plans of studies. The purpose of this course is to continue to improve reading, writing, mathematics, and executive functioning skills based on the student's needs. Instruction will be provided in a small group setting in the learning support classroom. Students are then given the opportunity to apply these intervention strategies and executive skills to their core academic courses. Students can earn up to 1 credit per school year in Academic Coaching and Intervention class.

PREREQUISITE: Approval of Special Education Department

#### Job Credit | Credit - 0.5 per Semester

Students are eligible to earn credits for having a job during their junior and senior years. Students must work a minimum of 5 hours per week or 90 hours total in order to qualify for this opportunity. Students must verify their hours and complete a reflection at the end of each term.

PREREQUISITE: Approval of school counselor and verification of employment

#### **Experiential Learning | Credit - 0.5 per Semester**

Experiential learning is the process of learning through action. Students gain content knowledge through instruction community service, civic engagement, internship, research/independent study projects, and cultural immersion. PREREQUISITE: Students will be required to complete a Student Engagement Application and have approval from administration

#### Functional Transitions | Credit - 0.5 per Semester

This course is designed for students with individualized plans of studies. It will provide students the opportunity to learn how to problem solve in the context of the real-world environment. This class will focus on citizenship, community and the daily issues that affect the individual. Classroom activities will focus on real-world applications, vocational skills, personal-care skills, and functional academics that will allow students to reach their maximum independence. This class will allow for exploration of employment options such as volunteerism, independent and/or support work settings.

PREREQUISITE: Approval of the Special Education Department

#### Saucon Valley Global Scholars Program

The Saucon Valley Global Scholars Program is inclusive for all high school students and provides the opportunity to meaningfully select interdisciplinary studies and activities, develop global awareness/competency, and prepare themselves for personal and professional success in an increasingly global society. During grades 9-12, the following four components, each of which has a global focus, must be achieved and approved:

Course Work - Successful completion of the following:

- 1. Course Work Successful completion of the following:
  - o Grade average of B or better
  - o Four (4) credits (or equivalent) of consistent World Language and
  - Four (4) additional credits toward graduation that are already part of the school's course of study and for which a
    primary component is global in nature
- 2. Extracurricular Activities Active participation in a minimum of four (4) activities
- 3. Service Hours Active participation in a minimum of twenty (20) hours
- 4. Literature/Media Reviews Completed a minimum of eight (8) review, four (4) of which are books

After completing all of the criteria, students qualify for a Global Scholars Certificate and Global Scholars Honor Cord to wear at graduation.

#### Summer Learning Academy | School Board Policy 124

Students who fail an English, social studies, science or mathematics course should make up the credit during Summer Learning Academy. This is particularly important for students who attend BAVTS as there is insufficient room to repeat courses in a vocational-technical schedule. Some elective courses may be available for Summer Learning Academy based on enrollment. A student must have earned a 55% to be eligible for Summer Learning Academy. Summer Learning Academy is currently offered as a cyber-school option only; please see the Counseling Office for more details. *NOTE: A fee is charged for each course taken during the Summer Learning Academy session.* 

### **COURSE OFFERINGS**

### **BUSINESS DEPARTMENT**

The Business Department offers a wide variety of courses, which provide valuable life skills in an ever-changing global marketplace.

Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
ACCOUNTING .5 Credit Semester	Accounting will enable students to acquire an understanding of basic accounting principles and procedures for a sole proprietorship and partnership. Simulated office experiences will be provided to help the student understand the accounting cycle using special journals. Students will complete an accounting cycle simulation during the final weeks of the course. This simulation will serve as the course's final exam.	ELECTIVE
BUSINESS COMMUNICATIONS & APPLICATIONS .5 Credit Semester	Business Communications & Applications will teach students how to use technology as a tool to solve problems. Using Google Docs and Microsoft Office, the focus will be on word processing, spreadsheets, databases, and presentations. Various practical problems will be used to illustrate personal and business applications to make fact-based decisions. Students will learn the practical skills necessary for effective on-the-job communication. Activities focused on resume and letter writing, interview techniques, listening skills, and organizational skills will prepare students to enter the job market and communicate effectively with customers, co-workers, clients, patients, and others. These activities will be supplemented by such topics as time management, stress management, and making successful presentations. In addition to becoming proficient communicators, students will gain confidence in speaking and an awareness of their own communication strengths and needs.	ELECTIVE
ENTREPRENEURSHIP .5 Credit Semester	Entrepreneurship introduces students to the basic principles of business, with a specific focus on owning and managing one's own business. Students will examine the major steps involved in starting a new business, including the marketing, financing, budgeting, managing, purchasing, staffing, and legal aspects. Students will be provided with real-world examples of entrepreneurs who have changed the business world. In addition, students will extend their understanding of concepts through a comprehensive computer simulation in which they will be responsible for operating a convenience store.	ELECTIVE
FINANCIAL MANAGEMENT & INVESTING .5 Credit Semester	This course is a life skills and financial planning course designed to alert, inform and educate high school students in the financial skills needed for today's world. Concepts covered include: time management and health, finding a job, budgeting and saving, finding an apartment, buying a car, shopping, choosing and balancing a checking account, getting a credit card, fixing your credit, education and advancement, using online banking, paying your taxes, introduction to investing, buying a home, and insurance. Current articles, vocabulary, lecture, discussions, and a comprehensive computer simulation will be the instructional tools. Students will review various investment choices with a focus on financial markets and real estate. Leverage, OPM, risk vs return, diversification, investing for retirement, short term goals, and long-term goals will be some of the topics discussed when looking at an investment. The course will consist of researching for opportunities, evaluating those opportunities, creating a plan, monitoring the plan, and a final determination of the investment.	ELECTIVE

#### **ENGLISH DEPARTMENT**

The English program is designed to guide students through a challenging and diversified literature-based curriculum. Students study a number of literary genres, analyzing its respective conventions and contributions to the world of literature. Thematic study of various fiction and nonfiction works will include student responses in writing, large- and small- group discussion, projects, and oral reports. **Four (4) credits are required for graduation**.

#### Course Name Credit Length

#### **COURSE DESCRIPTIONS**

Recommendations & Course Prerequisite Requirement(s)

#### **ENGLISH I**

1 Credit Year-long This course is a regular education English course designed to meet the communication and literacy needs of students who are Entering (0-1.9) or Beginning (2.0-2.9) English language learners. Students will develop basic interpersonal communication skills in English through listening, speaking, reading and writing components. Students will also develop the beginning academic language in English for listening, speaking, reading and writing to help students understand English in content classes. Course content emphasizes conversational skills, vocabulary development, guided and shared reading with limited independent reading, basic grammar and writing instruction and culture studies. Periodic, on-going assessment and testing is both formal and informal to gauge the student's acquisition of language and his/her understanding of English content. A summative final exam is given. Students must achieve a 2.9 English language proficiency level to advance to the next course level with teacher approval.

Approval from Student Services Department

#### **ENGLISH II**

1 Credit Year-long This course is a basic level regular education English course designed to meet the literacy and academic language needs of students who are high beginning (2.5), developing (3), or beginning expanding (4) English language learners. Students will develop and refine intermediate academic communication skills in listening, speaking, reading and writing and use those skills with academic content. Course content is structured to move students toward meeting PA Standards. Emphasis is placed on development of background knowledge, vocabulary knowledge, grammar, reading comprehension and writing. Periodic, on-going assessment and testing is formal and informal to gauge both the student's continuing acquisition of language as a reader and writer in English, as well as to measure student understanding of course content and application of skills. A summative final exam is required. Students must achieve at least a 3.5 English language proficiency level to advance to the next course level with teacher approval.

Approval from Student Services Department

# FUNCTIONAL SKILLS OF ENGLISH

1 Credit Year-long This course is designed for students with an individualized plan of study. Students with identified needs in English are placed in this required course for academic support to connect learning to real-world applications.

Approval from Special Education Department

#### ENGLISH 9 ACADEMIC SUPPORT

1 Credit Year-long Building upon the skills learned in previous English classes, students with individualized education plans will focus on improving their reading levels, practical vocabulary, grammar, and punctuation. Sentence and essay writing will be emphasized, as well as a variety of reading experiences designed to expand student verbal communication skills: short stories, newspapers, magazine articles, drama, nonfiction, and novels.

Approval from Special Education Department

#### BRIDGES TO LITERATURE & COMPOSITION

.5 Credit Semester Bridges to Literature and Composition is a foundational semester-long course. This course guides ninth-grade students through learning experiences designed to enhance their understanding of complex text and writing. Emphasis on literal comprehension, inferential thinking, and the role that prior knowledge plays in understanding texts. Students will be immersed in content area vocabulary and high-interest reading materials. Students will be encouraged to view reading as a means to develop higher-level thinking skills. Emphasis is also on writing in various styles for a variety of purposes. Learning will include use of standard English grammar, increased vocabulary and practical research methods. Students will be encouraged to view writing as a practical and necessary skill for any future profession and also as a personal skill that can help them discover themselves. The course will be graded pass/fail.

#### ELECTIVE

Recommendation from middle school teacher or high school teacher

#### **ENGLISH 9**

1 Credit Year-long English 9 is a required course for all students entering high school. In this course, students will develop writing skills and utilize the writing process to produce narrative, informative, and argumentative pieces. In addition, students will read a variety of fiction and nonfiction to develop their analytical reading skills and use this analysis to strengthen their writing. Additionally, vocabulary and grammar lessons will be integrated throughout the year to improve student literacy.

#### **HONORS ENGLISH 9**

1 Credit Year-long In this course, students will be challenged to integrate higher-level thinking into their written expression to produce narrative, informative, and argumentative pieces. In addition, students will read a variety of fiction and nonfiction texts to develop their analytical reading skills and use this analysis to strengthen their writing in preparation for the AP English pathway. Additionally, vocabulary and grammar lessons will be integrated throughout the year to improve student literacy.

Teacher recommendation

### ENGLISH 10 ACADEMIC SUPPORT

1 Credit Year-long Building upon the skills learned in previous English classes, students with individualized education plans will focus on improving their reading levels, practical vocabulary, grammar, and punctuation. Sentence and essay writing will be emphasized, as well as a variety of reading experiences designed to expand student verbal communication skills: short stories, newspapers, magazine articles, drama, nonfiction, and novels.

Approval from Special Education Department

#### **ENGLISH 10**

1 Credit Year-long English 10 is a required course in the SVHS Program of Studies. After the successful completion of English 9, students will enroll in English 10. This course examines both fiction and nonfiction in order to develop, practice, and demonstrate mastery of skills in reading, writing, speaking, and listening skills as outlined in the PA Core Standards for grades 9-10. To complete this, students will examine both fiction and nonfiction through a variety of short stories, novels, drama, and both current and historic nonfictional documents. Additionally, students will utilize various skills to compose original writing where they are required to both form and defend arguments surrounding given topics. At the conclusion of the course, students are required to take the Literature Keystone Examination, a state-mandated assessment.

### Teacher recommendation

#### **HONORS ENGLISH 10**

1 Credit Year-long This course is designed for students who have exceptional reading and writing skills and plan to pursue the Honors Pathway culminating in AP Literature and Composition. This course will examine both fiction and literary nonfiction, but the complexity of the texts and the writing will challenge and enable students to enhance their critical thinking, reading, and writing skills. Students will write responses to literature, using vocabulary skills and rhetorical devices to practice and build the foundation for AP writing. The Literature Keystone Exam will be administered at the conclusion of this course.

Approval from Special

#### ENGLISH 11 ACADEMIC SUPPORT

1 Credit Year-long Building upon the skills learned in previous English classes, students with individualized education plans will focus on improving their reading levels, practical vocabulary, grammar, and punctuation. Sentence and essay writing will be emphasized, as well as a variety of reading experiences designed to expand student verbal communication skills: short stories, newspapers, magazine articles, drama, nonfiction, and novels.

Education Department

#### **ENGLISH 11**

1 Credit Year-long In this course, students will study American, British, world, and nonfiction literature, which will allow them to make connections across cultures and time periods. Students will participate in a wide range of learning experiences, including literary analysis, an introduction to literary theory, research projects, oral presentations, and group work.

#### **HONORS ENGLISH 11**

1 Credit Year-long In this course, students will study fiction and nonfiction literature, which will allow them to make connections across cultures and time periods. Students will participate in a wide range of learning experiences, including literary analysis, an introduction to literary theory, research projects, oral presentations, and group work.

Teacher recommendation

### NCC | INTRODUCTION TO COMMUNICATION

.5 Credit Semester COMM 101 Northampton Community College (NCC) Dual Enrollment Offering This course covers the basic principles of communication theory and practice, including speech preparation and delivery, and the effective use of critical thinking and listening in relation to intrapersonal, interpersonal, intercultural, group, and mediated communication.

ELECTIVE

# AP LANGUAGE AND COMPOSITION

1 Credit Year-long AP Language and Composition is a course that cultivates the reading and writing skills that students need for college success and for intellectually responsible social engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course will deepen and expand their understanding of how written language functions rhetorically; to communicate writers' intentions and elicit readers' responses in particular situations. The course cultivates the rhetorical understanding and use of the written language by directing the students' study of professional non-fiction examples with the

Teacher recommendation

goal of applying to their own writing the features and strategies studied in class. At the conclusion of the course, students are prepared to take the AP Language and Composition Exam.

#### ENGLISH 12 ACADEMIC SUPPORT

1 Credit Year-long Building upon the skills learned in previous English classes, students with individualized education plans will focus on improving their reading levels, practical vocabulary, grammar, and punctuation. Sentence and essay writing will be emphasized, as well as a variety of reading experiences designed to expand student verbal communication skills: short stories, newspapers, magazine articles, drama, nonfiction, and novels.

Approval from Special Education Department

#### **ENGLISH 12**

1 Credit Year-long This year-long course aims to immerse students in reading and analyzing a diverse range of texts. They will engage in crafting extended oral and written projects, while honing their reading, writing, speaking, and listening skills to prepare for college and career communication. The curriculum includes the study of works from various genres and literary periods through both thematic units and novel studies. Students will also participate in targeted vocabulary, grammar, and language skills lessons, applying these concepts in their written and oral responses throughout the course.

Teacher recommendation

#### **HONORS ENGLISH 12**

1 Credit Year-long In this year-long course, students will develop critical reasoning skills to prepare for college coursework. They will understand the value of literary analysis and explore how literature reflects the human experience across diverse perspectives and time periods. They will demonstrate effective communication skills through various mediums and engage in rigorous extended writing pieces and formal oral presentations.

Teacher

# AP LITERATURE AND COMPOSITION

1 Credit Year-long AP Literature and Composition is a course designed to prepare students for the AP English Literature and Composition Exam, which can lead to exemption from freshman English in college. Although the course stresses the close reading of sophisticated British literature, other classic pieces are also analyzed. In addition, the course stresses analytic writing as a response to literature in numerous short responses (timed writings) and research-based critical essays. Throughout the course, AP practice questions (both multiple choice and essay) are consistently used during instruction to assess students' progress. At the conclusion of the course, students are prepared to take the AP Literature and Composition Exam in May.

recommendation

#### **CREATIVE WRITING**

.5 Credit Semester Creative Writing offers student writers in grades 10-12 an opportunity to expand their skills in the areas of poetry, fictional and nonfictional prose, and playwriting in a reader-response workshop environment. Students will examine a variety of genres and create original works in those genres. In addition, students will share their work with each other and the class to help enhance the editing process. A culminating reflection will analyze progress to reveal growth.

ELECTIVE

#### **JOURNALISM I**

.5 Credit Semester Journalism I will help students to develop the necessary skills for journalistic writing. Students will learn to identify and apply fundamental concepts and skills of journalism, including interviewing skills and effective oral communication, editorial and feature writing. Students will assist in the production of the school newspaper as part of their studies. Journalism students will also focus on production of the Saucon Valley High School newspaper: *The Panther Press*.

**ELECTIVE** 

#### **JOURNALISM II**

.5 Credit Semester Students enrolled in Journalism II will be on the front lines of news reporting, writing, editing, and production of Saucon Valley High School newspaper: *The Panther Press*. Using Adobe software, students will manipulate graphics and make decisions regarding layouts, lead stories, publication schedules and distribution of the school newspaper.

**ELECTIVE** 

#### **PUBLIC SPEAKING**

.5 Credit Semester Public speaking helps students acquire the skills needed to develop and present effective speeches. Students begin by analyzing notable speeches for successful techniques to model. Throughout the process, students work independently, as well as collaboratively, to practice researching, organizing, writing, speaking, listening, analyzing, and critiquing in an encouraging environment. Learning to select complementary visual aids helps students with their content and delivery. Relaxation techniques encourage students to develop confidence and to refine skills.

**ELECTIVE** 

#### **FAMILY & CONSUMER SCIENCE DEPARTMENT**

Family and Consumer Science courses are designed to meet a blend of the National and Pennsylvania Academic Standards in the following areas: financial and resource management, balancing family, work and community responsibility, food science and nutrition, and textile arts. Courses offered in the Family and Consumer Science Department are for elective credit.

Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
FASHION & CREATIVE CONSTRUCTIONS .5 Credit Semester	This course is designed for the student that has interests in either a hobby or a career in textiles, fashion, and the garment Industry. Units of study include students learning about a variety of textiles and their typical uses, a variety of fasteners and their best uses, the theory of basic garment construction, basic hand-sewing techniques, basic machine-sewing techniques, the evolution of various fashion styles, the differences between classic design and trends, and the recent history of textile manufacturing. Students will also learn recycling, repurposing, sewing, embellishing and hand crafting techniques.	ELECTIVE
FUNDAMENTALS OF COOKING & NUTRITION .5 Credit Semester	This introductory course is designed for the culinary enthusiast who wishes to gain confidence in the kitchen and develop basic food preparation and cooking skills. Throughout the course, students will learn the fundamentals and essentials that intuitive home cooks rely upon without cracking open a cookbook. Objectives will center on identifying, using, and caring for kitchen equipment; safety and sanitation practices; selecting, reading, and preparing recipes; selection and storage of foods; functions of ingredients; methods of preparation and techniques; food science; and basic nutrition. Lab experiences are aligned with course content to strengthen students' comprehension of concepts and standards.	ELECTIVE
INDEPENDENT LIVING .5 Credit Semester	This course is designed for all students who are preparing for a life of independence. This course will provide students with a unique opportunity to understand some of the challenges and opportunities that coincide with living on one's own in an ever-changing society. The course provides information that will allow students to make informed and more intelligent decisions with regard to life's choices. Units of study include an overall analysis of what it means to live independently; how to find an apartment; how to find your first real job, how to assess and address the need for transportation, budgeting strategies, common stressors of independent living and coping strategies, consumerism, and how to understand and protect oneself against the marketing strategies that companies use to promote their products.	ELECTIVE
YOUNG CHILD .5 Credit Semester	This course is designed for all students who have an interest in current understandings of child development. Units of study include parenting skills, career opportunities in the field of early childhood, prenatal care and pregnancy, birth defects, theories of child	ELECTIVE

development, brain development, family diversity issues, and physical, intellectual, social and emotional development of the child. Additional units of study include preschool and school-age children, types of observations, the preschool classroom, the special needs

child, lesson planning and the childcare profession.

### **FINE ARTS DEPARTMENT**

The Fine Arts program offers a variety of courses designed to nurture and develop the creative expression of students through organized and structured learning experiences.. All Fine Arts courses are elective credit.

learning experiences All Fine	e Arts courses are elective credit.	
Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
BAND	This course is designed to profile students with the technical skills needed for competent	ELECTIVE
1 Credit Year-long .5 Credit	ensemble performance. Through an interdisciplinary approach, students will study and perform music from the realm of western wind literature, as well as music from various historical periods in music history. The course is designed to heighten musical, cultural and historical awareness through an analytical approach. The growth and development of	Middle school band program or teacher recommendation
Semester	this ensemble will be highlighted through public performance during the enrolled semesters.	May be taken multiple times.
HONORS BAND	The Honors Band is open to any member of the high school band. This course option is	ELECTIVE
( <b>Year-long</b> ) 1 Credit Year-long	designed for the advanced instrumentalist desiring a more intense program of study. In addition to meeting all regular Band course requirements, students will be required to prepare for PMEA District Band and/or District Jazz Band auditions in December. They will	Band teacher recommendation
ŭ	also be asked to research repertoire and demonstrate advanced independent musicianship through various assignments throughout the school year. Applied study with a private teacher on the student's instrument is highly recommended for any student enrolled in this course. This is a full year course.	May be taken multiple times.
CHORUS	Open to all high school students, this non-auditioned choir welcomes singers of all skill	ELECTIVE
1 Credit Year-long .5 Credit	levels. Students will develop vocal technique, learn to read music, and perform a variety of choral repertoire. The focus is on building musical confidence, teamwork, and a love for singing. Performances include three school concerts and community events. No prior experience is required—just a willingness to sing and have fun!	May be taken multiple times.
Semester		
HONORS CHORUS	Honors Chorus course is designed for high school students who demonstrate exceptional vocal ability, musicianship, and commitment to choral excellence. This course is offered to	ELECTIVE
( <b>Year-long</b> ) 1 Credit Year-long	all chorus students in grades 9-12. Honors Chorus offers the opportunity to perform challenging and diverse repertoire, ranging from classical works to contemporary pieces,	Teacher recommendation
	while refining vocal technique, sight-reading skills, and ensemble performance. Students will participate in concerts, festivals, and competitions, representing the school with distinction. Students will audition for District choir in October as part of their honors credit	May be taken multiple times.
	Honors chorus is open to all choral students.	Not open to semester only choral students.
BAND/CHORUS	Band/Chorus allows students to alternate between band and chorus with teacher direction	ELECTIVE
1 Credit Year-long .5 Credit	throughout the semester. It is designed for students that would like to participate in both band and chorus. Students taking Band/Chorus will be expected to meet the requirements for both Band and Chorus ensembles.	May be taken multiple times.
Semester		
HONORS	Please refer to the course descriptions for Honors Band and Honors Chorus.	ELECTIVE
BAND/ CHORUS (Year-long) 1 Credit		Teacher recommendation
Year-long		May be taken multiple times.
INTRODUCTION TO MUSICAL THEATER .5 Credit	Introduction to Musical Theater exposes students to the art of improvisation, writing, blocking, the development of characters, and vocalizing all within the spectrum of theater. This course will push students beyond their comfort zone and develop their skills of listening and seeing what is happening on stage. It will also develop awareness of their	ELECTIVE

listening and seeing what is happening on stage. It will also develop awareness of their

physical presence on stage and how it conveys meaning to the audience. This course is open to anyone interested in starting or expanding his or her knowledge of theater.

Semester

#### **GUITAR CLASS**

.5 Credit Semester Guitar is designed for all students who are interested in learning or growing their skill-level on the instrument. This class will focus on reading music, reading tablature, understanding the instrument and its variations, history and chordal theory. The guitar will be used as both an accompanying instrument and a solo instrument. This class will feature a great deal of independent practice as students develop skills within varying genres of interest. It will be a mix of classical, blues, rock, pop, and jazz dependent upon a student's interest in the instrument. Theory will be taught to support the growing knowledge of the layer. A student taking this class is required to have a guitar available to him/her at home for practice. Classical, steel-string, or electric are all acceptable instruments.

#### **ELECTIVE**

#### MUSIC FUNDAMENTALS

.5 Credit Semester Music Fundamentals is designed to begin with the fundamentals of music theory leading to four-part harmonization. The purpose of music theory is to provide the student with a deeper understanding of the mathematical and functional principles of music. Music theory places students in the mind of great composers. Not only will students learn to hear the complexities of music, but they will also be able to write and analyze their own compositions using the same fundamental principles that have guided Western music for the past 400 years.

#### **ELECTIVE**

**Note:** Course will be a prerequisite for AP Music Theory beginning in **2026-27**.

#### **PIANO CLASS**

.5 Credit Semester Piano is built around two central concepts: performance and theory. Performance will be developed by daily, hands-on practice with appropriate repertoire designed to focus on varying aspects of technique. Theory will be taught to provide each student with the fundamentals of music reading necessary to facilitate quality and independent practice sessions. As a student's skill develops, concepts such as harmonization, lead sheets, finger dexterity and more will be explored. Each student will also be given the opportunity to experience performances at his or her current level of proficiency.

#### **ELECTIVE**

#### **VOICE CLASS**

.5 Credit Semester Voice is designed to enhance students' natural voice and musicianship through selected studies, exercises, and repertoire. He or she will study technique within his or her own music selections and learn from peer interaction both when performing and listening. This class serves as a platform for solo and choral performance opportunities. Each student will serve an active role not only as a developing singer, but also as a developing listener and analyzer of vocal and choral music throughout varying genres. Sight singing and fundamental theory concepts are also part of this class.

#### **ELECTIVE**

#### **AP MUSIC THEORY**

1 Credit Year-long AP Music Theory is an advanced-level course designed to engage students in learning activities that will help them to achieve the outcomes assessed by the College Board's AP Music Theory Exam. This course is designed to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. These abilities will be developed through various aural, written, performance, creative, and analytical exercises. Although this course focuses on music of the Common Practice Period (1600-1900), materials and processes found in other styles and genres are also studied.

#### **ELECTIVE**

Teacher recommendation

#### **INTERDISCIPLINARY STUDIES**

Interdisciplinary courses are designed to address individual academic interests and abilities. Courses consist of challenging, diverse, and complex experiences that allow for personal growth, individual creativity and expanding academic skills. The courses offered provide students with opportunities for in-depth explorations of self-selected topics and accelerated content. **Course offerings are for elective credit.** 

explorations of self-selected topics and accelerated contents. Course offerings are for elective credit.			
Course Name Credit Length		COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
NEW AND EI TECHNOLOO .5 Credit Semester		New and Emerging Technologies: Al in the 21st Century introduces students to the fundamentals of Generative Artificial Intelligence (Gen Al), focusing on how Al is transforming society and the skills needed to navigate this technological shift responsibly. Students will explore core concepts of Al, including how machines "learn" and make decisions, along with ethical considerations essential to developing and using Al responsibly. Key topics include machine learning, where students learn how algorithms build predictive models from data, and neural networks, which mimic the human brain to revolutionize fields such as healthcare and finance. Throughout the course, students will apply their Al knowledge to solve real-world problems, designing solutions that demonstrate both the potential and the ethical limitations of Gen Al technology.	ELECTIVE
AP SEMINA 1 Credit Year-long	R	AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary, and philosophical texts:	ELECTIVE  Teacher recommendation

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Graders

Open to 11th and 12th

Recommendations

recommendation

#### **MATHEMATICS DEPARTMENT**

and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing

artistic works and performances. Students learn to synthesize information from multiple

precision in order to craft and communicate evidence-based arguments.

**Course Name** 

sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and

The mathematics program is designed to meet the needs of all students. The course offerings emphasize the process of mathematical reasoning rather than computing. Students will be challenged through diverse real-world problems and projects. Higher-order thinking skills, such as application, analysis, and synthesis, will be modeled and emphasized. **Three credits of math are required for graduation**. A fourth year of math is highly recommended.

Credit Length	COURSE DESCRIPTIONS	& Course Prerequisite Requirement(s)
FUNCTIONAL SKILLS OF MATH 1 Credit Year-long	This course is designed for students with an individualized plan of studies. Students with identified needs in math are placed in this required course for academic support in order to obtain real-world application experiences and achieve individualized goals.	Approval from Special Education Department
MATH 9 ACADEMIC SUPPORT 1 Credit Year-long	Intended only for students with an individualized plan of studies, this course is the introductory course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade-level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis, probability, problem solving and reasoning, and proofs. Mathematical concepts introduced are applied to real-world situations and extend student understanding of the learned mathematical skills and strategies.	Approval from Special Education Department
ALGEBRA 1 MATH LAB	This course is established to provide additional support and practice for students in Algebra 1. This is a pass/fail course for students to meet grade-level standards. The goal is to strengthen students' algebraic skills for standardized test administration. This class	ELECTIVE  Middle school

is taken concurrently with Algebra 1. The course is diagnostic and prescriptive in nature to

.5 Credit Semester prepare the student for standardized testing. Individualized remediation may be planned for each student to optimize retention and performance on standardized tests.

9th Grade only

#### **ALGEBRA I**

1 Credit Year-long Students will learn to think logically as they study number systems and properties, signed numbers, variables, expressions, open sentences, solving linear equations/inequalities with one variable, absolute value, exponents, scientific notation, how to construct graphs using a number line, and the coordinate plane. Students will also apply critical thinking skills as they learn to solve a variety of application problems. The Algebra 1 Keystone Exam will be administered at the conclusion of this course.

#### MATH 10 ACADEMIC SUPPORT

1 Credit Year-long Intended only for students with an individualized plan of studies, this course is the second level course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade-level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis, probability, problem solving and reasoning and proofs. Mathematical concepts introduced are applied to real-world situations and extend student understanding of the learned mathematical skills and strategies.

Approval from Special Education Department

#### **ALGEBRA II**

1 Credit Year-long This course reinforces and extends concepts and ideas presented in Algebra I. The areas of study include relations and functions, exponents and radicals, systems of linear equations and inequalities, rational expressions, and radical and quadratic equations. Critical thinking skills are extended through the use of a variety of application problems.

Successful completion of Algebra I

#### **HONORS ALGEBRA II**

1 Credit Year-long This course reinforces and extends the ideas presented in Algebra I and develops detailed approaches to problem-solving situations and mathematical structure. The areas of study include relations and functions, exponents and radicals, systems of linear equations and inequalities, rational expressions, and radical and quadratic equations. Critical thinking skills are extended through the use of a variety of application problems, matrices, complex numbers, higher degree polynomials, and rational exponents are presented.

Teacher recommendation

Successful completion of Algebra I

#### MATH 11 ACADEMIC SUPPORT

1 Credit Year-long Intended only for students with an individualized plan of studies, this course is the third level course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade-level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis, and probability, problem solving and reasoning, and proofs. Mathematical concepts introduced are applied to real-world situations and extend student understanding of the learned mathematical skills and strategies.

Approval from Special Education Department

#### **GEOMETRY**

1 Credit Year-long This course uses a formal approach to the structure of geometry as it explores the concepts of proofs and problem-solving. Problem solving strategies will frequently use algebraic rather than numerical methods. Students will be encouraged to explore the relationships among geometry, algebra, and probability as they learn about points and lines, parallelism, similarity, congruence, polygons, special right triangles, and circles.

Successful completion of Algebra I and Algebra II.

#### **HONORS GEOMETRY**

1 Credit Year-long The Honors Geometry course is intended for the student who has the mathematical ability to assimilate and apply new material at a faster pace than the average college preparatory student. Students will apply deductive and inductive reasoning to the development of proofs and the solving of problems. Basic geometric concepts such as points and lines, parallelism, similarity, congruency, polygons, right triangles, basic trigonometric concepts, coordinate geometry, an introduction to solid geometry, and circles will be studied in depth and applied to problem-solving situations.

Teacher recommendation

Successful completion of Algebra I and Algebra II

#### MATH 12 ACADEMIC SUPPORT

1 Credit Year-long Intended only for students with an individualized plan of studies, this is the final course of a four-year continuum. Students with identified needs in math are placed in this required course for academic support in order to reach grade-level benchmarks and achieve individualized goals. The courses in this continuum focus on the following mathematical concepts and skills: number and operations, pre-algebra, algebra, geometry, measurement, data analysis, and probability, problem solving and reasoning, and proofs. Mathematical concepts introduced are applied to real-world situations and extend student understanding of the learned mathematical skills and strategies.

Approval from Special Education Department

#### **AP PRECALCULUS**

1 Credit Year-long Do you want to figure out how quickly you'll reach 10,000 followers on Instagram? In AP Precalculus, you'll explore concepts such as polynomial and exponential functions that can help you calculate your rise to influencer status, and many more concepts related to functions, logarithms, and trigonometry that can be applied beyond the classroom. In AP Precalculus you'll learn skills such as algebraically manipulating functions, equations, and expressions, Translating mathematical information between representations, communicating with precise language, and providing rationales for conclusions.

Teacher recommendation

Successful completion of Algebra II & Geometry

### MATH PROBLEM SOLVING

1 Credit Year-long This course combines the ideas mastered in algebra and geometry and then integrates new concepts of probability and statistics, to solve financial applications that occur in everyday life. Real-world problems in investing, credit, banking, auto insurance, mortgages, employment, income taxes, budgeting, and planning for retirement are solved by applying the relevant mathematics. Extensive use of project-based applications will be explored to utilize critical thinking skills required in everyday life to help the student to become a financially responsible adult.

Successful completion of Algebra II

# PROBABILITY & STATISTICS

1 Credit Year-long This course is designed for students who will be continuing their education after high school. It will focus on the concepts of descriptive statistics. These concepts include data collection and classification, frequency distributions; measures of central tendency, measures of variation, probability, probability distributions, normal distributions, and the standard normal distribution. Students will also be introduced to the concepts of inferential statistics through hypothesis testing, confidence intervals, and correlation and regression. Technology will be incorporated into each unit through the use of the TI-83/84 graphing calculator. Case studies will also be examined within each unit to pull together the concepts and apply them to real-life situations.

Teacher recommendation

#### **AP STATISTICS**

1 Credit Year-long AP Statistics is an introductory course to statistics meant to prepare students for the AP Statistics exam. The AP Statistics course will cover the two branches of statistics: descriptive and inferential. In the first half of the course descriptive topics covered will include data collection and classification, frequency distributions, measures of central tendency, measures of variation, probability, probability distributions, normal distributions, and the standard normal distribution. The second half of the course will focus on the inferential branch of statistics. Students will be generalizing from samples to populations, hypothesis testing, determining relationships among variables and making predictions, through the use of confidence intervals, T-tests, Z-tests, correlation and regression and chi-square tests. A graphing calculator will be required for use in this course.

Teacher recommendation

#### AP CALCULUS AB UNIVERSITY OF PITTSBURGH 1 Credit

1 Credit Year-long MATH 0220 - Analytic Geometry and Calculus 1 (4 college credits) – This Dual Enrollment offering is the standard first course in a basic calculus sequence required for all mathematics, science, engineering, and statistics students. Topics covered in this course include functions and graphs, limits, derivatives, trigonometric functions, application of the derivative, integral, applications of the integral, and exponential and logarithmic functions. As time allows, the College in High School course may include in its syllabus the differentiation of the logarithmic and exponential functions, which is the first topic in Calculus 2 at Pitt. A scientific calculator is needed for this course. Students enrolled in this course are encouraged to take the AP Calculus AB Exam.

Teacher recommendation

### AP CALCULUS BC UNIVERSITY OF PITTSBURGH

1 Credit Year-long MATH 0230 - Analytic Geometry and Calculus (4 college credits) - This Dual Enrollment offering is the standard second course in a basic calculus sequence required for all mathematics, science, engineering, and statistics students. In AP Calculus BC, you'll cover many of the mathematical principles in AP Calculus AB and build upon them. The additional skills you will learn in BC include: determining expressions and values using mathematical procedures and rules, connecting representations, justifying reasoning and solutions, and using correct notation, language, and mathematical conventions to communicate results or solutions. A scientific calculator is needed for this course. Students enrolled in this course will be encouraged to take the AP Calculus BC Exam.

A grade of C or higher in AP Calculus AB or an AP Calculus AB exam score of 4 or

# AP COMPUTER SCIENCE PRINCIPLES

1 Credit Year-long AP Computer Science Principles (AP CSP) introduces the student to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting the student to understand how computing has changed the world. A rigorous course, computational content and skills are developed under the framework of creativity. The course focuses on using technology and programming to solve computational problems and create relevant artifacts. In addition, the course addresses the role of computing in

Completion of Algebra I

May be used as a math or science credit

society and the ethical implications of new computing technologies. Students are encouraged to take the AP CSP Exam in May.

# AP COMPUTER SCIENCE A

1 Credit Year-long AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. College Course Equivalent AP Computer Science A is equivalent to a first-semester, college-level course in computer science.

Successful completion of AP CSP

May be used as a Math or Science credit

# NCC | COLLEGE MATHEMATICS 1

.5 Credit Semester The College Mathematics #1 (MAT 022) course reviews basic algebra topics which include; operations and properties of real numbers, solving linear equations and inequalities, modeling and graphing linear functions, slope and rates of change, systems of equations, and operations on polynomials. A student who enrolls in College Mathematics (NCC) is usually a senior and has successfully completed the required high school mathematics courses; Algebra 1, Algebra 2, and Geometry. Successful completion of this College Mathematics #1 course is defined as earning a 73% or better for the final exam score and final overall grade. This will allow the student to progress to College Mathematics #2 (MAT026). This course will be offered in the Fall semester. This is not a DE course and does not count for NCC credit but as a prerequisite for admissions into College Algebra.

Successful completion of Algebra I, Algebra II and Geometry

# NCC | COLLEGE MATHEMATICS 2

.5 Credit Semester The College Mathematics #2 (MAT 026) course extends algebraic properties and processes to linear, quadratic, rational, and radical expressions and equations, and applies them to real-world problems. The student will be expected to represent quadratic and polynomial expressions in multiple ways and make connections among these representations. If this student has successfully completed this course and earned a score of 73% on the final exam, they may matriculate to College Algebra at NCC. This course will be offered in the Spring semester. This is not a DE course and does not count for NCC credit but as a prerequisite for admissions into College Algebra.

Successful completion of Algebra I, Algebra II and Geometry

#### BUSINESS CALCULUS UNIVERSITY OF PITTSBURGH

1 Credit Year-long MATH 0120 (4 college credits) This Dual Enrollment Offering provides an introduction to calculus for students interested in managerial or social science. Topics include functions, limits and continuity, differentiation, applications of differentiation, integration, exponential and logarithmic functions, and an introduction to multivariable calculus. Open to students in grades 9 - 12.

61 or greater on the ALEKS placement exam is required

Algebra I and current facility with algebraic manipulations are essential.

#### INTRO TO MATRICES & LINEAR ALGEBRA UNIVERSITY OF PITTSBURGH

1 Credit Year-long MATH 0280 (3 college credits) This Dual Enrollment Offering includes vectors, matrices, determinants, linear transformations, eigenvalues and eigenvectors, and selected applications. Open to students in grades 10 -12.

Successful completion of AP CALCULUS AB

#### PHYSICAL EDUCATION DEPARTMENT

The Health and Physical Education program focuses on understanding the interaction between mental, physical, emotional, and social health, emphasizing total wellness, the development of fundamental sport skills, and cultivating lifetime sport and activity skills. **Health & Wellness with General Physical Education is required for graduation.** An additional .5 credit is required for graduation.

Course Name Credit Length

#### **COURSE DESCRIPTIONS**

Recommendations & Course Prerequisite Requirement(s)

#### HEALTH & WELLNESS WITH GENERAL PHYSICAL EDUCATION

.5 Credit Semester The Health/Wellness program consists of lectures, discussions, hands-on activities, reports, and projects that deal with health issues affecting the youth of today. Topics that are taught include: wellness, human sexuality, drug and alcohol education, relationships, diseases, and first aid/CPR education. The course will provide the students with the knowledge and skills necessary to make healthy life choices. The students will discover personal strengths and weaknesses through cognitive knowledge, skill execution and active participation in a variety of games and activities. Through nine weeks of activity, the students will be introduced to multiple levels of exercise, classroom assessments, skill evaluations and small group competitions. A major emphasis will be placed on the development of a personal fitness program to promote positive behaviors for lifelong wellness. The students should expect to be active, develop and improve their level of fitness, and promote positive, cooperative and fair competition.

### FITNESS & LIFETIME ACTIVITIES

.5 Credit Semester This is an elective course to improve the personal level of wellness with concentration on the five components of fitness and health. The students will graph and chart their personal goals, engage in physical activity, and develop skills in the three areas of complete wellness. The students will demonstrate ways to maintain their health and wellness and plan for a physically active life as young adults. The program will include various aerobic activities, weight training, and lifetime activities. The course is designed to promote a comprehensive active workout each day, so that the student can smile and sweat at the same time.

#### **SPORTS OFFICIATING**

.5 Credit Semester This course will teach students the rules, concepts, and mechanics of officiating, umpiring, and/or refereeing several sports. It will encourage student's interpersonal communication, knowledge of the rules, and confidence to be an official/umpire at the PIAA level. At the conclusion of the course, students will have the option to take the PIAA Officiating Exam in a sport(s) of their choosing, and if successful, join a local officials' chapter to begin PIAA officiating. Students age 16 or 17 may officiate games at the middle school or Jr. High level. Students age 18 are eligible to officiate all levels of PIAA sports.

\$40 Fee for PIAA Officials Exam

Equipment may be required

# STRENGTH & CONDITIONING

.5 Credit Semester This is an elective course where students will learn the principles of exercise science, including, proper warm-up and cool-down methods, exercise testing, spotting procedures, muscle groups, and proper exercise techniques. The class teaches strength training principles. Students will become more familiar with exercises that can be used to maintain a healthy lifestyle, as well as improve their strength, conditioning, and skills.

PE/HEALTH Teacher recommendation

This class may be taken multiple times.

#### **TEAM SPORTS**

.5 Credit Semester This course is an elective designed for students who wish to participate in an advanced physical education experience that emphasizes competition, challenge, leadership skills and alternative physical education type activities. Students will also receive instruction in basic anatomy and physiology and learn how to apply this knowledge to their performance in physical activities, as well as developing fitness programs and coaching techniques. Activities will include lifetime, team, individual, conditioning, and other fitness related activities. Aquatic activities will also be included

#### COMPREHENSIVE PHYSICAL EDUCATION

.5 Credit Semester Comprehensive Physical Education is a test-out option for students in grades 10, 11, and 12. In order to earn additional Physical Education (PE) credit without completing an additional PE course, the following criteria must be met: (1) demonstrate a history of participation in a particular sport/activity at an appropriate level, (2) obtain certification from a coach/advisor that the student completed the season/activity, and (3) receive a passing score greater than or equal to 70%.

Successful completion of Health/Wellness and General Physical Education.

### **SCIENCE DEPARTMENT**

Science course offerings are designed to introduce students to the methods, culture, and content of contemporary science. Students investigate science through science and engineering practices to make sense of real-world phenomena. **Biology is a required course for all students**. An additional **1.5 credits of science required to graduate**.

science required to graduate.		
Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
FUNCTIONAL SKILLS OF SCIENCE .5 Credit Semester	This course is designed for students with an individualized plan of studies. Students with identified needs are placed in this required course for academic support in order to obtain real-world applications and achieve individualized goals.	Approval from Special Education Department
ENVIRONMENTAL/ EARTH SPACE SCIENCE .5 Credit Semester	This class will explore the biotic and abiotic factors that help to create the environment. It will first develop basic themes such as nutrient cycling, water, and soil characteristics as well as populations and ecosystems before covering the more complex issues of management of these resources.	
PHYSICS FIRST .5 Credit Semester	The course will help develop mathematical problem-solving skills. Students will learn the nature of science while exploring the physical concepts of motion and forces, energy, and electricity and magnetism, using a combination of laboratory work, traditional instruction, and problem-solving.	
BIOLOGY 1 Credit Year-long	During this course, the student will progress through the fundamental concepts of biology to modern concepts in biological theory. Principles of cell biology, genetics, evolution, and ecology will be major topics in the students' investigation of concepts in this course. The course aligns with the PA Keystone Biology standards. The Biology Keystone Exam will be administered at the conclusion of this course.	
HONORS BIOLOGY 1 Credit Year-long	Honors Biology is an in-depth approach to the study of structure and function of living organisms at the molecular and cellular level. Key concepts in biology are explored and integrated into a challenging course designed for students who anticipate a science-based career, desire an accelerated, comprehensive program and intend to take advanced courses in science. The course aligns with the PA Keystone Biology Standards. The Biology Keystone Exam will be administered at the conclusion of this course.	Teacher recommendation
CHEMISTRY .5 Credit Semester	This college-preparatory level course will introduce interested students to the fundamentals of chemistry. The topics studied include atomic and structural theory, equations and chemical calculations, states of matter, chemical reactions, nomenclature and chemical bonding, and basic stoichiometry. Emphasis is placed on the development of correct laboratory procedures as the student progresses through this study of chemistry.	Successful completion of Algebra I & Biology
HONORS CHEMISTRY .5 Credit Semester	Honors Chemistry is an in-depth approach to the study of basic Chemistry. Key concepts in Chemistry are explored by fully integrating reading, technology and inquiry based labs and activities that emphasize independent research and analysis. This is a challenging course designed for students who anticipate a science-based career, desire an accelerated, comprehensive program and intend to take advanced courses in science. Students will need a calculator.	Teacher recommendation
AP BIOLOGY 1 Credit Year-long	The AP Biology course seeks to meet the objectives of a biology course at the college freshman level. The aim of the course is to achieve the knowledge of the facts, principles and processes of Biology with the understanding that science is a human endeavor with social consequences. The course is organized to conform to the AP suggested syllabus. It includes research papers, experiments and independent study projects. Students are encouraged to take the AP Biology Exam in May.	Teacher recommendation
AP CHEMISTRY 1 Credit	The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in Chemistry. Students cultivate their understanding of Chemistry through inquiry based investigations, as they explore topics such as: atomic	Teacher Recommendation

Chemistry through inquiry-based investigations, as they explore topics such as: atomic

Year-long

structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Created by the AP Chemistry Development Committee, the course curriculum is compatible with many Chemistry courses in colleges and universities. At the conclusion of the course, students are encouraged to sit for the AP Chemistry exam

# AP COMPUTER SCIENCE PRINCIPLES

1 Credit Year-long AP Computer Science Principles (AP CSP) introduces the student to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting the student to understand how computing has changed the world. Computational content and skills are developed under the framework of creativity. The course focuses on using technology and programming to solve computational problems and create relevant artifacts. In addition, the course addresses the role of computing in society and the ethical implications of new computing technologies. Students are encouraged to take the (AP AP CSP Exam in May.

Successful completion of Algebra I

May be used as a Math or Science credit

### AP COMPUTER SCIENCE A

1 Credit Year-long AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. College Course Equivalent AP Computer Science A is equivalent to a first-semester, college-level course in computer science.

Successful completion of AP CSP

May be used as a Math or Science credit

#### **PHYSICS**

.5 Credit Semester Physics is a comprehensive, algebra-based course that explores the fundamental principles governing the natural world. Students investigate topics such as motion, forces, energy, waves, electricity, magnetism, and the structure of matter through hands-on experiments, mathematical problem-solving, and conceptual analysis. Emphasis is placed on the scientific method, critical thinking, and the application of physics concepts to real-world scenarios. This course provides a foundation for further studies in science, engineering, or related fields and is designed to develop analytical and problem-solving skills essential for success in the modern world.

Successful completion of Algebra II

### AP PHYSICS C MECHANICS

1 Credit Year-long This course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or preceded by mathematics courses that include calculus. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. The subject matter of the C course Part 1 is classical mechanics. This course prepares the student for a second Physics course at the college level, typically a calculus based study including some combination of electricity and magnetism, light and waves or thermodynamics. Each student is encouraged to participate in the AP Physics C Part 1 Exam.

Successful completion of or concurrent enrollment in AP Calculus AB

# AP ENVIRONMENTAL SCIENCE

1 Credit Year-long How can we meet the needs of a growing population while sustaining natural resources? How can the global community collaborate to address environmental challenges? What does science tell us about our relationship with and dependence on the earth? In AP Environmental Science, you'll learn how to use the tools of science to address these and other big questions about our planet's future. In this course you will learn skills such as explaining environmental concepts and processes, analyzing data, visual representations and writings, applying quantitative methods in solving problems, proposing a solution for an environmental problem and supporting your idea with evidence, and analyzing a research study to identify a hypothesis.

Teacher recommendation

One year of Algebra

Two years of high school laboratory

#### **ASTROPHYSICS**

.5 Credit Semester This course is a science elective, which introduces physical phenomena outside of the Earth. Two main themes are presented: Structures in the Universe and Space Exploration. Through Structures of the Universe, students explore the planets and moons of our solar system and galaxies. The segment on stars includes our sun, solar systems, the lifecycle of stars and associated structures and the classification of star types. The Space Exploration theme encompasses human achievements, cosmology and current projects. Cosmology covers the Big Bang Theory and other possible beginnings of the universe, the present state of the universe and possible ends to the universe.

# HUMAN ANATOMY & PHYSIOLOGY

This course provides a basic understanding of the structure and function of the human body. Emphasis is placed upon homeostasis, energy use in organisms, physiology of cell processes and medical applications of anatomy and physiology. Laboratories include

Successful completion of Biology

.5 Credit biochemistry, cellular processes, dissection, and physiology of various systems. Students Semester will complete several projects, including a formal research paper Ecology will offer an advanced investigation of living organisms and their relationships to **ECOLOGY** one another and to the environment. An emphasis will be placed on field observations and .5 Credit research, exposing the student to the basic principles of ecology through direct contact Semester with a variety of terrestrial and aquatic ecosystems and the life forms found within them. This course uses a college level text and some AP level content. This course will examine several biological and environmental concerns facing society **BIOETHICS** today. By using known facts and relevant research data, students will gain an .5 Credit understanding of current issues and develop the ability to make logical, conscientious Semester decisions concerning those issues. Successful completion **INTRO TO** Introduction to Microbiology focuses on the study of viruses and bacteria. Basic structure of Biology and physiology will be discussed. The role of microbes in human disease will also be **MICROBIOLOGY** studied both in terms of mechanisms of disease and epidemiology. Laboratory work will .5 Credit stress sterile technique, culturing, and staining methods. Semester **ROBOTICS** The High School Robotics course offers students an exciting opportunity to explore the world of robotics through hands-on learning experiences. The main topics of the course .5 Credit include the engineering design process, CAD & fabrication, robotics theory, and project Spring Semester management. Students will learn how to design, build, and program robots to perform various tasks and challenges. Students will work collaboratively in teams to design and construct robotic systems using state-of-the-art hardware and software platforms. They will learn to integrate sensors, motors, and other components to create robots capable of performing autonomous actions and responding to their environment. Additionally,

#### **ROBOTICS II**

.5 Credit
Fall Semester

The Robotics II course replaces the old Robotics course and is running in the fall semester. The Robotics II course will use the FIRST-Tech Challenge (FTC) to present the class with a novel tough problem. The High School Robotics II course offers students the ability to specialize in an area of robot development and creation. The course provides a student the ability to further understandings gained in AP CSA, Robotics I, or from other experiences. The course uses the FTC as a "hard problem" to inspire creativity and develop grit. This course provides the opportunity to apply the engineering design process to a unique problem. Each student will choose to specialize in project management, design & fabrication, mechanical engineering, or control systems. Together they will form a team to complete a team designed robot and required documentation in order to compete in an FTC qualifying event.

students will develop proficiency in programming languages such as Blocks or Java to

control the behavior of their robots and solve complex problems.

Successful completion of Robotics

#### **SOCIAL STUDIES DEPARTMENT**

Social Studies course offerings are designed to develop a deeper understanding of the individual in relation to society. Students completing course work in social studies will have an improved understanding of their historical and cultural context; will be better prepared to understand the evolving nature of social structures at the local, state, national, and international level; and will have the skills required to be productive and informed citizens in the 21st century. Two (2) credits of social studies courses are required to graduate: United States History (1 credit), World History (.5 credit), and Government (.5 credit).

Course Name Credit Length

#### **COURSE DESCRIPTIONS**

Recommendations & Course Prerequisite Requirement(s)

#### FUNCTIONAL SKILLS OF SOCIAL STUDIES

.5 Credit Semester This course is designed for students with an individualized plan of studies. Students with identified needs are placed in this required course for academic support in order to obtain real-world applications and achieve individualized goals.

Approval from Special Education Department

# UNITED STATES HISTORY II

.5 Credit Semester United States History II provides a survey of the major political, social, and economic issues in American history from the election of Abraham Lincoln in 1860 through the Great Depression and the New Deal. Topics of study include a discussion of the Civil War and Reconstruction era, the rise of industrialization, settlement of the West, labor and immigration, the progressive reform movement, the emergence of America as a global power during World War I, the prosperity of the 1920s, and subsequent economic collapse. Equipped with this historical background, students are then able to comprehend contemporary issues such as race relations, the economy, current legislation, and the changing role of women in their proper context. Instructional methods in the United States History II courses are flexible and varied in order to meet the educational needs of students of all abilities.

# HONORS UNITED STATES HISTORY II

.5 Credit Semester This intensive study of American history is designed for those high achieving students who have demonstrated disciplined work habits and strong reading and writing skills. The course will emphasize analytical thinking in order to evaluate the political, social, and cultural trends existent in the United States between the Civil War and the Great Depression, students will be introduced to historical argumentation. Significant out of class inquiries will be required, including simulation, preparation, and reading assignments. Honors U.S. History II is intended for the intellectually curious and hard-working student who seeks an in-depth examination of the forces that shaped modern America..

Teacher recommendation

#### **WORLD HISTORY**

.5 Credit Semester World History is a course designed to inform the student about the many diverse and unique cultures that differ from, yet interact with, the more familiar American traditions. Elements of anthropology, history, geography, political science, and economics will be combined to provide the student with knowledge of the world's major cultural areas. The central theme of World History will be the exploration of each major cultural area emphasizing spatial analysis, social interactions, culture, historical developments, and current events of Africa, Southwest and Central Asia, Europe, East Asia, South Asia, Southeast Asia, Australia, Oceania, and Latin America.

Successful completion of United States History II

### UNITED STATES HISTORY III

.5 Credit Semester This course continues from the point where United States History II concludes, exposing students to the rapidly changing currents of the last seven decades of the 20<sup>th</sup> Century. Major themes of the 20<sup>th</sup> Century include genocidal events, U.S. involvement in war and conflicts, changes in social issues and policy, and the evolution of American foreign policy. These themes will be explored through the study of topics ranging from the rise of totalitarian regimes and World War II to U.S. involvement in regional hot spots, U.S. reaction to genocidal events of the second half of the 20<sup>th</sup> century, and reaction to the increased use of domestic and international terrorism. Through their exploration, students will develop the ability to organize information, to understand and critically think about and empathize with an ever-changing society as engaged citizens.

# HONORS UNITED STATES HISTORY III

.5 Credit Semester This course continues from the point where ninth grade United States History II concludes, exposing students to the rapidly changing currents of the last seven decades of the 20<sup>th</sup> century. A global perspective is utilized, with emphasis placed on the role of America in world events. Major themes of the 20<sup>th</sup> century of which students will be required to write knowledgeably include genocidal events, U.S. involvement in war and conflicts, changes in social issues and policy, and the evolution of American foreign policy. These themes will be explored through the study of topics ranging from the rise of totalitarian regimes and World War II to U.S. reaction to genocidal events of the second half of the 20<sup>th</sup> century and

Teacher recommendation

Successful completion of United States History II reaction to the increased use of domestic and international terrorism. Through their exploration, students will develop the ability to organize information around central historical, political, cultural, civic, technological, and social concepts in order to better understand, think critically, and empathize with an ever-changing society and will have the necessary skills and historical knowledge to be valuable citizens.

#### **HONORS WORLD HISTORY**

5 Credit Semester Honors World History is a reading and writing intensive course for students who have demonstrated disciplined work habits and strong writing skills. This course is designed to inform the student about the many diverse and unique cultures that differ from, and interact with, the more familiar American traditions. Elements of anthropology, history, geography, political science, and economics will be combined to provide students with knowledge of the world's major cultural regions. Analysis of primary source documents will be utilized to examine the peoples and cultures of the world. Students will spend time out of class preparing for simulations, seminars, and collaborative projects.

Teacher recommendation

#### **AMERICAN GOVERNMENT & ECONOMICS**

.5 Credit Semester American Government and Economics offers a survey course on the basics of American government and economics. It is a one semester course, providing students a fundamental understanding of microeconomics and macroeconomics, while establishing a working understanding of the functions of American Govt. Economics will provide the student with a foundation of economic concepts, institutions and policies, and their impact on individuals and the country.

# **HONORS AMERICAN** Honors American Government and Economics is a reading intensive course which

### **GOVERNMENT & ECONOMICS**

.5 Credit Semester comprises an in-depth analysis of theoretical and practical application of the American-style democracy and capitalist system. Students will not only explore the foundations of our democratic and free market system, but they will analyze the impact of globalization on American political and economic policies. Extensive, independent reading and research will allow students to expand their understanding of the challenges that face the global economy in the 21st century. Honors American Government and Economics is designed for inquisitive and diligent students. Included in the requirements for this course will be individual and group research projects, including an individual MLA research paper.

Teacher recommendation

#### **AP HUMAN GEOGRAPHY**

1 Credit Year-long AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine social, economic, and political organization and environmental consequences of human activity. They also learn about the methods and tools geographers use in their research and applications.

**ELECTIVE** 

#### **AP ECONOMICS**

1 Credit Year-long AP Macroeconomics is a college-level course that introduces students to the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination. It also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. AP Macroeconomics is equivalent to a one-semester introductory college course in economics. Open to students in grades 10-12. AP Microeconomics is a college-level course that introduces students to the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. AP Microeconomics is equivalent to a one-semester introductory college course in economics. **ELECTIVE** 

#### AP PSYCHOLOGY

1 Credit Year-long The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas. Students will be encouraged to take the AP Psychology Exam in the Spring.

**ELECTIVE** 

# AP US GOVERNMENT & POLITICS

1 Credit Year-long AP U.S. Government and Politics is an introductory college-level course in U.S. government and politics. Students cultivate their understanding of U.S. government and politics through analysis of data and text-based sources as they explore topics like constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis.

Teacher recommendation

### AP UNITED STATES HISTORY

1 Credit Year-long As an elective course, this in-depth study of United States history involves an intensive and critical investigation of historical events and concepts. This will be accomplished by means of independent research, written and oral presentations and seminars. The course is also intended to provide a transition from a high school to a college approach to thinking and learning. Students are encouraged to take the AP United States History Exam.

Teacher recommendation

#### **AP WORLD HISTORY**

1 Credit Year-long In AP World History students will investigate significant events, individuals, developments and processes from approximately 1200 CE to the present. Students will employ historical methodology to develop analytical skills including chronological reasoning and argumentation in this college-level course. Through independent research, seminars, oral presentations, simulations and debate, students will make connections between historical developments in different times and places. Students will be encouraged to take the AP test in the spring.

Teacher recommendation

#### **LAW & JUSTICE**

.5 Credit Semester This elective course is designed to illustrate the many different aspects of law and justice in America's unique society. The goal of this course is to further the student's knowledge of the organization, and problems of the American legal system and to explore the pursuit of justice in a democratic society. From the Supreme Court to plea bargains, from the FBI to the community police officer, from the mafia to street gangs and from civil law to lawsuit abuse, elements of sociology, political science, and history will be combined to study the legal system through research, discussion, case studies, problem solving, and group presentations. Students will develop a research project.

**ELECTIVE** 

# INTRO TO PSYCHOLOGY

.5 Credit Semester This elective course includes a description of psychology as a social science and an analysis of the use of the scientific method of inquiry. Various instructional methods and participatory activities will be used to develop student understanding of personality, motivation, and emotion, learning and memory, abnormal psychology and psychological treatment methods.

**ELECTIVE** 

### INTRO TO SOCIOLOGY

.5 Credit Semester Sociology, as an elective, will examine the issues and problems that transcend societal dynamics everywhere. Focus will be on the realities of life in the age of technology and emphasis will be placed on community life styles and problems. Students will discover the meaning behind group behavior and its impact on individual behavior. Discrimination, poverty, crime, aging, alienation, and human ecology are some of the issues and problems in which real life studies will be made and research presented. Periodical reviews, community issues and problem solving will be stressed.

ELECTIVE

### CONTEMPORARY WORLD ISSUES

.5 Credit Semester As an elective course, this class will examine contemporary issues of national and international significance. Students will systematically investigate historical, geo-political and socio-economic context and contemporary perspectives on the issues under examination. Through civil discourse and reflective writing, students will identify their own position on each issue. In this course, students will practice a wide range of skills including reading, writing, research, analysis, critical thinking, and civil discourse.

ELECTIVE

# INTRO TO ANTHROPOLOGY

.5 Credit Semester Anthropology can broadly be defined as the study of humans. Introduction to anthropology will serve as a survey course to introduce students to three of the four sub-disciplines within anthropology: biological/physical anthropology, cultural anthropology, linguistics and archaeology. The course will explore the origins of humanity, evolutionary theory, biological and genetic variations of human development, primatology, past civilizations and a study of current societies and cultures. In lieu of a final exam, students will participate in a culminating project.

ELECTIVE

### **TECHNOLOGY EDUCATION DEPARTMENT**

Course offerings in Technology Education are designed to introduce students to the use of technology as a tool in solving problems. Courses provide career information in engineering, mathematics, science, manufacturing, multimedia, and computer programming. Classes emphasize project-based learning, use of the design process, and technology-based instruction. The courses offered in this department are for elective credit.

the design process, and teems	longly bused monaction. The boardes officied in this department are for elective oreals.	
Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
CADD I .5 Credit Semester	This is an introductory course designed to familiarize students with basic drafting and CADD concepts. Students will learn the foundation content for drafting including object visualization, dimension standards, and multi-view projection. Most of the focus of the course will be on learning and applying CADD software to solve technological problems. Students will have access to industry standard Autodesk drafting software in order to complete their assignments. CADD concepts covered will include 2D sketching and 3D modeling, generating working drawings, and creating simple assemblies. Throughout the semester, students will have the opportunity to apply the design process to various projects as they develop custom solutions to given problems.	ELECTIVE
CADD II .5 Credit Semester	This class will be a continuation and extension of the CADD 1 course. The introductory concepts taught in CADD 1 will be utilized to solve more advanced drafting problems as well as create more complex CADD drawings. Students will use knowledge of the design process from level 1 and apply their skills to develop solutions to more difficult problems. Content areas discussed will include section views, auxiliary views, advanced assemblies, and utilization of a 3D printer to test CADD modeled solutions. Students will also have the opportunity to reverse-engineer objects and recreate them in CADD using precision measuring instruments.	ELECTIVE  Successful completion of CADD I
HOME MAINTENANCE & MATERIAL TECHNOLOGY .5 Credit Semester	This course will focus on the use of various materials for woodworking and construction projects. The importance of project planning, interpreting engineering CADD schematics to assist builds and the application of the design process will be incorporated on all major assignments. Students will complete projects individually and in small groups in the areas of structural creation, utility installation, heat transfer in residential structures, and interior finish. Emphasis will be placed on safe laboratory work practices in terms of tool and machine usage.	ELECTIVE
BIT BY BIT .5 Credit Semester	This introductory technology course prepares students for their college and career future by creating a foundation of Digital Citizenship, Media Literacy, and Computational Thinking. Students will acquire knowledge by engaging in a variety of technology tools including computer programming, 3D printing, Raspberry Pi, little bits, and VEX robots. Students will be exposed to experiential learning with real-world applications and have the opportunity to grow in problem-solving and creativity.	ELECTIVE
CODING & WEB DESIGN .5 Credit Semester	Coding will teach the foundations of computer science and basic programming with an emphasis on helping students develop logical thinking and problem solving skills. This course will prepare students for AP Computer Science Principles. Students will gain skills in building web pages and writing software. Students will begin with JavaScript and increase in knowledge and experience throughout the course. Students will learn how to create effective, informative personal and business web pages while investigating the use of the Internet in business. Students will learn advanced web page design using HTML, DHTML, and JavaScript. Students will apply the knowledge and skills acquired in this course to create web pages for the district web site and possibly local business/community members.	ELECTIVE
GRAPHIC COMMUNICATIONS .5 Credit Semester	The ability to create effective advertisements using digital media is a big part of every business. Promoting your product through a variety of digital formats is key to successful sales and marketing. In this course, students will learn the basics of composing a visually appealing graphic layout by mixing colors, fonts, and the elements of design. These principles will be applied on several creative digital projects that use industry standard	ELECTIVE

graphics software from the Adobe Creative Suite. Students will learn Adobe Photoshop for image editing and modification, Adobe InDesign for graphic layout, and Adobe Illustrator for vector graphics and image creation. Student projects will include image touch up, image combination, vector artwork, digital comics, logo creation, and a screen printed

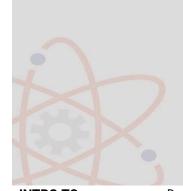
T-shirt.

#### **VIDEO PRODUCTION**

.5 Credit Semester Digital Media is the most prevalent form of communication and advertisement in society today. In this course students will explore video production, which includes: video planning, filming, and video editing. To complete these tasks, students will have professional tools at their disposal including HD digital video cameras and accessories, green screen, as well as the industry standard software in Adobe Premiere Pro to edit their videos. Students will apply problem-solving strategies individually and in small groups to create projects such as radio shows, silent movies, commercials, movie trailers, and music videos.

**ELECTIVE** 

#### **PROJECT LEAD THE WAY**







### INTRO TO ENGINEERING DESIGN (IED)

.5 Credit Semester Designed as a beginning course in the Pathways to Engineering (PTE) program, the major focus of the PTE program is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook and communicate solutions to peers and members of the professional community.

### ELECTIVE

### HONORS PRINCIPLES OF ENGINEERING (POE)

.5 Credit Semester This survey course exposes students to major concepts they will encounter in a postsecondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions. This course is weighted as an Honors course.

Successful completion of Introduction to Engineering Design

# HONORS DIGITAL ELECTRONICS (DE)

.5 Credit Semester Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras, and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards, and technical documentation. This course is weighted as an Honors course.

#### **ELECTIVE**

Successful completion of Introduction to Engineering Design

# HONORS CIVIL ENGINEERING & ARCHITECTURE (CEA)

.5 Credit Semester Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects. This course is weighted as an Honors course.

#### ELECTIVE

Successful completion of Introduction to Engineering Design

# HONORS ENGINEERING DESIGN & DEVELOPMENT (EDD)

.5 Credit Semester In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate and justify a technical problem. After carefully defining the problem, teams design, build and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel.

#### **ELECTIVE**

Successful completion of Introduction to Engineering Design

Successful completion of one additional PLtW course

### **WORLD LANGUAGE DEPARTMENT**

Course offerings in World Language are designed to deepen student understanding and use of language as a tool in the representation of ideas and culture. The study of World Languages can help students recognize, understand, and negotiate cultural differences. **Two years of World Language is highly recommended.** 

recommended.		
Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
FRENCH I .5 Credit Semester	French I is an introduction to the language and culture of the French speaking world. The fundamentals of grammar are introduced at this level. The four skills of reading, writing, listening, and speaking are also introduced. A total immersion approach is taken so that an authentic accent and greater comprehension of the spoken language may be attained. Technology will be incorporated as a tool to access authentic materials.	ELECTIVE
FRENCH II .5 Credit Semester	French II is a continuation of the first-year program. Listening, speaking, reading, and writing skills are further developed. The cultural emphasis is on the geography of France. The total immersion approach is continued with a focus on student communication in the language.	Successful completion of French I or Teacher recommendation
FRENCH III .5 Credit Semester	French III refines and further develops the four skills of listening, speaking, reading, and writing. The total immersion approach with emphasis on proficiency is continued with special attention given to speaking and reading skills. The cultural emphasis is on the French speaking countries of Africa.	Successful completion of French II or Teacher recommendation
HONORS FRENCH IV .5 Credit Semester	French IV is designed to focus on linguistic and cultural knowledge with an emphasis on the components of language. The total immersion approach is continued with special attention given to speaking and listening skills. Students use the language both within and beyond the school setting.	Successful completion of French III or Teacher recommendation
AP FRENCH LANGUAGE & CULTURE 1 Credit Year-long	The AP French Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes and assumptions). This is a year-long course.	ELECTIVE  Successful completion of French IV or Teacher recommendation
SPANISH I .5 Credit Semester	Spanish 1 is an introduction to the language and culture of the Spanish speaking world. The fundamentals of grammar are introduced at this level. The four skills of reading, writing, listening, and speaking are also introduced. A total immersion approach is taken so that an authentic accent and greater comprehension of the spoken language may be attained. Technology will be incorporated as a tool to access authentic materials.	ELECTIVE
SPANISH II .5 Credit Semester	Spanish II is a continuation of the first-year program. Listening, speaking, reading, and writing skills are further developed. The cultural emphasis is on the geography of Spain. The total immersion approach is continued with a focus on student communication in the language.	Successful completion of Spanish I or Teacher

recommendation

SPANISH III .5 Credit Semester	Spanish III refines and further develops the four skills of listening, speaking, reading, and writing. The total immersion approach with emphasis on proficiency is continued with special attention given to speaking and reading skills. The cultural emphasis is on Latin American geography and culture	Successful completion of Spanish II or Teacher recommendation
HONORS SPANISH IV .5 Credit Semester	Spanish IV is designed to focus on linguistic and cultural knowledge with an emphasis on the components of language. The total immersion approach is continued with special attention given to speaking and listening skills. Students use the language both within and beyond the school setting.	Successful completion of Spanish III or Teacher recommendation
AP SPANISH LANGUAGE & CULTURE 1 Credit Year-long	AP Spanish is intended for students to demonstrate an understanding of Spanish culture, incorporate interdisciplinary topics, make comparisons between English and Spanish and between cultures, and use Spanish in real-life settings. The following themes will be integrated: global challenges, science and technology, contemporary life, personal and public identities, families and communities, beauty, and aesthetics. This course prepares students for the AP Exam in May.	Successful completion of Spanish IV or Teacher recommendation
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### **VISUAL ARTS DEPARTMENT**

The Visual Arts department offers a variety of courses designed to nurture and develop the creative expression of students through organized and structured learning experiences. Each course is available to students at Level I (first enrollment in that course), Level II (second enrollment in that course, with advancing skills and concepts). Level III (independent study) may be available to the advanced student, based upon enrollment in a specific course and mutual agreement of student and instructor. All Visual Arts courses are elective credit.

Course Name Credit Length	COURSE DESCRIPTIONS	Recommendations & Course Prerequisite Requirement(s)
ART CONCEPTS I .5 Credit Semester	This is a foundation course each semester. In it, students will experiment with a variety of materials and processes. Students learn basic visual arts concepts and vocabulary in both two- and three-dimensional design. Students will draw, paint, sculpt and work with printmaking. They will work with the elements and principles of design that constitute a language common to all the visual arts. In this course, homework is assigned on a continuing basis. This includes weekly sketches and project specific readings. The course is open to all students.	ELECTIVE
ART CONCEPTS II .5 Credit Semester	Building on the Art Concepts I foundation, Concepts II will provide a greater range of personal expression, with opportunities for more in-depth art experiences using a range of two and three-dimensional media. The course emphasizes the learning of strong drawing skills using observation, perspective and spatial illusion. Art experiences include observational drawing, imaginative problem solving, aesthetic understanding and creativity. In all their work, students will implement the sequential steps for project development. Homework is assigned on a more intense basis.	Successful completion of Art Concepts I
DRAWING I .5 Credit Semester	The student will be instructed in a variety of drawing techniques and drawing media (pencil, pen and ink, charcoal, pastel, scratchboard, etc.). Drawing techniques will explore line, value, proportion, texture, depth and perspective, as well as such subjects as portraiture, figure drawing and various historical and contemporary styles.	ELECTIVE
DRAWING II .5 Credit Semester	This is a continuation of Drawing 1. The course includes individual focus for advanced student learning. Portfolio Building is the basis of the course.	ELECTIVE  Successful completion of Drawing I

PAINTING I .5 Credit Semester	Students will be instructed in the proper use and techniques of painting in the following media: tempera, acrylics, oils and mixed media. Students will experiment with various techniques and styles and will be introduced to various subject matters (landscape, still life, portrait, figure, etc.) in historical and contemporary artworks.	ELECTIVE
PAINTING II .5 Credit Semester	This is a continuation of Painting 1. Emphasis will be placed on historical painting styles, further development of skills and personal style, and portfolio building.	ELECTIVE  Successful completion of Painting I

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