EXCELLENCE IN ENGAGING, EMPOWERING, AND ENRICHING TODAY FOR TOMORROW'S EXPECTATIONS.

KEYSTONE OAKS HIGH SCHOOL

PROGRAM OF STUDIES
2025-2026

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Keystone Oaks School District
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Dear Keystone Oaks High School Students & Families,

As you begin to plan for the upcoming school year with your child(ren), I am proud to present to you the Program of Studies for Keystone Oaks High School. This catalog includes our course offerings for the upcoming school year, along with important information about Keystone Oaks High School. The Program of Studies is designed to establish opportunities for continued educational growth and development of each student, through consistent personalized learning. Courses are created to meet the needs of all learners and aim to prepare students to become future focused and prepared for all opportunities after high school.

The Program of Studies contains valuable information to guide students throughout their high school career. Included in this guide is specific information relative to the high school experience, including a listing and description of each department and available course. Keystone Oaks High School is committed to supporting students' educational development through rigorous and relevant course offerings at each level.

As you review our offerings for the upcoming school year, I encourage you to take time to consider which courses may be right for you and will best allow for you to achieve your future goals. The staff and administration at Keystone Oaks High School are here to make suggestions, provide guidance, and present both a welcoming and encouraging environment for all students.

Yours in Education,

Michael Linnert, Ed.D.
Principal
Keystone Oaks High School.

WWW.KOSD.ORG
KEYSTONE OAKS IS AN EQUAL OPPORTUNITY SCHOOL DISTRICT

KOSD Mission, Values & Guiding Principles

Mission Statement:

Excellence in engaging, empowering, and enriching today for tomorrow's expectations

Core Values:

Communication: Expressing, receiving, and sharing information
Empathy: Acknowledging the perspective, emotions, and experiences of all stakeholders
Global Competence: Responding to and understanding diverse cultural practices and world viewpoints
Imagination: Envisioning creative and innovative ways to take risks and solve problems
Integrity: Making ethical choices and doing the right thing regardless of personal gain
Learning: Acquiring, processing, and retaining information for life-long use
Motivation: Achieving goals through personal drive
Ownership: Having pride and taking responsibility for one's actions and their outcomes
Passion: Sparking the emotional connection that ignites one's purpose
Work: Being accountable and persevering

Beliefs & Guiding Principles

Students:

- Learn when their instructional, social, and emotional needs are addressed.
- Participate in relevant, rigorous, and authentic learning experiences.
- Respect themselves, adults, peers, and their school environment.
- Engage in future-focused and interdisciplinary learning.
- Exhibit curiosity and explore individual learning interests.
- Demonstrate growth and/or mastery while advancing their learning.
- Experience learning through diverse environments.
- Participate in challenging experiences.

Teachers:

- Are life-long learners who prepare through continuous, meaningful professional development.
- Enhance instruction using students' needs and interests.
- Encourage self-reflection and questioning.
- Maintain high expectations.
- Develop a positive rapport with all stakeholders.
- Embrace innovation, experimentation, and risk-taking.
- Support students' academic, social and emotional well-being.
- Build knowledge, skills, community, and connections.

Learning Communities:

- Take risks and share successes.
- Invest in common goals.
- Align policies and practices.
- Provide real-world experiences.
- Encourage new and diverse ideas.
- Collaborate to support students' academic, social, and emotional well-being.
- Embrace innovation, experimentation, and growth.
- Demonstrate patience and understanding while implementing policies and practices.

Keystone Oaks High School Administrators, Teachers, and Staff

Dr. Michael Linnert, Principal
Mr. Ryan Brown, Assistant Principal
Ms. Beth Brack, Secretary
Ms. Lisa Sirera, Secretary
Ms. Rose Stettler, Secretary

Mrs. Lauryn Asmann, Counselor
Mrs. Jennifer Tom, Counselor
Ms. Nicole Varrenti, Counselor
Ms. Melissa Bowers, Mental Health Therapist

Mr. Mark Elphinstone, Athletic/ Activities Programs Facilitator

English

Ms. Jennifer Bogdanski
Ms. Sarah Fontanesi
Ms. Nancy Kraemer
Ms. Carrie Quinn
Ms. Lainey Resetar
Ms. Kim Smykal

Math

Mr. Kevin Gallagher
Ms. Danielle Kandrack
Mr. Jeff Kelly
Mr. Josh Kirchner
Mr. John McCarthy
Ms. Paige Petroval
Mr. Randy Tobias

Science

Ms. Breanna Baker
Ms. Allyson Culp
Ms. Suzanne Deemer
Ms. Rebecca Hritz
Ms. Michelle McSwigan
Mr. Ben Stewart
Mr. Brady Whalen

Social Studies

Mr. Russell Klein
Mr. John Murphy
Mr. Jeff Sieg

Special Education

Mr. Mark Elphinstone - Transition Coordinator
Ms. Joyelle Galiszewski
Ms. Pam Gianoglio
Mrs. Brittany Linsenbigler
Mr. Michael Turner

Art

Ms. Heather Hakos-Hruby

Technology and Engineering

Mr. Jeff Oestreich
Mr. Craig Wetzel

Computer and Data Science

Mr. Kevin Gallagher
Mr. Craig Wetzel

Foreign Language

Ms. Lisa Forlini
Dr. Michele Lowers
Mrs. Julie O'Mara

Music

Mr. William Eibeck
Ms. Carol Smith
Mr. Richard Smith

Wellness

Ms. Jessica Anderson
Ms. Emily Brill
Mr. Ken Hustava
Mr. Nick Kamberis

Paraprofessionals

Ms. Patricia Costantini
Ms. Diane Flaherty

Mr. Mark Elphinstone - **Cyber Education**
Ms. Annie McGaughey - **Librarian**
Ms. Kathy Morrow - **ESL**

PROMOTION POLICY

Graduation from Keystone Oaks High School currently requires satisfactory completion of 25.5 credits, plus 1 credit of community service & career readiness for a total of 26.5 credits. Seniors who do not meet the graduation requirements must attend summer school and cannot participate in the commencement ceremony. Students may attend summer school through the Keystone Oaks Cyber Program or CCAC, at their expense. Please refer to School Board Policy 214 for information on class rank.

GRADUATION REQUIREMENTS

Planned Course Sequence and Credits

Beginning in the ninth grade, students will demonstrate attainment of learning outcomes by completing the following Program of Planned Courses:

English – 4 credits
Social Studies - 4 credits
Math – 4 credits
Science – 4 credits
Physical Education/Health - 1 credit
Electives – 8 credits (must include .5 Speak to Lead, .5 Key to the Future, and .5 Money Matters)
Community Service - .5 credit
Career Readiness - .5 credit
Computer Science - .5 credit

Course Selection

As students prepare to select courses for the upcoming school year, the high school teaching staff, with support from the counseling staff, will suggest the next course for a student to take within a particular department. This suggestion is derived from their professional responsibilities and educational experiences with the student to the point of scheduling.

In the spirit of the District's Strategic Plan, which embraces personalized learning, competency-based learning, and project-based learning, parents/guardians and students have the option to challenge themselves with a different course than what has been suggested by the teacher and/or school counselor. To choose an alternative course other than what may have been suggested, a parent/guardian and student will need to complete a waiver form.

When selecting a course that is of a higher level than suggested, there is the potential of also having to complete some advanced work over the summer in order to be prepared for the course and hopefully eliminate any potential gaps in the student's current knowledge. A meeting may

be scheduled with the school counselor to discuss this and provide the waiver form. Keystone Oaks High School is prepared to help each student meet his or her learning goals through a rigorous curriculum, while providing course suggestions that are supportive of each student.

Community Service

All Keystone Oaks High School students must complete 60 hours of community service. The community service hours are prorated in 15-hour required increments during each of the four years. Students transferring to Keystone Oaks must complete community service hours adjusted to the date of entry. Students may begin earning hours during May of their 8th grade year. It is required that students earn a minimum of 15 hours each school year to meet this requirement. For more information, please refer to the school website or contact your counselor.

Career Readiness

All Keystone Oaks High School students must demonstrate career readiness through the development of a Career Plan, the completion of a career portfolio, culminating project, and participation in a job shadow. For more information, please visit the school website or contact your counselor.

IEPs

For students who are part of the Special Education Program, successful acquisition of the student goals and of graduation criteria will be accomplished within the requirements developed as part of the IEP process.

SCHEDULE CHANGES AND COURSE WITHDRAWAL

Schedule Changes & Course Withdrawals

Students will be expected to accept full responsibility for their course selections and to fulfill their commitment to these selections. Schedule changes will be made as a result of summer school credit recovery, computer errors, schedule conflicts, and special program placements. Students begin the scheduling process during the second semester of each school year. Students meet with their counselor on an individual basis to select courses for the next school year, with consideration to teacher suggestions for next courses. All students will select a schedule that fulfills each of their seven periods, with the exception of students participating in early college and/or work release.

Course withdrawals and/or schedule changes will only be permitted during days 1-10 at the start of the school year for full-year and semester 1 courses, as well as days 1-10 at the start of semester 2 for semester 2 courses. Schedule changes permitted will be at the recommendation of the classroom teacher, following consultation with the parent/guardian and student, when a

student is looking to and/or is recommended to move to a different course level, i.e., Accelerated Biology to Honors Biology.

Students who attend Parkway West Career & Technology Center and wish to return to Keystone Oaks High School full-time will be permitted to make a schedule change mid-year only at the transitions from semester 1 to semester 2.

Credit Recovery for a Failed Class

There are **two** (2) options available for a student who has failed a class in a school year.

Option 1: Schedule and retake the class the following year / semester at Keystone Oaks High School. Under this option, the grade and credit earned will be applied to the GPA during the year/semester the class was rescheduled and passed. The grade earned during the year/semester the class failed will not change and will still be applied to the GPA and reported on the transcript.

Option 2: Completing the failed course(s) through the Keystone Oaks Cyber Academy. Assigned credit recovery courses will be provided to the student within 10 days following grades being due for the previous school year. The credit recovery course must be completed in its entirety 10 days prior to the start of the upcoming school year. Beginning and end dates are subject to change based upon the school district calendar. Failure to complete the credit recovery course will result in the following:

- When the schedule of the student permits, all credit recovery courses will be assigned for in-person instruction during the upcoming school year. This will be based upon schedule availability and the number of courses previously failed.
- If a student has two (2) or more credit recovery courses not completed during the summer, the student may be unable to participate in athletics and/or extracurricular activities, including but not limited to sports, band, musical, clubs, and more. Additionally, students who drive to school may have their parking pass not issued and/or revoked. This will be at the discretion of the school administration.
- Students who do not pass and/or complete Algebra 1 during the school year and/or credit recovery will take Algebra 1 again during the following school year.

CLASS CANCELATION

When scheduling classes, students must keep in mind that some classes may have to be canceled due to insufficient student enrollment. In this event, those students who have signed up for a canceled course will be contacted by their counselor, as soon as it is determined that a course is canceled, and given an opportunity to choose another class. It is very important that students identify alternative courses to ensure that a complete schedule can be created.

GRADING SYSTEM & NUMERICAL EQUIVALENTS

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Keystone Oaks School District no longer recognizes the top two graduates (a valedictorian and a salutatorian). Instead, the District recognizes graduates in three categories:

- Honors - GPA **3.5-3.74**
- High Honors - GPA **3.75+**
- Distinguished Graduate - GPA **4.01+** and **100 or more hours** of community service, and a **leadership position** within the school or community.

Letter Grade	Regular	Honors	AP/DC	Grading Scale
A	4.0	4.5	5.0	90-100
B	3.0	3.5	4.0	80-89
C	2.0	2.5	3.0	70-79
D	1.0	1.0	1.0	60-69
E/F	0.0	0.0	0.0	0-59
P	0.0	0.0		

NCAA ACADEMIC ELIGIBILITY

Any student planning to pursue collegiate athletics should contact the Athletic and Activities Programs Facilitator and visit the NCAA website at www.eligibilitycenter.org or http://fs.ncaa.org/Docs/eligibility_center/Student_Resources/IE_Brochure.pdf for more information. Courses receiving approval by the NCAA are designated in the Program of Studies

SCHOOL COUNSELING

Last Names **A – Ha:** Mrs. Tom
Last Names **He – O**: Ms. Asmann
Last Names **P – Z:** Ms. Varrenti

General Services

The Counseling Department exists to help students make successful adjustments to school life. During high school, a variety of services will be available through the school counselor. Programs will be provided to acquaint students with school policies, programs of study, extracurricular activities, and counseling services. In addition, personal, social, educational, and career information materials are available. A counselor will assist with choosing an appropriate program of studies in keeping with a student's interests, abilities, and future plans.

Future Fair

The Counseling Department hosts an annual career and college fair in the fall. Students and their parents are invited to meet with career professionals and representatives from post-secondary institutions.

College Briefings

Representatives from colleges and universities make visits to the High School to meet with interested students. Students can sign up in the Counseling Office on the morning of the visit. Students are responsible for all work missed while attending the meeting. Monthly lists of visiting schools are posted in student homerooms.

Financial Aid

The Counseling Department hosts a financial aid meeting in the spring of each year for students/parents of 11th and 12th grade students to provide information regarding financing post-secondary education.

FAFSA Completion Workshop

A representative from PHEAA will be available to assist students and parents in completing the application for financial aid.

Student Assistance Team

A SAP (Student Assistance Program) team made up of school and agency staff is available to help families access school and community services for your child. In Pennsylvania, every school district is required to have a plan for identifying and assisting students who experience barriers to learning. Our school's Student Assistance Program team consists of many dedicated professionals including teachers, counselors, specialists, and principals.

The SAP team will help families find services and assistance within the school and, if needed, in the community. The SAP team does not diagnose, treat or refer children for treatment. The team provides families with information to make the choice(s) that best fit their needs and wishes. Parents/guardians are an important part of the team.

The SAP team information is completely confidential and the team will respect the privacy of children and families at all times.

PSAT

The Preliminary SAT/National Merit Scholarship Qualifying Test (*PSAT*/NMSQT) is a standardized test administered by the College Board and cosponsored by the National Merit Scholarship Corporation (NMSC). Scores from the PSAT/NMSQT are used to determine eligibility and qualification for the National Merit Scholarship Program. This test will be offered at Keystone Oaks High School to all 10th and 11th grade students in October at the district's expense.

Keystone Exams

The Keystone Exams are end-of-course assessments designed to assess proficiency in the subject areas of Algebra, Biology, and Literature. Please refer to the District website for the latest updates from the Pennsylvania Department of Education for additional information on the Keystone Exams or contact your counselor. Students not passing one or more exams will be registered for each subsequent testing wave for the exam(s) not yet passed.

Work Study

The Work Study Program is to provide a learning and training opportunity to students as part of their senior year. The Work Study Program offers educational experiences through on-the-job training to develop the skills required to be successful after graduation. Students will have the opportunity to recognize their aptitudes, abilities, and interests regarding career choices.
Program Requirements:
1. Completed application form including career goals and parent permission.
2. Written documentation from the employer stating work site objectives and hours.
3. Students must be a senior and in line to meet all graduation requirements.
4. Students must sustain a 95% attendance rate at school and work site, as well as a C or better in all classes.
5. Students with excessive tardiness to school will not be eligible for work release.
6. No academic credit will be given for this work experience.
7. If the student loses their employment, he/she will have two weeks to secure an approved work site or will be required to attend school for a full day.
8. Students must sign-out every day, before leaving for work study, while entering/exiting through the Main High School entrance.

SENIOR INTERNSHIP

#902 Grade 12

This two-credit course is designed for senior students who are in good academic and attendance standing and desire direct experience in a career. Internships will begin in either the fall or spring semester of the senior year. Interested interns will complete an application, which will be reviewed by the Intern Selection Committee. If accepted they will be required to complete a minimum of fifteen hours each week at their designated job site. Interns are responsible for attending the Internship Orientation, submitting a weekly log, completing 270 field hours, adhering to all deadlines and meetings, and producing a presentation for a final assessment.

TELECOMMUNICATIONS JOB TRAINING

Offered through the Catholic Charities, students in grades 11 and 12 at Keystone Oaks High School will have the opportunity to participate in a program focused on telecommunications job training, soft skills education, and customer service training. During each training, students will be supported by a dedicated case manager who will be focused on supporting the students. Upon successful completion, students will have earned five in-demand professional certificates, which will support future employment. Certificates include Telecommunication Technologies, Network Cabling Specialist Copper Systems, Network Cabling Specialist Fiber Optic Systems, Wireless Connectivity, and Grounding & Bonding. This opportunity may be a part of Eagle Time and/or the students' daily schedule.

STEM ACADEMY

Through a partnership with Robert Morris University, high school students will be able to enroll in courses throughout their high school years that will also count towards college level credits, which will be awarded by Robert Morris University.

The STEM Academy is designed as an Early College in High School program that is taught by Keystone Oaks teachers who have formed partnerships with faculty members at Robert Morris University in the Pre-Engineering, Computer Science, and Mathematics Departments. Credits that are earned may be applied to entrance into Robert Morris University, upon graduation from Keystone Oaks, or to another college/university of which Robert Morris University has an articulation agreement.

For more details, students should contact Mr. Kevin Gallagher at gallagher@kosd.org.

The following Keystone Oaks High School Courses have been approved by Robert Morris University for college level credit:

Keystone Oaks STEM Academy:

Computer **S**cience: AP Computer Science A (INFS 2151)

Technology Education: CADD II (ENGR 2160)

Engineering: Engineering and Design (ENGR 1110)

Mathematics: Accelerated Trigonometry and Pre-Calculus (MATH 1020) and AP Statistics (STAT 2110)

All enrolled students shall receive additional benefits including a college immersion experience field trip to Robert Morris University

PARKWAY WEST CAREER AND TECHNOLOGY CENTER

GENERAL INFORMATION

ADMISSION PROCEDURES

Students should request an online application form from the High School Counseling Office. This application is to be completed and returned to the counselor who will prepare a transcript to accompany the application. When all admission procedures and final evaluations are completed, students are notified of acceptance. Parkway West students must maintain satisfactory grades at their home school in order to continue their technical training.

ELIGIBILITY

Students who have successfully completed the eighth grade are eligible for consideration. Students admitted to Parkway West are selected from a wide range of ability and achievement levels. The following factors are considered:

Ability: An inclination towards technical and manual areas, a degree of manual dexterity, and talent for training in a technical field is preferred.

Grades: Students need to be in good academic standing to participate in Parkway.

Math: An understanding of basic math is required for most technical and trade areas. Algebra is required for some programs.

Maturity: A record of regular attendance, cooperation, diligence, perseverance, and responsible behavior is required.

Those students who attend Parkway will enroll in History (course appropriate for grade level) at Parkway or online through the Keystone Oaks Cyber Academy.

ATTENDANCE

Students attend Parkway West for half-day sessions. The other half-day is spent at the home school following a schedule of general academic courses. Students will attend the A.M. session (7:40 - 10:25). In the event of absence, students must submit an excuse to Parkway within 2 days of their return to school.

TRANSPORTATION

The home school provides transportation to and from Parkway West. Prior to the first day of school, students will receive a bus schedule of pick-up times and locations.

ADVANCED EDUCATION

Although the primary purpose of the technical school program is to prepare students for employment, it quite often prepares them for further education. It is possible for technical school students to select appropriate academic courses at the home school to become eligible for admission to colleges or other institutions of higher education. In some programs, credit is earned for advanced standing in college, technical school, professional school, or apprenticeship programs.

WITHDRAWAL FROM PARKWAY

Any student who withdraws from Parkway must do so within the timeframe for schedule changes, which is outlined in the Schedule Changes and Course Withdrawal section of the Program of Studies. All additional requests will be at the discretion of the building administrators.

CAREER MAJORS

-Auto Body Repair
-Automotive Technology

-Construction Technology Cluster
- Carpentry
- Electrical Systems Technology
- Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC)
- Welding Technology

-Cosmetology
- Nail Technician (open to seniors only)
- Teacher License (must have a Cosmetology license)

-Culinary Arts
-Diesel Technology
-Graphic Arts and Production Technology
-Health Occupations Technology
- Phlebotomy (open to seniors only)
- Pharmacy Technology (open to seniors only)

-Cyber Security and Network Technology
-Public Safety Technology
-Sports Medicine and Rehabilitation Therapy Technology (SMARTT)
-Power Motor Sports
-Veterinary Assistant Technology

CREDITS

Students receive two credits for each year completed at Parkway West Career & Technology Center with a passing grade. All credits earned are transferred to the home school to become a part of the permanent record of the student. Upon graduation, students will receive a diploma from their home school and a certificate of achievement from Parkway West Career & Technology Center. The transcript from the home school will include all earned Industry-based Credentials of the student.

After an extensive review of all Parkway West Career & Technology Center school programs and accompanying curriculum, Keystone Oaks High School will allow students entering their Senior year, who have successfully completed at least two years of a CTC program, choose to receive up to two credits on their transcript. This may enable students to waive completion of certain courses during their senior year. The specific credits that *may* be waived are dependent upon the program completed and can be reviewed on the next page.

Parkway West CTC Program	Number of Credits Earned			
	ELA	Math	Science	Social Studies
Automotive Technology	1	1		
Auto Body Repair	1	1		
Carpentry	1	1		
Cosmetology		1	1	
Culinary Arts	1	1	1	
Cyber Security & Networking Technology	1	1		
Diesel Technology	1	1		
Electrical Systems Technology	1	1		
Graphic Arts & Production Technology	1	1		
Healthcare Occupations Technology	1		1	
Heating, Ventilation, Air Conditioning & Refrigeration (HVAC)	1	1		
Power MotorSports Technology	1	1		
Public Safety Technology	1			1
Sports Medicine & Rehabilitation Therapy Technology (SMARTT)	1		1	
Veterinary Assistant Technology	1		1	
Welding & Fabrication Technology	1	1		

Students who attend Parkway West Career & Technology Center will meet with their school counselor during their junior year to review the following:

- Intention of the student post-graduation from Keystone Oaks High School.
- Impact of credits earned and waived on NCAA requirements.
- Program and course exploration if courses are waived.
- Internship opportunities.
- Work study opportunities

Sample Program Applied Curriculum

Grade 9
Applied English 9
Speak to Lead
World History 9
Applied Algebra I
Applied Biology
Physical Education/Health
Electives

Grade 10
Applied English 10
Key to the Future
Government and Economics
Applied Geometry
Applied Chemistry
Physical Education/Health
Electives

Grade 11
Applied English 11
Modern American History
Applied Algebra II
Money Matters
Applied Physics
Physical Education
Computer Science Discoveries*
Electives

Grade 12
Applied English 12
Accelerated Sociology/Psychology
Business Math
Applied Environmental Science
AP Computer Science Principles*
Electives **OR** Work Study, Internship, or Dual Enrollment

Sample Program Accelerated

Grade 9
Accelerated English 9
Speak to Lead
World History 9
Accelerated Algebra I or Accelerated Geometry
Accelerated Biology
Physical Education/Health
Electives

Grade 10
Accelerated English 10
Key to the Future
Government and Economics
Accelerated Geometry and/or Accelerated Algebra II
Accelerated Chemistry
Physical Education/Health
Computer Science Discoveries*
Electives

Grade 11
Accelerated English 11
Modern American History
Accelerated Algebra II or Accelerated Trigonometry/Pre-Calculus
Accelerated Physics and Accelerated Chemistry II or Organic Chemistry or Human Anatomy or Forensic Science
Money Matters
Physical Education
AP Computer Science Principles*
Electives

Grade 12
Accelerated English 12
Accelerated Sociology and Accelerated Psychology
Accelerated Trigonometry/Precalculus, College Algebra/Statistics, Or CHS Business Calculus or AP Statistics
Electives **OR** Work Study, Internship, or Dual Enrollment

Sample Program Honors/Advanced Placement

Grade 9

Honors English 9
Speak to Lead
Honors World History 9
Honors Algebra II/Honors Geometry
Honors Biology
Physical Education/Health
Computer Science Discoveries*
Electives

Grade 10

Honors English 10
Key to the Future
Honors Government and Economics
AP Pre-Calculus
Honors Chemistry and AP Physics 1
Physical Education/Health
Electives

Grade 11

AP English Language & Composition or
AP Literature
AP US History
AP Calculus AB or AP Statistics
AP Biology or AP Chemistry or AP Physics 2
Money Matters
Physical Education
AP Computer Science Principles*
Electives

Grade 12

AP English Literature or AP English Language & Composition
AP Psychology/AP European History/AP Comparative Government
AP Calculus AB or AP Calculus BC and/or AP Statistics
AP Biology and/or AP Chemistry and/or AP Physics 2 and/or AP Environmental Science
Electives **OR** Work Study, Internship, or Dual Enrollment

*Students must take at least .5 credits in computer science

Sample Program Vocational/ Technical Education

Each year of participation, students will take courses in their program during Parkway's morning session. They will return to school in the afternoon for their core academic classes, including English, Math, and Science. Students will be enrolled in an online History course through Parkway.

English Courses

Students must earn four English credits to meet graduation requirements. In addition to their regular, year-long English class, students will take an additional semester course during each of their first two years of high school. Full year English classes will earn credit upon successful completion; semester classes will earn a half credit.

Grade 9

Students must select one of these courses toward their English credit requirements.

- Applied English 9
- Accelerated English 9
- Honors English 9
- Speak to Lead - *required course under Elective Credits for all 9th grades* (semester)

Grade 10

Students must select one of these courses toward their English credit requirements.

- Applied English 10
- Accelerated English 10
- Honors English 10
- Key to the Future - *required course under Elective Credits for all 10th graders* (semester)

Grade 11

Students must select one of these courses toward their English credit requirements.

- Applied English
- Accelerated English II
- AP English Language & Composition
- AP English Literature & Composition

Grade 12

Students must select one of these courses toward their English credit requirements.

- Applied English 12
- Accelerated English 12
- AP English Literature & Composition
- AP English Language & Composition

Electives

(Cannot be taken in place of a required, one-credit, full-year English course)

- Creative Writing
- Advanced Creative Writing
- Journalism
- Poetry Workshop
- Storytelling Through Video Game Design and Literature

Grade 9 Course Offerings

APPLIED ENGLISH 9

#109 Grade 9
NCAA Approved
Applied English 9 is a course designed to strengthen student skills in preparation for college and career readiness. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. This course is designed to meet state standards for reading, writing, speaking, and listening.

ACCELERATED ENGLISH 9

#119 Grade 9
NCAA Approved
Accelerated English 9 is a course designed to strengthen student skills in preparation for college and career readiness. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. The course encourages students to become independent thinkers. This course is designed to meet and exceed state standards for reading, writing, speaking, and listening. Content is approached at a quicker pace.

HONORS ENGLISH 9

#123 Grade 9
NCAA Approved
Honors English 9 is a course designed to strengthen student skills in preparation for college and career readiness and Advanced Placement classes. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. The course encourages students to become independent thinkers. This course is designed to meet and exceed state standards for reading, writing, speaking, and listening. Additional content is pursued.

SPEAK TO LEAD

(Required Course under Elective Credits; semester)

#142 Grade 9
This required course is designed so that students will develop an awareness of the importance of communication skills and demonstrate an understanding of the process. Course emphasis will be on communication skills essential for success in school, college, career, and as a citizen. Methods of delivery to be taught include manuscript, impromptu, and extemporaneous.

Grade 10 Course Offerings

APPLIED ENGLISH 10

#110 Grade 10
NCAA Approved
Applied English 10 is a course designed to offer a thematic approach to world literature. The course will focus on improving reading comprehension skills and critical thinking skills of students by requiring him/her to explore interesting and challenging themes. This course will focus on utilizing a wide range of writings and media to approach a broad theme. All students will critically evaluate themes in various works of literature by employing group instruction, small group review, independent practice, and interactive methods for comprehension and analysis.

ACCELERATED ENGLISH 10

#120 Grade 10
NCAA Approved
Accelerated English 10 is a course designed to offer a thematic approach to world literature. The course will focus on improving the communication skills of the college bound student by requiring him/her to explore interesting and challenging themes. Creative, research, and communication processes will be tools used by all students to critically evaluate these themes in various works of literature.

HONORS ENGLISH 10

#124 Grade 10
NCAA Approved
Honors English 10 is a course designed to strengthen student skills in preparation for college and career readiness and Advanced Placement classes. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. The course encourages students to become independent thinkers. This course is designed to meet and exceed state standards for reading, writing, speaking, and listening. Additional content is pursued.

KEY TO THE FUTURE

(Required Course under Elective Credits; semester)

#146 Grade 10
Key to the Future is a course that is designed to enhance and strengthen students' approach to college and career development and provide strategies for future standardized testing. Students will research and explore future careers and practice communication skills necessary for career acquisition and maintenance. Additionally, students will develop skills to write job applications, cover letters, and professional emails, as well as argumentative and informational essays. Student essays will be evaluated and scored according to specific criteria and structure.

Grade 11 Course Offerings

APPLIED ENGLISH 11

#111 Grade 11
NCAA Approved
Applied English 11 is a course designed to strengthen student skills in preparation for college and career readiness. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. This course is designed to meet state standards for reading, writing, speaking, and listening.

ACCELERATED ENGLISH 11

#121 Grade 11
NCAA Approved
Accelerated English 11 is a course designed to strengthen student skills in preparation for college and career readiness. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. The course encourages students to become independent thinkers. This course is designed to meet and exceed state standards for reading, writing, speaking, and listening. Content is approached at a quicker pace.

AP ENGLISH LANGUAGE & COMPOSITION

#130 Grade 11 or 12
NCAA Approved
The AP English Language and Composition course aligns to an introductory college level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

AP ENGLISH LITERATURE & COMPOSITION

#126 Grade 11 or 12
NCAA Approved
AP English Literature & Composition follows a course consistent with the Advanced Placement Program and is comparable to a freshman course in college. The readings survey a variety of periods and forms of world literature including fiction, poetry, and drama. The class discussions are based on close analysis of the meaning and structure of the literature being studied. Composition is predominantly analytic or expository and is based on the literature being read.

Grade 12 Course Offerings

APPLIED ENGLISH 12

#112 Grade 12
NCAA Approved
Applied English 12 is a course designed to strengthen student skills in preparation for college and career readiness. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. This course is designed to meet state standards for reading, writing, speaking, and listening.

ACCELERATED ENGLISH 12

#122 Grade 12
NCAA Approved
Accelerated English 12 is a course designed to strengthen student skills in preparation for college and career readiness. The focus is in all areas of communication: oral, written, listening, group interaction, and transfer of knowledge to direct application. The course encourages students to become independent thinkers. This course is designed to meet and exceed state standards for reading, writing, speaking, and listening. Content is approached at a quicker pace.

AP ENGLISH LITERATURE & COMPOSITION

#126 Grade 11 or 12
NCAA Approved
AP English Literature & Composition follows a course consistent with the Advanced Placement Program and is comparable to a freshman course in college. The readings survey a variety of periods and forms of world literature including fiction, poetry, and drama. The class discussions are based on close analysis of the meaning and structure of the literature being studied. Composition is predominantly analytic or expository and is based on the literature being read.

AP ENGLISH LANGUAGE & COMPOSITION

#130 Grade 11 or 12
NCAA Approved
The AP English Language and Composition course aligns to an introductory college level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

Elective Offerings in English

CREATIVE WRITING (semester)

#145
NCAA Approved
This coffee shop-style course explores creative writing styles in the formats of image poetry, dominant impressions, character sketches, personal narratives, and drama. Special techniques for each format and prompts are studied and then applied to the students' original compositions. This class offers an avenue for students to express their voice through imaginative writing. Each student will leave the course with a portfolio of his/her own work.

ADVANCED CREATIVE WRITING (semester)

#147
NCAA Approved
This coffee shop-style course continues to explore the foundations utilized in the course, Creative Writing. Students will continue to express their own voice through imaginative writing. The focus of this course will be on various genres and mediums of writing. Special techniques for each format are studied and then applied to the students' original compositions. This class offers an avenue for students to express their voice through imaginative writing. Each student will leave the course with a portfolio of his/her own choice of a genre(s) and medium(s).

STORYTELLING THROUGH VIDEO GAME DESIGN AND LITERATURE (semester)

#653
This innovative, semester-long course merges the worlds of English Language Arts and Video Game Design. Students will analyze traditional narrative structures, character development, themes, and symbolism in literature, while also learning how these elements are transformed and enhanced in interactive video game environments.

Through a combination of literary analysis, creative writing, and game design, students will gain a deep understanding of how stories engage and immerse audiences. They will examine the impact of player choices on narrative, explore how dialogue and tone shape characters, and create their own branching storylines and game concept development, culminating in a final project where students collaboratively design their own game narrative.

JOURNALISM (semester)

#145/146
NCAA Approved
Journalism is a course designed to offer an introduction to journalistic writing, photography, and online publication of a student newspaper. This course will emphasize interview skills, feature writing, sports writing, and editorial writing. Students will participate in the process of the

publication, The Keynote. In order to earn credit for the course, students will write publishable articles on student news, activities, and events. This course will be offered both semesters. Students may take this course twice.

POETRY WORKSHOP (semester)

#150
NCAA Approved
This course will study works from Robert Frost, William Wordsworth, Emily Dickinson, E.E. Cummings, and many of their contemporaries as students seek to understand, analyze, and write poetry. Students will study methods, forms, and experiences that have helped develop these poets and also write poetry using many of the same devices. Through in-class writing exercises, reading of model poems, and discussion of student work, this course encourages students to produce poetry of increasing quality. Students will learn the basic elements of poetry, important types of poems, and fundamental poetic techniques while also exploring different forms of poems from various time periods and begin to learn what it takes to create a poem. Students will be expected to write analytically about poetry, in addition to writing their own original poetry.

Social Studies Courses

Students must earn four social studies credits to meet graduation requirements. Each social studies course listed is worth one credit, unless otherwise designated as a semester (half credit) course.

Grade 9

- World History 9
- Honors World History 9

Grade 10

- Government & Economics
- Honors Government & Economics

Grade 11

Students must select one of these courses toward their Social Studies requirement

- Modern American History
- AP United States History

Students may select one of these courses toward their elective requirement

- AP European History
- AP Comparative Government & Politics
- History of the United States through Pop Culture (semester)
- The American Presidency (semester)
- Destination USA (semester)
- American Law and Justice (semester)
- Contemporary Domestic Issues (semester)

Grade 12

Students must select two semester courses or one full year course toward their Social Studies requirement. Students may not repeat any courses. Additional courses may be taken as electives.

- Accelerated Sociology (semester)
- Accelerated Psychology (semester)
- History of the United States through Pop Culture (semester)
- The American Presidency (semester)
- AP Psychology
- AP European History
- AP Comparative Government & Politics
- Destination USA (semester)
- American Law and Justice (semester)
- Contemporary Domestic Issues (semester)

Grade 9 Course Offerings

WORLD HISTORY 9

#217 Grades 9
NCAA Approved
World History places an emphasis on geography, time-period, inventions, and prominent people. The course blends social, political, economic, and cultural events to help students comprehend the diversity of people and their achievements from Feudalism to present. Evaluation will be based on critical-thinking, writing skills, quizzes, tests, homework, participation, and reflective essays.

HONORS WORLD HISTORY 9

#218 Grade 9
NCAA Approved
Honors World History will generate a study from the Middle Ages to present day. Students will experience learning using a broad spectrum of activities. They will debate, articulate content through Socratic Seminars, draw conclusions from chapter concepts, and demonstrate opinions and justifications through a reflective essay. The students will be able to identify the significance and recurring themes such as: power and authority, cultural interaction, economics, science and technology, and art. The objective of the course is for the student to understand and correlate the historical information to improve themselves as individuals and as a community.

Grade 10 Course Offerings

GOVERNMENT AND ECONOMICS 10

#211 Grade 10
NCAA Approved
This course will provide the student with fundamental knowledge regarding the American political and economic system. The primary objective is to help each individual make intelligent decisions as a citizen and consumer in today's society. Skills related to this objective will be stressed, along with factual knowledge and an emphasis on current topics. Problem solving activities will be an integral part of the course. Evaluation will be based on unit examinations, quizzes, class projects, homework, and participation.

HONORS GOVERNMENT AND ECONOMICS 10

#224 Grade 10
NCAA Approved
This course is designed for the college bound student who needs to reinforce his/her academic skills with high school level materials and activities. The content of the course will focus on the

American government and the American Capitalist System. Curriculum will be supported by current political and economic topics as they relate to class content. The theories behind, and actual operation of U.S. political and economic system will be presented in such a manner as to help the student make useful decisions pertinent to today's society. Central to this objective will be an emphasis on communications, reasoning, and study skills consistent with the needs and abilities of a college bound high school sophomore. Evaluation may consist of a combination of unit examinations, quizzes, out-of-class assignments, research projects, and class participation.

Grade 11 Course Offerings

Note: Students must complete either Modern American History or A.P. U.S. History. Other listings may be used for elective credit

MODERN AMERICAN HISTORY 11

#215 Grade 11
NCAA Approved
Modern American History places an emphasis on prominent people, events, and social changes that took place in America from 1920 to the present including current events that are shaping the current world. The course blends social, political, economic, and cultural events that show the history and evolution of the United States. Evaluation will be based on critical-thinking, writing skills, quizzes, tests, homework, participation, and note-taking skills.

AP UNITED STATES HISTORY

#230 Grade 11
NCAA Approved
AP United States History is designed for the student who desires an intensive study of American history from the colonial period to the present. Emphasis is on skill development consistent with the demands of a college level course. A particular focus of the course is to prepare each student for the Advanced Placement Examination. Evaluation is based upon unit and semester examinations, essay development, book reviews, class recitation, and a research paper.

AP EUROPEAN HISTORY

#231 Grades 11 or 12
NCAA Approved
AP European History is designed to provide the students with skills and content knowledge required on the college level. The history of Europe includes political, social and economic, cultural, and intellectual themes. Grades are based on recitation in class quizzes and exams, project papers, and work reviews. Students may choose to take the Advanced Placement exam for college credit at the end of the year.

AP COMPARATIVE GOVERNMENT & POLITICS

#233 Grades 11 or 12

NCAA Approved

This course will establish conceptual lenses to compare political and socio-economic phenomena in six countries: Great Britain, Russia, China, Iran, Nigeria, and Mexico. We will learn about the impact of political structure, political culture, political socialization, political recruitment, political institutions, interest groups, etc. on the domestic policies of these nations. The course is designed to introduce the discipline of comparative politics and to learn the art of critical analysis as the class establishes variables to compare across national boundaries. The methodology for the course will introduce theories of comparative politics, establish conceptual lenses to study it, and use countries as comparative case studies.

AMERICAN LAW AND JUSTICE (semester)

#253 Grades 11 or 12

American Law and Justice is a semester course designed to provide students with a practical understanding of law and the legal system; to improve understanding of the fundamental principles and values underlying the Constitution, laws, and legal system; to promote awareness of current issues and controversies relating to law and the legal system; to encourage effective citizen participation in the legal system; and to bring about a greater sense of justice, tolerance, and fairness. The course is designed to improve basic skills, including critical thinking and reasoning, communication, observation, and problem solving. The curriculum includes a balance of legal knowledge, application of this knowledge, and experiential activities. Included in this is reflection of local politics and lawmaking, the police and prison system, as well as the court system locally and in America. Activities include legal case studies, mock-trials, and the use of community resource people in the classroom, such as local politicians, lawyers, judges, and police officers.

CONTEMPORARY DOMESTIC ISSUES (semester)

#254 Grades 11 or 12

This semester course provides students with the opportunity to explore current domestic issues in the realm of politics, economics, peace and security, health, and the environment. Students have flexibility in the topics they study based on the current issues happening each semester. Students will do copious research into the history and progress of contemporary domestic issues while analyzing these issues from every political side. Students are expected to have an extensive background in formal research skills, writing, and public speaking. It is also recommended that students have a substantial knowledge of current U.S. and world affairs.

THE AMERICAN PRESIDENCY (semester)

#251 Grades 11 or 12

This course focuses on key elements of the office of the President of the United States. This would include formal and informal qualifications, powers that the president possesses, various roles that the president carries out, a comparison of leadership styles, and how the presidency has changed and developed throughout U.S. history. A major focus will be on key moments in American history and on vital decisions made by numerous presidents, including actions taken and possible alternatives that were considered in the decision- making process.

DESTINATION U.S.A. (semester)

#252 Grades 11 or 12

This course reviews key geographic regions of the U.S. in a fun and organized manner. The course provides an opportunity for students to review the geographic location and information of each state and territory while researching and sharing information about a chosen destination within that state. Cooperative learning, student- based projects, and student presentations will be used to help students learn from one another. Students will be assigned a state within a geographical region and develop a project to highlight a destination within that state to be shared with their classmates. Various project options will be made available when considering the different regions of the U.S.

HISTORY OF THE UNITED STATES THROUGH POP CULTURE (semester)

#250 Grades 11 or 12

In this course students will critically analyze eras of history and focus on the events and culture of the times. Students will progress through American History in an effort to determine how society reacted to events and how movies, fads, music, TV, and culture impacted daily lives. The course will define pop culture, why people care about it, and how it truly reflects the values of society over time.

Grade 12 Course Offerings

Students must take two semesters or one full year course from the listings. Additional courses may be taken as electives.

ACCELERATED SOCIOLOGY 12 (semester)

#222 Grade 12

NCAA Approved

Sociology will help students prepare for careers in an increasingly diverse world. Course content will focus on the scientific study of society. Students will be introduced to sociological theory and address important issues such as culture, social organization, inequalities, class structure,

deviance, conformity, social change, and other contemporary social issues. Evaluation will consist of homework assignments, quizzes, essays, unit exams, and class discussions.

ACCELERATED PSYCHOLOGY 12 (semester)

#223 Grade 12
NCAA Approved
Psychology is designed to involve the student in the scientific study of behavior and the human mind. Emphasis is on understanding why people behave as they do and what may influence that behavior. Additional topics include theories of personality, development, thinking, memory, social behavior, disorders, and treatment. Psychology will offer important lessons that can be applied to any career. Evaluation will consist of homework assignments, quizzes, essays, unit exams, and class discussions.

AMERICAN LAW AND JUSTICE (semester)

#253 Grades 11 or 12
American Law and Justice is a semester course designed to provide students with a practical understanding of law and the legal system; to improve understanding of the fundamental principles and values underlying the Constitution, laws, and legal system; to promote awareness of current issues and controversies relating to law and the legal system; to encourage effective citizen participation in the legal system; and to bring about a greater sense of justice, tolerance, and fairness. The course is designed to improve basic skills, including critical thinking and reasoning, communication, observation, and problem solving. The curriculum includes a balance of legal knowledge, application of this knowledge, and experiential activities. Included in this is reflection of local politics and lawmaking, the police and prison system, as well as the court system locally and in America. Activities include legal case studies, mock-trials, and the use of community resource people in the classroom, such as local politicians, lawyers, judges, and police officers.

CONTEMPORARY DOMESTIC ISSUES (semester)

#254 Grades 11 or 12
This semester course provides students with the opportunity to explore current domestic issues in the realm of politics, economics, peace and security, health, and the environment. Students have flexibility in the topics they study based on the current issues happening each semester. Students will do copious research into the history and progress of contemporary domestic issues while analyzing these issues from every political side. Students are expected to have an extensive background in formal research skills, writing, and public speaking. It is also recommended that students have a substantial knowledge of current U.S. and world affairs.

THE AMERICAN PRESIDENCY (semester)

#251 Grades 11 or 12

This course focuses on key elements of the office of the President of the United States. This would include formal and informal qualifications, powers that the president possesses, various roles that the president carries out, a comparison of leadership styles, and how the presidency has changed and developed throughout U.S. history. A major focus will be on key moments in American history and on vital decisions made by numerous presidents, including actions taken and possible alternatives that were considered in the decision- making process.

DESTINATION U.S.A. (semester)

#252 Grades 11 or 12

This course reviews key geographic regions of the U.S. in a fun and organized manner. The course would provide an opportunity for students to review the geographic location and information of each state and territory while researching and sharing information about a chosen destination within that state. Cooperative learning, student- based projects, and student presentations will be used to help students learn from one another. Students would be assigned a state within a geographical region and develop a project to highlight a destination within that state to be shared with their classmates. Various project options will be made available when considering the different regions of the U.S.

HISTORY OF THE UNITED STATES THROUGH POP CULTURE (semester)

#250 Grades 11 or 12

In this course students will critically analyze eras of history and focus on the events and culture of the times. Students will progress through American History in an effort to determine how society reacted to events and how movies, fads, music, TV, and culture impacted daily lives. The class will define pop culture, why people care about it, and how it truly reflects the values of society over time.

AP PSYCHOLOGY

#232 Grade 12

NCAA Approved

AP Psychology is designed to introduce the student to the scientific study of the behavior and the mental processes of humans and animals. Students will study all of the major theories of psychology, as well as units on the brain, cognition, personality, behavior, and disorders. Evaluation will be based upon quizzes, tests, homework assignments, and research. Students may choose to take the Psychology Advanced Placement exam for college credit at the end of the year.

AP COMPARATIVE GOVERNMENT & POLITICS

#233 Grade 11 or 12

NCAA Approved

This course will establish conceptual lenses to compare political and socio-economic phenomena in six countries: Great Britain, Russia, China, Iran, Nigeria, and Mexico. We will learn about the impact of political structure, political culture, political socialization, political recruitment, political institutions, interest groups, etc. on the domestic policies of these nations. The course is designed to introduce the discipline of comparative politics and to learn the art of critical analysis as the class establishes variables to compare across national boundaries. The methodology for the course will introduce theories of comparative politics, establish conceptual lenses to study it, and use countries as comparative case studies.

AP EUROPEAN HISTORY

#231 Grades 11 or 12

NCAA Approved

AP European History is designed to provide the students with skills and content knowledge required on the college level. The history of Europe includes political, social and economic, cultural, and intellectual themes. Grades are based on recitation in class quizzes and exams, project papers, and work reviews. Students may choose to take the Advanced Placement exam for college credit at the end of the year.

MATHEMATICS COURSES

Students must earn four credits in Mathematics to meet graduation requirements.

Although the majority of students take Algebra 1 in high school, students should be encouraged to take Algebra I prior to entering 9th grade. In the year following Algebra I, students are encouraged to take both Algebra II and Geometry. All Algebra courses will prepare students for the PA Keystone Exam

Students may earn college credit by obtaining a qualifying score on the AP Precalculus, AP Statistics, AP Calculus AB, and/or AP Calculus BC exam. Students may also earn college credit by achieving a "C" or better in the College in the High school courses in AP Statistics, Accelerated Trigonometry & Precalculus, Business Calculus, Introduction to Data Analytics, College Algebra, and/or College Statistics**.** All AP and College in the High School courses carry equal weight in calculating students' grade point averages.

Students may take computer science course(s) to satisfy one (1) of their four (4) math credits.

Beginning with the class of 2027, student math credits must include Algebra 2 (Applied or Accelerated or Algebra 2), unless a special waiver is granted by the high school principal or the Superintendent designee.

Some Example Pathways (Note these are examples and students do not need to be confined by grade level)

9th Grade	10th Grade	11th Grade	12th Grade
Applied Algebra 1	Applied Geometry	Applied Algebra II	Applied Algebra II or Business Math or Applied Data Analysis CHS Intro to Data Analytics
Accelerated Algebra I	Accelerated Geometry	Accelerated Algebra II	Accelerated Trig/ Pre-Calculus, College Algebra/College Statistics, or Business Math
Accelerated Geometry	Accelerated Algebra II	Accelerated Trig/Pre-Calculus	CHS Business Calculus AP Statistics

Honors Algebra I	Honors Algebra II and Honors Geometry	AP Pre-Calculus AP Statistics	AP Calculus AB CHS Business Calculus
Honors Algebra II and Honors Geometry	AP Precalculus	AP Calculus AB AP Statistics	AP Calculus BC AP Statistics

APPLIED ALGEBRA I

#326

Applied Algebra 1 provides students with a foundational understanding of algebraic concepts at a steady, supportive pace, emphasizing practical applications. Topics include operations with real numbers, linear equations, graphing, inequalities, and proportional reasoning. The course focuses on using algebra to solve real world problems, preparing students with essential skills for various career paths. Designed to support interactive learning, the course builds confidence in mathematical reasoning. All students are required to take the Keystone Algebra Exam in the spring.

ALGEBRA 1B

#011

Algebra 1B is year two of a two-year course in Algebra 1. Algebra 1B will focus on the second half of a traditional Algebra course with additional topics to prepare the student for the Keystone Exam given in the spring. Topics include systems of equations and inequalities, exponents, polynomials, and data analysis and probability. Individual and group projects will be a component of this course. Students are required to take the Keystone Algebra exam in the spring at the end of the Algebra 1B course.

ACCELERATED ALGEBRA I

#331

NCAA Approved

Accelerated Algebra I builds on students' understanding of numerical operations by introducing them to algebraic thinking in terms of patterns and relationships that apply across various situations. Throughout the year, students focus on modeling real-life problems with constant rates of change. They explore topics such as properties of real numbers, absolute value, proportional reasoning, systems of linear equations and inequalities, and an introduction to quadratic equations. All students are required to take the Keystone Algebra Exam in the spring.

HONORS ALGEBRA I

#332

NCAA Approved

Honors Algebra 1 is a rigorous, fast-paced course tailored for college-bound students. It covers a broad range of topics, including expressions, equations, functions, properties of real numbers, linear equations (solving, graphing, and writing), inequalities, systems of equations and inequalities, exponents, exponential functions, polynomials and factoring, quadratic equations and functions, radicals, and geometric connections. All students enrolled in the course are required to take the Keystone Algebra I Exam in the spring.

APPLIED GEOMETRY

#327

NCAA Approved

Applied Geometry explores topics such as congruence and similarity, as well as the properties of lines, triangle, quadrilaterals, and circles. Students will apply algebraic skills to solve problems involving length, perimeter, area, circumference, surface area, and volume, using these concepts to analyze real-world scenarios.

ACCELERATED GEOMETRY

#332

NCAA Approved

Accelerated Geometry develops students' reasoning and problem-solving skills through the study of congruence, similarity, and the properties of lines, triangles, quadrilaterals, and circles. Students will also apply algebraic skills to solve problems involving length, perimeter, area, circumference, surface area, and volume, using these concepts to explore real-world applications. It is recommended that this course be taking simultaneously with Accelerated Algebra 2

HONORS GEOMETRY

#332

NCAA Approved

Honors Geometry is a rigorous, fast-paced course designed for students preparing for future AP Calculus. Topics include essentials of geometry, reasoning and proof, parallel and perpendicular lines, congruent triangles, triangle relationships, similarity, right triangles and trigonometry, quadrilaterals, transformations, properties of circles, and measurement of length, area, surface area, and volume of solids. It is recommended that this course be taken simultaneously with Honors Algebra 2.

APPLIED ALGEBRA II

#328

NCAA Approved

Applied Algebra II focuses on the study of various functions, including linear, quadratic, cubic, quartic, piecewise, exponential, logarithmic, radical, and rational functions. Students will explore function operations, transformations, and equation solving, with the graphing calculator serving as a key tool to connect the units of study.

ACCELERATED ALGEBRA II

#333

NCAA Approved

Accelerated Algebra II builds on students' prior knowledge to strengthen and expand their algebraic skills. This course covers a range of functions, including linear, quadratic, cubic, quartic, piecewise, exponential, logarithmic, radical, and rational functions. Students will explore function operations, transformations, and equation solving, with the graphing calculator serving as a central tool to connect the units of study. It is recommended that this course be taken simultaneously with Accelerated Geometry.

HONORS ALGEBRA II

#319

NCAA Approved

Honors Algebra II is a rigorous continuation of Algebra I, designed for students with a high level of mathematical achievement. This course focuses on an in-depth study of functions- linear, quadratic, cubic, piecewise, exponential, logarithmic, radical, and rational - emphasizing function operations and transformation as a unifying theme. Distinguished by its pace, rigor, and depth of understanding, this course prepares students for AP Precalculus the following year. It is recommended that this course be taken simultaneously with Honors Geometry.

ACCELERATED TRIGONOMETRY AND PRE-CALCULUS

#334

NCAA Approved

Accelerated Trigonometry and Precalculus is designed to prepare students for the study of calculus. The course begins with an in-depth study of trigonometry, covering right triangle relationships, graphing periodic functions, proving identities, and solving trigonometric equations. In the second semester, students focus on a deeper understanding of functions and their applications to further strengthen their understanding of their algebraic knowledge. This course may be taken for college credit through the College in High School Program.

AP PRECALCULUS

#358

NCAA Approved

AP Precalculus assesses students' mastery of skills and concepts for success in AP Calculus. A significant portion of the course focuses on understanding functions and their properties, including linear, quadratic, absolute value, square root, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise-defined functions. Students will represent these functions symbolically, graphically, verbally, and in tabular form. A solid grasp of these functions forms the foundation of precalculus and leads to an introduction to calculus before the end of the year.

COLLEGE ALGEBRA (semester)

#339

NCAA Approved

College Algebra develops students' mastery of essential skills and concepts foundational for advanced mathematics. The course emphasizes understanding functions and their properties, covering linear, quadratic, absolute value, square root, polynomial, rational, exponential, logarithmic, and piecewise-defined functions. Students will represent these functions in symbolic, graphical, verbal, and tabular forms. Mastery of these functions provides a strong basis for further study in mathematics.

COLLEGE STATISTICS (semester)

#355

NCAA Approved

College statistics is an introductory college-level course. Students will explore topics such as experimental design, dara description (both graphical and numerical), probability, sampling distributions, the normal distribution, the central limit theorem, and statistical inference. This course may be taken for college credit through the College in High School Program.

BUSINESS MATH

#660

This course will focus on using mathematics in financial planning for the future. Topics include discretionary spending, banking, credit, auto and home ownership, employment, taxes, investments, entrepreneurship, retirement, and budgeting.

CHS BUSINESS CALCULUS

#365

CHS Business Calculus is recommended for students interested in business, economics, and social sciences. This course covers essential concepts, including a review of precalculus, limits, differentiation, integration, and problem-solving, with a focus on applications in business, economics, and social sciences. This course covers essential concepts, including a review of

precalculus, limits, differentiation, integration, and problem-solving, with a focus on applications in business and economics. Students may take this course for college credit through the College in High School Program.

AP STATISTICS

#316
NCAA Approved
AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution, patterns and uncertainty, and data-based predictions, decisions, and conclusions. Students can earn college credit for this course with a qualifying score on the AP exam or for college credits through the College in High School Program.

AP CALCULUS AB

#315
NCAA Approved
AP Calculus is a college-level course covering differential and integral calculus, with a focus on limits, derivatives, integrals, and the Fundamental Theorem of Calculus. Students will engage with calculus concepts through graphical, numerical, analytical, and verbal approaches to solve real-world problems. All students in this course are expected to take the AP Calculus AB exam, with the opportunity to earn college credit through a qualifying score.

AP CALCULUS BC

#345
NCAA Approved
AP Calculus BC is a college-level course that extends the concepts of Calculus AB to include different types of equations and introduces sequences and series. Students learn to approach calculus problems from multiple perspectives and apply these techniques to real-world situations. All students in this course are expected to take the AP Calculus BC exam, with the opportunity to earn college credit through a qualifying score,

INTRODUCTION TO DATA ANALYTICS (Semester)

#320 Grades 11, 12

Introduction to Data Analytics is an introductory semester college-level course open to ALL students to learn essential terminology and foundational skill in data analytics, including sampling, data cleaning, management, predictions, and exploration. Students will conduct basic statistical analyses on various datasets, using these analyses to draw conclusions and make data-driven predictions. They will also gain experience presenting their findings through oral or slide presentations. This course introduces ethical issues in data analysis, storage, and acquisitions, providing an innovative option for students fulfilling their math credit. College credit may be available through the College in High School Program

COMPUTER AND DATA SCIENCE AND TECHNOLOGY AND ENGINEERING COURSES

All students must earn a 0.5 credit in Computer Science and 8 credits of electives to meet graduation requirements. Students will have the ability to earn college credit by receiving a qualifying score on the AP exam in Computer Science Principles or Computer Science A or by receiving a "C" or better in College in the High school courses in Data Science and/or Computer Science.

In all cases, students should seek the recommendation of a teacher, the Computer and Data Science and Technology Education department/curriculum leader and/or a counselor if they have questions regarding their schedule.

HIGH SCHOOL PRE-ENGINEERING APPRENTICESHIP PROGRAM

- In conjunction with the Industry Manufacturing Technician (IMT) Pre-Apprenticeship Program through Catalyst Connections
- Earns between 3-6 college credits at no cost and meets Act 158 graduation requirements
- Helps students begin a career pathway in manufacturing

Program Overview

This Pre-Apprenticeship and Advanced Apprenticeship Program offers high school students an opportunity to gain hands-on experience in engineering, advanced manufacturing, and robotics. In partnership with Catalyst Connections, the program prepares students for manufacturing, technology, and engineering career pathways through structured, skills-based, and theory-based courses. Students will complete courses in the Technology and Engineering department at KOHS, with additional components and assessments completed online. Please see Mr. Bochicchio for additional information

Program Pathways

Pre-Apprenticeship Program

Courses:

- Manufacturing Technology 1
- Computer-Aided Design and Drafting (CADD)
- IMT Pre-Apprenticeship – asynchronous online portion to complete skills assessments

Skills Developed:

- Introduction to manufacturing safety
- Manufacturing quality practices and measurement
- Basic drafting and design principles
- Preparation for industry-standard assessments

Pre-Engineering Apprenticeship Requirements

Eligibility: Open to high school students in grades 9-12 interested in manufacturing and technology.
Completion: Successful completion of assessments and projects in each course.

Advanced Apprenticeship Program

Courses:

- Manufacturing Technology 2
- Robotics
- IMT Advanced Pre-Apprenticeship – asynchronous online portion to complete skills assessments

Skills Developed:

- Manufacturing Process and Production
- Manufacturing Maintenance Awareness
- Advanced manufacturing and design techniques
- Robotics programming and competitive problem-solving
- Preparation for industry-standard assessments

Advanced Pre-Engineering Apprenticeship Requirements

- **Eligibility**: Open to high school students in grades 11-12 interested in manufacturing and technology and those students who completed the Pre-Engineering Apprenticeship program.
- **Completion**: Successful completion of assessments and projects in each course.
- **Sample Pathway**

9th Grade	10th Grade	11th Grade	12th Grade
Manufacturing Technology 1	Computer-Aided Design and Drafting (CADD)	Manufacturing Technology 2	IMT Advanced Pre-Apprenticeship
	IMT Pre-Apprenticeship	Robotics	

Benefits

- Hands-On Learning: Engage with real-world manufacturing and design tools.
- Skill Certification: Leads to industry-recognized credentials recognized nationally and allows students to receive up to 7 industry-recognized certifications with the ability to earn a CPT credential and 2 State Certified Pre-Apprenticeship completion certificates.
- Career Preparation: Develop foundational and advanced skills for a career in manufacturing and technology with career placement opportunities.
- Post-Secondary Articulation Agreements with CCAC and Penn West University with 3 to 6 credits offered for free upon completion of both IMT Pre-Apprenticeship Programs.

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Department Courses

Computer and Data Science:

AP Computer Science Principles
AP Computer Science A
Computer Science Discoveries (semester)
CHS Data Science Using Python (semester)
CHS Data Science- Using "R" (semester)

Technology and Engineering:

Accelerated Technology Education (semester)
3D Printing (semester)
CADD I (Computer Aided Drafting and Design) (semester)
CADD II (Computer Aided Drafting and Design) (semester)
Engineering and Design
Game Design with Unity (semester)
Manufacturing Technologies (semester)
Manufacturing Technologies II (semester)
Mobile APP Design (semester)
Robotics (semester)
Virtual Reality with Unity (semester)

Some Example Course Pairings

These would be recommended, not required. Students can personalize their learning as needed.

Course 1	Course 2	Course 3	Course 4
Accelerated Technology Education	Manufacturing Technologies	Manufacturing Technologies II	Engineering and Design
CADD I	CADD II	Engineering and Design	
CS Discoveries	AP Computer Science Principles	AP Computer Science A	
CS Discoveries	Data Science with Python	Data Science with R	AP Statistics
CS Discoveries	Mobile App Design	Game Design	Virtual Reality
CS Discoveries	Robotics	Competitive Robotics	

COMPUTER SCIENCE DISCOVERIES (semester)

#350

NCAA Approved

Computer Science Discoveries is an introductory course in computer science aligned with CSTA standards. This course provides a broad overview of computer science, covering topics such as problem-solving, programming, user-centered design, and data. Students are inspired to create their own websites, apps, animations, and games, gaining foundational skills in a variety of digital tools and technologies.

AP COMPUTER SCIENCE PRINCIPLES

#353

NCAA Approved

AP Computer Science Principles is an introductory college-level course that explores the breadth of computer science. Students learn to design, evaluate, and apply solutions to real-world problems through algorithm and program development. They incorporate abstraction, use data to uncover insights, and explain how computing innovations and systems- including the internet - function and impact society. Emphasizing collaborative and ethical computing practices, this course fosters a responsible computing culture. Students can earn college credit with a qualifying score on the AP exam or a grade of "C."

AP COMPUTER SCIENCE A

#356

NCAA Approved

AP Computer Science A is an introductory college-level course focused on programming in Java. Students cultivate their coding skills by analyzing, writing, and testing Java code, exploring essential concepts such as variables, control structures, data structures, and object-oriented programming principles like inheritance and polymorphism. This course builds a strong foundation in programming and computational thinking. Students can earn college credit by qualifying on the AP exam or by achieving a grade of "C" or better in the College in High School Program.

CHS DATA SCIENCE USING PYTHON (semester)

#370

CHS Data Science with Python is a semester-long course open to ALL students, focusing on Python as a powerful tool for data science. Python, a versatile programming language, is widely used by companies to analyze data and gain a competitive edge. Unlike other Python courses, this course centers specifically on data science applications, teaching students efficient methods for data storage, manipulation, analysis, and an introduction to machine learning to prepare for automation in an AI-driven world. Students will also explore essential tools to conduct their own data analyses. College credit is available through the College in High School Program.

CHS DATA SCIENCE USING "R" (semester)

#808

CHS Data Science with R is a semester-long course open to ALL students, focusing on R as a powerful tool for data science. R, a statistical programming language, is widely used in industries and research settings for data analysis and visualization. Unlike general R tutorials, this course centers specifically on data science applications, teaching students efficient methods for data storage, manipulation, analysis, and an introduction to machine learning to prepare for automation in an AI- driven world. Students will also explore essential tools within R to conduct their own data analyses and create compelling visualizations. College credit is available through the College in High School Program.

ACCELERATED TECHNOLOGY EDUCATION (semester)

#721

Accelerated Technology Education is a hands-on, activity-based course that explores key technological systems in communication, transportations, production, and manufacturing. Students will work both independently and in teams to design practical solutions using sketching, industry-standard 3D design, laser engraving, #D printing, pen lathe technology, and modeling software. Through structured activities and open-ended projects, students will build skills in planning, documentation, communication, and career preparation. In addition, students will have

the opportunity to join the student-run EdCorp, where they can apply their skills in a real-world business environment. Through EdCorp, students gain entrepreneurial experience by creating a business plan, promoting and advertising products, producing and selling items, working with real clients, managing an e-commerce website, and learning other aspects of the business process.

MANUFACTURING TECHNOLOGIES (semester)

#720

Manufacturing Technologies is a semester course that introduces students to the technology lab, emphasizing the proper and safe use of tools, machines, materials, and processes commonly used in skilled trades, manufacturing, and modern careers. Lessons focus on building lifelong skills and knowledge to solve real-world problems and contribute as successful citizens. Students will apply their accumulated knowledge, along with STEM concepts, to create, design, and build both teacher-assigned and self-selected projects under teacher guidance. While many projects center on wood tools, machines, and manufacturing, students will also explore other materials and technologies, including plastics, metals, coatings, CNC, CAD, and laser engraving. The skills acquired in Manufacturing Technologies provide a foundation for students planning to take Engineering and Design. Additionally, students can apply their skills through opportunities in stage set design, community projects, and participation in the student-run Educational Corporation (EdCorp)

MANUFACTURING TECHNOLOGIES II (semester)

723

Manufacturing Technologies 2 is a semester course that builds on the knowledge and skills acquired in Manufacturing Technologies. This course provides an in-depth review of safe practices and proper use of advanced tools, machines, materials, and processes common in skilled trades, manufacturing, and modern careers. Lessons emphasize real-world problem-solving, preparing students with lifelong skills and knowledge. Students will apply and expand their understanding of STEM concepts to create, design, and build more advanced teacher-assigned and self-selected projects under supervision. This course introduces complex techniques, tools, and materials, including advanced woodwork, plastics, metals, welding, coatings, CNC, CAD, and laser engraving. Skills developed in this course are foundational for students planning to take Engineering and Design. Students also have opportunities to apply their knowledge through stage set design, community projects, and involvement in the Educations Corporation (EdCorp).

ENGINEERING AND DESIGN

#722

Engineering and Design is a year-long course designed for students to deepen and apply the skills, tools, technologies, machines, materials, and processes gained in Technology and Engineering. Students will engage in the engineering design process to develop individual, team, or teacher-selected projects, applying STEM concepts to research and create detailed design plans. They are encouraged to use a range of tools, materials, and technologies available in class, with the option

to supplement with additional resources. Lessons and projects are designed for students seeking an accelerated experience, preparing them with essential skills for solving real-world problems and for careers in skilled trades, manufacturing, and 21st-century industries. Students in this course can also apply their skills through stage set design, community projects, and participation in the student-run Educational Corporation (EdCorp). College credit is available through the College in High School Program.

CADD I (Computer Aided Drafting and Design) (semester)

#250

CADD I (Computer-Aided Drafting and Design) is a semester-long course that introduces students to 2-dimensional and 3-dimensional CAD modeling, with an emphasis on mechanical applications. Students will learn to use industry-leading software (Autodesk AutoCAD) to create and model mechanical projects, producing and distributing basic, industry-standard mechanical drawings.

CADD II (Computer Aided Drafting and Design) (semester)

#723

CADD II (Computer-Aided Drafting and Design) is a semester-long course that introduces students to three key areas of CADD. First, students will explore basic computer hardware, software, and operating systems, along with techniques for creating and editing 2D mechanical drawings. Next, the course applies architectural drafting practices in a CADD environment, including the development of 2D site plans. Finally, students will learn 3D modeling using Autodesk Inventor and 3DS Max, creating working drawings and files for 3D Printing. This course supports post-secondary goals in various trades, mechanical or architectural drafting, and engineering. College credit is available through the College in High School Program.

MOBILE APP DESIGN (semester)

#621

Mobile App Design is a semester-long course that explores the growing significance of mobile applications in media consumption, social interaction, news, and learning. In this course, students will learn to create mobile apps, develop applications that can run on their own smartphones, and design an app to address a specific real-world problem.

GAME DESIGN (Unity) (semester)

#650

Game Design (Unity) is a semester-long course introducing students to basic programming through the creation of 2D and 3D games using Unity™, a professional, industry-standard game development engine. Students will design and develop at least one full, playable game that can run on multiple platforms, which they can showcase in their digital portfolios.

VIRTUAL REALITY (semester)

#375

Virtual reality is a semester-long course where students learn to create their own virtual reality worlds using C# and Unity software. Students can experience their VR creations on a computer, mobile device, or VR headset such as an Oculus.

ROBOTICS (semester)

#725

Robotics guides students through the design and construction of a mobile robot using motors, servos, analog sensors, and digital sensors. Along the way, students learn essential STEM principles and robotics concepts, culminating in an understanding of key engineering principles. This modular, project-based curriculum teaches the design process in a hands-on, engaging way that motivates and inspires students, helping them see the real-world relevance of their work. No Prior robotics experience is required; beginners advance through sequential units that gradually increase in complexity. This course supports post-secondary goals, including associates degrees in mechatronics, computer science, and electrons, and bachelor's degrees in computer science, mechanical engineering, and computer engineering. Students may take robotics more than once.

3D PRINTING (semester)

#727

3D Printing is a high school course on additive manufacturing that introduces students in grades 10-12 to the fundamentals of designing and creating objects layer by layer from digital models. Through hands-on projects and the use of various materials and 3D printing technologies, students will explore the applications and potential of additive manufacturing in the fields such as aerospace, healthcare, and consumer goods. This course equips students with the technical skills and innovation mindset needed to excel in the rapidly evolving field of digital fabrication.

DRONES AND AERIAL TECHNOLOGY (semester)

#724

Drones and Aerial Technology is an introductory course that explores the fundamentals of drone technology, including design, mechanism, programming, and applications in various industries. Students will gain hands-on experience in operating drones while learning principles of flight,

navigation, and aerial photography. The course covers essential drone safety and FAA regulations, including requirements for hobbyist drone pilots in Pennsylvania. Students will learn about the Recreational UAS Safety Test (TRUST), mandated by the FAA for hobbyist pilots, and be informed about the FAA's recreational model aircraft rules. For drones over 0.55 lbs (250g), students must register their drone with the FAA, with a registration fee required (Currently $5). This course also covers guidelines on airspace, altitude, and maintaining line-of-sight during flight. Through project-based learning, students will develop technical skills in piloting, programming, and data analysis, preparing them for potential careers in the growing field. No prior experience with drones is required.

SCIENCE COURSES

- All science course offerings are aligned with the Pennsylvania STEELS Standards.
- Students must complete a minimum of 4 credits of science to graduate.
- All students are required to take at least one course in each of the natural sciences: biology, chemistry, and physics.
- All biology courses will prepare students for the PA Keystone Exam in Biology, given in the Spring of 9th Grade.
- Students are encouraged to check with prospective colleges to ensure that appropriate courses are selected for potential college majors.
- Medical career paths would benefit from AP Courses in Biology and Chemistry as well as Organic Chemistry and Human Anatomy.
- Engineering career paths would benefit from AP Courses in Physics.

9th Grade	10th Grade	11th Grade	12th Grade
Applied Biology	Applied Chemistry	Applied Physics	Applied Environmental Science
Accelerated Biology	Accelerated Chemistry	Accelerated Physics May Take Concurrently: Accel. Chemistry 2 Organic Chemistry Human Anatomy	Select 1 or More: AP Biology AP Chemistry AP Physics 1 AP Envir. Science Accel. Chemistry 2 Organic Chemistry Human Anatomy
Honors Biology	Honors Chemistry May Take Concurrently: AP Physics 1 if concurrently enrolled in Algebra II	AP Physics 1 or Accelerated Physics May Take Concurrently: AP Biology AP Chemistry AP Physics 2	Select 1 or More: AP Physics 1 AP Biology AP Chemistry AP Envir. Science AP Physics 2 Accel. Chemistry 2 Organic Chemistry Human Anatomy

		Accel. Chemistry 2 Organic Chemistry Human Anatomy	

APPLIED BIOLOGY

#430 Grade 9
NCAA Approved
This course uses a hands-on approach to teach the fundamental concepts of biology in preparation for post-high school academic endeavors. Topics include: basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology. This course includes integration of technology, cooperative learning projects, hands-on labs, online labs, and research. Assessment is through multiple approaches such as exams, quizzes, projects, and presentations.

ACCELERATED BIOLOGY

#432 Grade 9
NCAA Approved
***Recommendation**: Successful completion of Science 8.*

This course prepares students for a future academic development by providing a more in-depth, accelerated view of the world of living things. Topics covered include: basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology. This course includes integration of technology, cooperative learning, laboratory experiments, and research. Assessment is through multiple approaches such as exams, quizzes, lab work, homework, projects, and presentations.

HONORS BIOLOGY

#433 Grade 9
NCAA Approved
***Recommendation:** Completion of Honors Science 8 with a minimum of a C or completion of Science 8 with a minimum of a B along with teacher recommendation.*

This introductory biology course is designed for motivated students who may be interested in pursuing medical, research, or environmental careers. Honors Biology topics include: basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology.

The two major goals of Honors Biology are to help students develop a conceptual framework for the study of biology and to gain an appreciation of science as a process. The primary emphasis of this course is the development of an understanding of biological concepts rather than

memorization of facts and technical details. Four major notions are essential to this conceptual understanding: a grasp of science as a process rather than as an accumulation of facts, personal experience in scientific inquiry, recognition of unifying themes that integrate the major topics of biology, and the application of biological knowledge and critical thinking to environmental and social concerns. Assessment is through multiple approaches such as written exams, lab work, homework, and class work.

AP BIOLOGY

#446 Grades 11 or 12
NCAA Approved
Recommendation: *Successful completion of Honors Biology or completion of Accelerated Biology with a minimum of a B average with teacher recommendation.*

Students interested in STEM or medical careers are strongly encouraged to take AP Biology. Students should also inquire about the electives, Human Anatomy and Organic Chemistry, as concurrent courses with AP Biology.

This course is designed to be the equivalent of a full year college biology course including laboratory. In this rigorous college level course, living organisms are studied from the cellular, genetic, organismal, and ecological perspectives. Evolution by natural selection is one of the central ideas that ties together much of the content in the course. Topics such as gene regulation and cell communication are explored and stressed in an attempt to more deeply understand the biology of living things at a cellular level. Students will regularly work with biological models and data sets to strengthen content learned in class. Laboratory activities will allow the students to pose their own questions and design experiments related to their questions. Students will apply statistical tests to best analyze data as well.

Students who select AP Biology should be self-disciplined and of the maturity level expected for a college level course. Students can earn up to 8 college credits for this course with a qualifying score on the AP exam.

APPLIED CHEMISTRY

#434 Grade 10
NCAA Approved
This course uses a hands-on approach to teach the fundamental concepts of chemistry in preparation for post-high school academic endeavors. Topics include: matter, phases, periodic table, and energy. This course includes integration of technology, cooperative learning projects, hands-on labs, online labs, and research. The skills covered during the course include the use and care of laboratory equipment, evaluation of simple equations, recording and analyzing data, and making and interpreting graphs. Assessment is through multiple approaches such as written exams, projects, lab work, homework, and class participation.

ACCELERATED CHEMISTRY

#436 Grade 10
NCAA Approved
Recommendation: *Students must pass Accelerated Biology or complete Applied Biology with an A average, along with teacher recommendation and completion of Algebra I.*

This course includes integration of technology, cooperative learning, and laboratory experiments. The course will cover the following topics: measurements, matter and energy, atomic theory and structure, periodic law, chemical bonding, chemical formulas and nomenclature, chemical equations and reactions, and stoichiometry. Applications to issues and topics from everyday life will be made while laboratory skills and cooperative skills are refined. Assessment is through exams, lab results and reports, homework, and class participation.

HONORS CHEMISTRY

#437 Grade 10
NCAA Approved
Recommendation*: Successful completion of Honors Biology or completion of Accelerated Biology with a minimum of a B-average, along with teacher recommendation with completion of minimum of Algebra I.*

This course is a comprehensive, laboratory-oriented introduction to chemistry intended to prepare students for AP science courses. Traditional principles and applications of chemistry include concepts of matter, energy, atomic structure, chemical bonding, periodic law, compound formula writing and nomenclature, composition stoichiometry, reactions, reaction stoichiometry, and gas laws. Laboratory skills are developed for performing experiments and for analyzing data. Application of general chemical knowledge to daily living, technology, and the environment is incorporated.

This course is designed for those students who have demonstrated exceptional abilities in mathematics and science and who desire a much more rigorous approach to chemistry. Students

taking this course should be prepared to work on a more independent basis and should intend to take AP Chemistry in either their junior or senior year. Students who are interested in STEM careers will benefit from this course. Technology is an integral part of this course. Assessment is through exams, lab results and reports, homework, projects, and class participation.

ACCELERATED CHEMISTRY II

#444 Grades 11 or 12
NCAA Approved
***Recommendation**: Completion of Accelerated Chemistry or Honors Chemistry.*

A student who enjoys using mathematics, who is very interested in science, and who feels it may be a major role in his/her career choice should elect this course.

This course is a second-year course designed for those students who have a need for or an interest in continuing study of chemistry and will prepare students for the freshman year of college. The topics covered include gases, thermochemistry, acids and bases, equilibrium, kinetics, nuclear chemistry, and electrochemistry. The labs integrate modern technologies to collect and analyze data. Student experiments and instructor demonstrations are also included as visible applications of theories. Practical examples of these theoretical concepts being applied to everyday life are extensively used throughout the course.

This course is highly recommended for the college bound student who is planning a career in science, mathematics, medicine, engineering, or a related field.

AP CHEMISTRY

#447 Grades 11 or 12
NCAA Approved
***Recommendation**: Successful completion of Honors Chemistry or completion of Accelerated Chemistry with a minimum of a B average with teacher recommendation, along with completion of a minimum of an Algebra I course.*

Students taking AP Chemistry would benefit from concurrently enrolling in Organic Chemistry. Students interested in STEM, Engineering, and Medical careers will benefit from this course.

This course is the equivalent of a full year of a college general chemistry course including laboratory design by the College Board curriculum. In this course, the student will attain a depth of understanding of the fundamentals of chemistry and a reasonable competence in dealing with chemical problems.

Success in this level of chemistry requires a high level of motivation and interest in chemistry, excellent study skills, sophisticated problem-solving skills, and a commitment to working outside of the classroom. Students who select AP Chemistry should be self-disciplined and of the maturity level expected for a college level course. Students can earn up to 8 college credits for this course with a qualifying score on the AP exam.

APPLIED PHYSICS

#435 Grade 11
NCAA Approved
This course uses a hands-on approach to teach the fundamental concepts of physics. Topics include: optics, waves, electricity, motion, and forces. This course includes integration of technology, hands-on labs, online labs, and research. The skills covered during the course include the use and care of laboratory equipment, evaluation of equations, recording and analyzing data, and making and interpreting graphs. Assessment is through multiple approaches such as written exams, projects, lab work, homework, and class participation.

ACCELERATED PHYSICS

#442 Grade 11
NCAA Approved
***Recommendation**: Successful completion of Accelerated Chemistry I and at least concurrently enrolled in an Algebra II mathematics course. However, a trigonometry-based mathematics course is preferred.*

This course is an accelerated, comprehensive, laboratory-oriented introduction to physics. It focuses on conceptual understanding and computational problem solving using hands-on activities and includes a lab period once a week. Emphasis will be directed to the application of major principles to everyday experiences. Topics include: waves, optics, electricity, motion, forces. Laboratory experiences provide opportunities for students to engage in science practices as they conduct experiments, make predictions, collect and analyze data, apply mathematical routines, develop explanations, and communicate about their work. Assessment is through multiple approaches such as written exams, projects, lab work, homework, and class participation.

AP PHYSICS 1: Algebra-Based

#438 Grades 10, 11, or 12
NCAA Approved
***Recommendation**: Students may select to concurrently enroll in this course in 10th grade with Honors Chemistry. This course is highly recommended for all students preparing to go to college in the fields of science, engineering, math, and medicine. Students must be concurrently enrolled in Algebra II or have completed the course. However, a trigonometry-based mathematics course is preferred.*

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, and conservation. Students build their understanding of physical models as they explore and solve problems in these content areas: Kinematics; Forces and Translational Dynamics; Work, Energy, and Power; Linear Momentum; Torque and Rotational Dynamics; Energy and Momentum of Rotating Systems; Oscillations; and Fluids.

Students who select AP Physics 1 should be self-disciplined and of the maturity level expected for a college level course. Students can earn up to 4 college credits for this course with a qualifying score on the AP exam.

AP PHYSICS 2: Algebra-Based

#439 Grades 11 or 12
NCAA Approved
Prerequisite: *Successful completion of AP Physics 1 or an A average in Accelerated Physics.*

Students must be concurrently enrolled in Algebra II or have completed the course. However, a trigonometry-based mathematics course is preferred. This course is highly recommended for all students preparing to go to college in the fields of science, engineering, math, and medicine.

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. Students build their understanding of physical models as they explore and solve problems in these topics: Thermodynamics; Electric Force, Field, and Potential; Electric Circuits, Magnetism and Electromagnetism; Geometric Optics, Waves, Sound, and Physical Optics.

Students who select AP Physics 2 should be self-disciplined and of the maturity level expected for a college level course. Students can earn up to 4 college credits for this course with a qualifying score on the AP exam.

APPLIED ENVIRONMENTAL SCIENCE

#448 Grade 12
NCAA Approved
This course examines the delicate balance that exists in the ecology of the planet. Environmental science is a multidisciplinary field that integrates physical, biological, and information sciences to the study of the environment and the solutions to environmental problems. The major units studied include population dynamics, overpopulation, pollution, alternative energy, climate change, destruction of rainforests, and endangered species. Environmental Science incorporates

the social sciences for understanding human relationships, perceptions, and policies toward the environment.

Issues such as the understanding of earth processes, evaluating alternative energy systems, pollution control and mitigation, natural resource management, and the effects of global climate change will be examined. Assessment is through unit exams, quizzes, class projects, and class participation.

AP ENVIRONMENTAL SCIENCE

#460 Grade 12
NCAA Approved
Prerequisite: Students must have successfully completed at least one full year of biology, chemistry, and physics in order to take this course.
Recommendation*: Students are encouraged to enroll in multiple science classes senior year.*

AP Environmental Science is an introductory course equivalent to a semester of college environmental science. The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

Students who select AP Environmental Science should be self-disciplined and of the maturity level expected for a college level course. Students can earn up to 3 college credits for this course with a qualifying score on the AP exam.

Science Electives

HUMAN ANATOMY

#449 Grades 11 or 12
NCAA Approved
Recommendation*: Successful completion of a minimum of a biology and chemistry course.*
Students interested in medical careers will benefit from this course.
Human Anatomy will enable students to develop an understanding of the relationships between the structures and functions of the human body. Topics include the basic organization of the body and major body systems along with the impact of diseases on certain systems. Students will also learn the mechanisms for maintaining homeostasis within the human body. This course will involve laboratory activities, textbook materials, models, diagrams, and clinical studies. This course is designed for college preparation, especially for biology and health career majors. Assessment is through multiple approaches such as written exams, lab work, homework, and class participation.

ORGANIC CHEMISTRY

#450 Grades 11 or 12
NCAA Approved
Recommendation*: Successful completion of a minimum of a biology and chemistry course.*
Students interested in STEM, engineering, and medical fields will benefit from this course. Students enrolled in AP Chemistry are strongly encouraged to take this course concurrently.

This course is designed to teach the basic nomenclature, structures, reactions and properties of aliphatic and aromatic hydrocarbons and their derivatives, including alcohols, esters, ethers, aldehydes, ketones, amines, and amides. Techniques of purification, separation, and synthesis are practiced in the laboratory. The student will evaluate the impact of organic compounds on standard of living and the environment. This course is intended for students planning to major in biology, chemistry, chemical engineering, pharmacy, and certain medical fields. Assessment is through exams, labs, and class participation.

FORENSIC SCIENCE (semester)

#451 Grades 11 or 12
NCAA Approved
This course will examine the unifying principles of forensic science, discuss the rooting of forensic science in the pure sciences, and introduce the unique ways in which a forensic scientist must think. Students will work through interactive exercises and discuss various scenarios. Topics covered include blood analysis, hair analysis, fiber comparisons, paints, glass compositions, and soil comparisons. This course involves all areas of science including biology, anatomy, chemistry, physics, and earth science with an emphasis in complex reasoning and critical thinking. In addition, students must incorporate the use of technology, communication

skills, language arts, art, family and consumer science, mathematics, and social studies. Assessment is through exams, homework, class participation, and performance assessments, with students working in teams to solve crimes using scientific knowledge and reasoning.

ECOLOGY (semester)

#456 Grades 11 or 12
NCAA Approved
This course is a semester that examines the balance that exists in the ecology of the planet. The major units studied include basic ecological principles; six terrestrial biomes of the world and human ecology including overpopulation, pollution, alternative energy, climate change, destruction of rainforests, and endangered species. Assessment is through unit exams, class projects, and class participation.

WORLD LANGUAGE COURSES

World Languages offerings include French and Spanish. Students will follow a sequential program in each language. The goal of all language courses is for students to achieve communicative proficiency. The World Language teachers strongly encourage students to commit themselves to a full program, studying one language for four years between Grades 9 and 12. College-bound students should consider pursuing world language based on their intended major.

- French 2
- French 3
- Honors French IV
- Spanish 1
- Spanish 2
- Spanish 3
- Honors Spanish IV

FRENCH 2

#502 Grades 10, 11, or 12
NCAA Approved
French 2 continues the study of French by expanding meaningful expression in both speaking and writing. The primary purpose of the course is to prepare students to be college-ready, well-rounded global citizens who can communicate effectively in French and are aware of the cultural influences of French heritage at home and abroad. Each unit consists of new vocabulary themes and grammar concepts, reading and listening comprehension activities, speaking and writing activities, multimedia cultural presentations, and interactive activities and practices that reinforce vocabulary and grammar. Various forms of assessments will monitor the language progression. Students selecting this course should have attained at least a C grade in French 1.

FRENCH 3

#503 Grades 11 or 12
NCAA Approved
French III provides a greater emphasis on the French language, grammar, and culture. The primary purpose of the course is to prepare students to be college-ready, well-rounded global citizens who can communicate effectively in French. This course is a continuation of the beginning level courses and is designed to help the student continue learning the French language. In this course, students practice listening, speaking, reading, and writing skills. Throughout the course, students will expand their vocabulary and use increasingly complex grammatical structures that are introduced and practiced in innovative and interesting ways. Students learn about the culture, people, geographical locations, and histories of the French-speaking world. Various forms of assessments will monitor the language progression. Students selecting this course should have attained at least a C in French 2.

HONORS FRENCH IV

#504 Grade 12
NCAA Approved
Honors French 4 is an advanced language course that continues with a more in-depth study of French in multiple areas. Student proficiency is increased through an intense approach involving listening, grammar, reading, vocabulary (including idiomatic expressions), speaking and writing skills. Students are required to use more sophisticated vocabulary and more complex grammatical structures. Reading and writing assignments are more challenging as they include more authentic literature and essays. Student to student interaction is emphasized as the focus of the course is more student centered. Cultural knowledge plays a pivotal role in this course through the integrated and thematic study of art, history, film, literature, and music. Students will also be expected to incorporate modern technology by utilizing a variety of tools such as videos, podcasting, and multimedia.

SPANISH 1

#521 Grades 9, 10, 11, or 12
NCAA Approved
This course is designed to enhance students' ability to learn a world language. Students will be expected to use the target language extensively in class to enhance their communicative skills. Students will develop their listening, speaking, reading, and writing skills through oral and written presentations. Short cultural readings will provide authentic insight into Spanish culture worldwide. Students will have the opportunity to work with technology in an interactive manner. In addition to classroom participation, students will be assessed through regularly assigned homework, quizzes, projects, and a comprehensive end of year test. It is recommended that students selecting this course should have a minimum of a C average in their English course from the previous year.

SPANISH 2

#522 Grades 10, 11, or 12
NCAA Approved
Spanish 2 continues the study of Spanish by expanding meaningful expression in both speaking and writing. Each unit consists of new vocabulary topics and grammatical concepts, reading and listening comprehension activities, speaking and writing activities, multimedia cultural presentations, and interactive activities and practices that reinforce vocabulary and grammar. This course includes a strong emphasis on providing context and conversational examples for the language concepts presented in each unit. Students are actively engaged in their own language learning, understand common vocabulary terms and phrases, use a wide range of grammar patterns in their speaking and writing, participate in conversations and respond appropriately to conversational prompts, analyze and compare cultural practices, products, and

perspectives of various Spanish-speaking countries. Various forms of assessments will monitor the language progression.

SPANISH 3

#523 Grades 11 or 12
NCAA Approved
Spanish 3 provides a greater emphasis on the Spanish language, grammar, and culture. The primary purpose of the course is to prepare students to be college-ready, well-rounded global citizens who can communicate effectively in Spanish. This course is a continuation of the beginning level courses and is designed to help the student continue learning the Spanish language. In this course, students practice listening, speaking, reading, and writing skills. Throughout the course, students will expand their vocabulary and use increasingly complex grammatical structures that are introduced and practiced in innovative and interesting ways. Students learn about the culture, people, geographical locations, and histories of the Spanish -speaking world. Various forms of assessments will monitor the language progression. Students selecting this course should have attained at least a C in Spanish 2.

HONORS SPANISH IV

#524 Grade 12
NCAA Approved
Honors Spanish 4 is an advanced language course that continues with a more in-depth study of Spanish in multiple areas. Student proficiency is increased through an intense approach involving listening, grammar, reading, vocabulary (including idiomatic expressions), speaking and writing skills. Students are required to use more sophisticated vocabulary and more complex grammatical structures. Reading and writing assignments are more challenging as they include more authentic literature and essays. Student to student interaction is emphasized as the focus of the course is more student centered. Cultural knowledge plays a pivotal role in this course through the integrated and thematic study of art, history, film, literature, and music. Students will also be expected to incorporate modern technology by utilizing a variety of tools such as videos, podcasting, and multimedia.

BUSINESS EDUCATION COURSES

The courses in the Business Education Department will fulfill elective credit requirements.

- Accounting 1
- Accounting 2
- Business Publications (semester)
- Introduction to Business and Marketing (semester)
- Investing for the Future (semester)
- Digital Video Production and Editing (semester)
- Money Matters - *Required Course under Elective Credits* (semester)

ACCOUNTING I

#601 Grades 10, 11, or 12

This course provides students with skills useful in life related to banking, credit, taxes, invoices, and payroll. Students are introduced to basic accounting principles for a service business organized as a proprietorship. Students will learn the basics of completing an accounting cycle and all of the financial statements that must be completed according to generally accepted accounting principles. Sophomores wanting to take this course should be in good academic standing with an overall C average or better**.** Grades are based on homework, class work, and chapter tests.

ACCOUNTING 2

#602 Grades 11 or 12

This course is for students who have career objectives in accounting or any other business fields such as finance, economics, marketing, financial planning, or management. The basic principles of Accounting 1 are reviewed and applied to a merchandising business organized as a partnership. A full accounting cycle will be studied with the new addition of payroll, taxes as related to payroll, and merchandise. Automated Accounting Software is utilized to reinforce concepts and introduce how their basic knowledge of manual accounting is enhanced by the use of the computer and accounting software. Grades are based on homework, class work, and chapter tests**.**

Prerequisite: Students must have completed Accounting 1 with a C or better

BUSINESS PUBLICATIONS, *formerly Graphic Design* (semester)

#643 Grades 9, 10, 11, or 12

Business Publications is an applications software course that allows students to utilize their creativity skills to create professional-quality business publications for print using advanced layout and design techniques. A great emphasis is placed on the concepts and procedures of graphic design for integrating text, graphics, stationery, fact sheets, newsletters, advertisements, posters, brochures, and much more. This course is highly recommended for students who have an interest in the technology or business fields, specifically to utilize their creative skills through general layout and design of documents.

DIGITAL VIDEO PRODUCTION AND EDITING (semester)

#670 Grades 9, 10, 11, or 12

In this course, students will learn the process of creating and editing video content. The primary software used will be Adobe Premiere Pro, which is a professional grade editing software. With Adobe Audition, we will cover the basics of editing and using sound effectively in videos. Finally, students can add some special effects edits to their videos using Adobe After Effects.

MONEY MATTERS (semester)

Required course under elective credits

#662 Grades 10 or 11

Money Matters is designed to provide students with the tools needed to understand some of the biggest financial decisions that they will have to make throughout their lives. From goal setting and formulating a financial plan to choosing the right investment and insurance policy, students will develop valuable lifelong skills for making career decisions, managing money, and creating a secure financial future into retirement. This course is intended to help students prepare for a lifetime of financial literacy and is designed for students who want to get the most from their money. Managing money is a very important skill set for all young adults and this course will help them succeed.

INVESTING FOR THE FUTURE (semester)

#665 Grades 10, 11, or 12

With the ever-expanding online investing landscape, it is important for students to learn what is available to them. This course will provide students with a broad overview of various investment options and strategies. A variety of topics will be covered including stocks, bonds, mutual funds, real estate, and crypto-currency. Finally, a stock market simulation unit will allow students to put what they learn into practice.

INTRODUCTION TO BUSINESS AND MARKETING (semester)

#666 Grades 10, 11, or 12

Introduction to Business and Marketing provides students with an overview of course concepts that are valuable and impact the world of marketing. The course provides real world and current

examples of relevant companies and organizations. The course includes hands-on creation of a marketing plan.

FAMILY AND CONSUMER SCIENCES COURSES

The courses in Family and Consumer Sciences will fulfill Elective Credit requirements.

- Culinary Arts I (semester)
- Culinary Arts II (semester)
- Child Development (year)
- Advanced Child Development (year; double period)
- Bake Shop (semester)
- Sports Nutrition (semester)
- Decorating Sense (semester)
- Fashion (semester)
- Principles of Teaching (year)

CULINARY ARTS I (semester)

#701 Grades 9, 10, 11, or 12

This class is a semester course for any student interested in learning the basics of food preparation and kitchen management which are necessary life skills. Students will prepare recipes using various cooking techniques and will work in teams practicing cooperation skills including communication, decision making, problem solving, and conflict management. Particular emphasis will be placed on learning the nutritional value in everyday foods and how good food choices make a healthier lifestyle. Topics include kitchen equipment and utensils, sanitation practices, knife skills, dairy products, fruits and vegetables, grains, quick breads, and eggs.

CULINARY ARTS II (semester)

#702 Grades 9, 10, 11, or 12

Prerequisite: *Successful completion of Culinary Arts I*

This class is a semester course for the student who wants to further their skills in food preparation and nutritious meal planning. The class will consist of reinforcement of the skills learned in Culinary Arts I with an emphasis on more challenging cooking skills. Meats, yeast breads, soups, casseroles, pastry, and desserts are some of the units that will be covered in this class. Students will also have the opportunity to prepare recipes of their choosing for other labs, in addition to practicing budgeting and meal planning skills.

BAKE SHOP (semester)

#709 Grades 9, 10, 11, or 12

Bake Shop is a competition-based course in which groups will write recipes and produce baked goods based on various themes. Groups will compete against one another and present dishes to a panel of judges upon completion. Students will create various treats throughout the semester including, but not limited to, quick breads, pies, cookies, cupcakes, and candies.

SPORTS NUTRITION (semester)

#703 Grades 9, 10, 11, or 12

This course will give students a greater understanding of nutritional needs as they pertain to sports and fitness. Students will analyze their current eating habits, formulate a plan based on their calculated needs, understand the different nutrients bodies need, and design a healthy eating plan. Students will spend time in the culinary arts kitchen preparing and modifying recipes covering meals, pre- and post-workout fuel, snacks, and beverages. Participating in a school sport is not a requirement of this class. All students interested in learning more about maintaining healthy weight, gaining muscle mass, losing body fat, or staying hydrated are welcome.

FASHION

(Formerly Fashion, Fad, and Fantasy) (semester)

#770 Grades 9, 10, 11, or 12

Co-taught by an Art and Family and Consumer Science teacher, this course will focus on the elements of design and basic embroidery and sewing techniques to create original fashion items.

DECORATING SENSE (semester)

#690 Grades 9, 10, 11, or 12

Decorating Sense is a semester course designed for any student interested in learning the basic fundamentals of interior design. Students will learn the elements and principles of design. They will apply this knowledge in several projects both assigned and self-chosen.

CHILD DEVELOPMENT

#705 Grades 9, 10, 11, or 12

Child Development is a year-long, one period course designed for any student interested in having their own children in the future or considering a career working with children. Prenatal health and development will be discussed, as well as the physical, cognitive, and social/emotional development of children through age five. The first semester will also include learning the skills and techniques needed for participating in the Keystone Oaks Nursery School program. Teaching techniques are demonstrated and practiced, and educational theories are discussed. Students will also be required to complete the Real Care Baby project in which they will take care of a computerized baby. During the second semester, students will apply their knowledge of planning, preparing, and carrying out lesson plans while participating in the nursery school program. Students will supervise and teach children between the ages of 3 ½ and 5 on Mondays, Wednesdays, and Fridays for approximately 12 weeks.

ADVANCED CHILD DEVELOPMENT

#706 Grades 10, 11, 12

Prerequisite: *Successful completion of Child Development*

Advanced Child Development is a year-long, double-period course designed to provide students with the skills necessary for career planning in one of the many fields related to child care and development. The class is involved in the operation of the Keystone Oaks Nursery School program, supervising and teaching children between the ages of 3 ½ to 5 years of age. Two twelve-week sessions meeting Mondays, Wednesdays, and Fridays will be offered (one session per semester). The high school students plan, prepare, and coordinate all of the themes and lessons for the nursery school children. Both in-school and outside field trips are planned to help enhance the class for both the nursery school and high school students.

This course is an excellent continuation of Child Development for any student interested in early childhood education, elementary education, day care employment, and careers involving children. If a student has taken Child Development as a sophomore, they may elect to take Advanced Child Development during both their junior and senior years.

PRINCIPLES OF TEACHING: EDUCATORS RISING

#757 Grades 11-12

Principles of Teaching is a year-long course designed for students who have an interest in pursuing a career in the field of education. The class will focus on several areas of teaching including classroom management, planning, preparation, and methodology. Students will also complete field experience work by observing, assisting, and interning within a classroom. Credit is available through the College in the High School program.

HUMANITIES DEPARTMENT

The courses in the Humanities Department will fulfill elective credit requirements.

ART

- Drawing I (semester)
- Drawing II (semester)
- Painting I (semester)
- Painting II (semester)
- Fine Arts Studio (semester)
- Fashion (semester)
- Ceramics: Wheel Throwing (year)
- Ceramics: Coil & Slab Hand Building (semester)
- Ceramics: Pinch & Drape Hand Building (semester)

MUSIC

- Chorus (year)
- Symphonic Band (year)
- Jazz Ensemble (year)
- Orchestra (year)
- Music for You (year)
- Music Theory I (semester)
- Music for Film and Stage (semester)
- Piano (semester)
- Musical Theater (year)

Chorus, Jazz Band, Orchestra, and Symphonic Band are offered as a four-year sequenced program, meaning students may take them consecutively in 9th, 10th, 11th, and 12th grade.

Music for You may be taken multiple times, as students will explore new learning experiences, interests, and projects each time.

ART

Students will utilize the design process, Habits of Mind, and 21st Century Skills in all art courses. The following courses are designed to help students build their confidence and skills in communication, collaboration, problem-solving, and self-direction. Students will be encouraged to develop creativity, flexibility, and responsibility while developing and creating their art.

DRAWING I (semester)

#760 Grades 9,10, 11, or 12

If you are looking to develop your drawing skills or want to just get a start, this semester course will help you get there. Expand your style and practice technique using a variety of tools and mediums. Build strong connections between what is seen and transfer that onto paper. Participate in exercises that develop your observational skills.

DRAWING II (semester)

#748 Grades 9,10, 11, or 12

Prerequisite: Successful completion of Drawing I

In this course, students will build upon techniques and learning experiences developed at the Drawing 1 level.

PAINTING I (semester)

#761 Grades 9, 10, 11, or 12

If you are looking to develop your painting skills or are just beginning, this semester course is for you. Expand your style and practice a variety of techniques while developing your foundation of color knowledge and apply it to a variety of painting surfaces.

PAINTING II (semester)

#749 Grades 9, 10, 11, or 12

Prerequisite: *Successful completion of Painting I*

In this course, students will be building upon techniques and learning experiences developed at the Painting 1 level.

FINE ARTS STUDIO (semester)

#747 Grades 9, 10, 11, or 12

Explore a vast range of multimedia mediums and techniques. Examine and apply thoughtful art elements and principles into designs, utilizing a multitude of tools and techniques. Redefine definitions of art to include experiences in metal-work, fibers, glass, or installation works. This semester course takes learning experiences beyond traditional art and explores a variety of mediums and techniques. Participate in the design process utilizing Chrome Canvas and experience ideas transitioning from their initial spark to actual physical forms. Students may enroll in this course more than once, building upon knowledge and skills development via new learning experiences, interests, and projects.

FASHION (semester)

#770 Grades 9, 10, 11, or 12

Co-taught by an Art and Family and Consumer Science teacher, this course will focus on the elements of design and basic embroidery and sewing techniques to create original fashion items.

CERAMICS: WHEEL THROWING (year)

#764 Grades 9, 10, 11, or 12

In this course, body, balance, and pressure unite to create cups, bowls, and cylinders on the potter's wheel. This learning experience explores clay and its various stages of development as it transforms from a mound of earth to a functional piece of dinnerware. Through determination and practice, you will develop the skills needed to succeed in this year-long hands-on course. ***All ceramics courses may be taken without prior ceramics experience.***

CERAMICS: COIL & SLAB HAND BUILDING (semester)

#762 Grades 9, 10, 11, or 12

This semester course explores clay and its various stages of development from a mound of earth to functional dinnerware to sculptural art forms.

Develop your hand-building skills through the exploration of clay in a series of techniques introducing coil, slab, and drape construction methods and a combination of these techniques. ***All ceramics courses may be taken without prior ceramics experience.***

CERAMICS: PINCH POT & DRAPE HAND BUILDING (semester)

#763 Grades 9, 10, 11, or 12

Develop your hand-building skills through the exploration of clay in a series of techniques introducing pinch pot and drape construction methods and a combination of these techniques.

This semester course explores clay and its various stages of development from a mound of earth to functional dinnerware to sculptural art forms.

All ceramics courses may be taken without prior ceramics experience.

MUSIC

Why Learn Music?

Music is a science. It is precise, specific, and demands exact acoustics. Written music is a chart that indicates pitch, frequency, intensity, volume, melody, and harmony all at once with an exacting control of time.

Music is mathematical. It is rhythmically based on the subdivisions of time into fractions that musicians compute seamlessly while performing.

Music is a foreign language. Many terms are passed down in Italian, German, and French, among others. The notation is a highly developed shorthand that uses symbols to represent complex ideas. Understood throughout the world, Music is a complete and universal language.

Music is history. Music reflects the setting, time, and place of its creation and can lead to insight in the composer's background.

Music is a physical education. It requires intricate coordination of fingers, hand, arms, legs, lips, and facial muscles. It requires the extraordinary control of the diaphragm, back, stomach, and chest muscles that respond seamlessly to the sound the ears hear and the mind interprets.

Music is all of these things and so much more, but most of all, Music is Art! It allows human beings to take all of these techniques and concepts and use them to create and express human emotion.

That is Why We Learn Music!

Evaluation of Students in Performing Ensembles

Students participating in a performing ensemble will be evaluated on participation during class, participation in rehearsals, attendance at concerts, and growth. Please consult the course syllabi for additional information. ***Participation in Rehearsals and Concerts is Mandatory for All Performing Ensembles***

CHORUS

#771 Grades 9, 10, 11, and 12

The concert choir is a group of students with a desire to sing. This chorus offers the opportunity to participate in an active singing group that contributes to the life of the school and community. Elements of vocal technique and concepts in musicianship are incorporated through preparation for various public performances. The chorus performs in December and May. Important considerations include ability to sing, commitment within the group, and positive individual contributions. Specific concert attire is required as well as some evening performance times.

SYMPHONIC BAND

#775 Grades 9, 10, 11, and 12

***Prerequisite**: Prior experience playing a band instrument.*

The Symphonic Band course is a continuation of the instrumental music education program for students who have had previous experience in playing a band instrument. This course seeks to expand the technical, intellectual, and spiritual horizons of young band musicians by promoting the highest performance standards possible along with the development of creativity, flexibility, and versatility on the part of each band student. All types of quality concert band literature are studied with the goal of expanding each student's level of music appreciation, as well as preparing them for playing with college and community bands. Several symphonic band concerts are scheduled throughout the year and allow students ample performance opportunities while emphasizing the development of a commitment to the group. Specific concert attire is required as well as some evening performance times.

JAZZ ENSEMBLE

#776 Grades 9, 10, 11, and 12

***Prerequisite**: Audition and/or teacher recommendation. **A signature is required before students are permitted to schedule this course**. Students are not permitted to schedule Jazz Band without first scheduling Symphonic Band except by written permission of the instructor.*

This is a specialized ensemble designed for advanced instrumental students who want to expand their knowledge and performance ability through the study of jazz and pop music styles. Instrumentation is limited to the standard jazz band grouping of 5 saxophones, 4 trumpets, 4 trombones, guitar, bass-guitar, drums and keyboards; however, multiple players in each section are encouraged. All types of quality jazz band literature are studied both in written form, as well as through the development of improvisation skills. Several concerts are scheduled throughout the year and allow students ample performance opportunities while emphasizing the development of commitment to the group. Specific concert attire is required as well as some evening performance times.

ORCHESTRA

#790 Grades 9, 10, 11, and 12
***Prerequisite**: Prior experience playing an orchestra instrument or approval from the Orchestra Director.*

The High School Orchestra Course is designed for students interested in further development as string musicians. The course has a focus on both ensemble playing and individual performance skills. Students may repeat this course multiple times throughout High School, from 9th through 12th grade. Students are also able to take this course as a continuation from the 8th Grade orchestra course. Students who did not participate in the Middle School Orchestra program courses should seek out the Orchestra director's approval before enrolling in the course.

Students will have the opportunity to perform more advanced orchestral repertoire, refine their performance technical skills, and deepen their knowledge of literature and vocabulary related to orchestral music. Students will learn and perform literature composed at an appropriate level for the ensemble, selected by the director. Students enrolled in this course are required to participate in all performances and dress rehearsals.

MUSIC FOR YOU

#782 Grades 9, 10, 11, or 12
This High school music elective is designed to allow students to pursue independent study in a specific area of music that interests them. Students will propose a method of study in their chosen area, then implement that plan with consultation and assistance from the instructor throughout the year.

Possible topics students may explore include, but are not limited to, electronic music/MIDI/DAW, guitar, piano/keyboard, songwriting, traditional wind band instruments, percussion, string instruments, and voice.

Students may enroll in this course more than once and gain a different experience each year, based on new learning experiences, interests, and project ideas.

MUSIC THEORY I (semester)

#801 Grades 9, 10, 11, or 12
In Music Theory, students will break down the mysteries of music into fundamental elements and find out what makes it all work. Why are there 8 notes in a scale, or is it 12, and could it be more or even less? Whether you are looking to further your understanding of music to help you be a better musician or you are just curious, Music Theory is a great way to continue learning.

Students will also gain a deeper understanding of the rules of music, and also how and when to break those rules. Students will expand their ability to read and write music and will have opportunities to compose their own original music. Exploration of how music theory compares between cultures can give insight into other aspects of culture, let alone be super interesting.

MUSIC FOR FILM AND STAGE (semester)

#810 Grades 9, 10, 11, or 12

Impress friends and family with words such as Diegetic and Non-Diegetic Music and learn the difference. Diegetic music is the music that occurs within a scene and can be heard by the characters and non-diegetic music, only by the audience. How does one use these two types of music to help tell the story?

Students will learn about the history of music on screen and on the stage. Understanding the role that music plays in these works will help students develop a deeper appreciation for both the music and film, ballet, opera, musical, or even advertisement. Students will have an opportunity to develop their own creativity by creating short musical scores for everyday scenes using various technologies.

PIANO (semester)

#770 Grades 9, 10, 11, or 12

Piano is a semester-long course that is offered to students who are interested in learning how to play the piano. The class is designed so any student may register for the class, whether they have experience playing the piano already or not. The course will be tailored to the specific needs of each student. Beginning students will learn basic hand position and playing skills culminating in learning an intermediate solo work on the piano. Students that have prior experience, either from 8th Grade Piano or private study, will have assignments matched to their current level of experience, culminating in an appropriate solo work for their level of experience and skill.

MUSICAL THEATER (Year)

#168 Grades 9, 10, 11, 12

Students in Musical Theater will form an understanding and an appreciation of musical theater as an artform, and develop skills in acting, improvisation, voice, movement, audition technique, stagecraft, and performance. Students will also gain a deeper knowledge of theater's history and its place in America's cultural landscape. The course is open to any student wishing to improve in these areas or with an interest in performing. Though not a course requirement, students are strongly encouraged to take part in the spring musical, either as a member of the cast or crew. Additional performance opportunities may arise based on student interest.

PHYSICAL EDUCATION COURSES

- Physical Education/Health 9 and 10
- Physical Education 11 and 12
- Lifetime Fitness for You
- Strength Training and Conditioning

Students may only take a Physical Education course once per semester
PE with Health must be taken by the end of the 10th grade year

PHYSICAL EDUCATION AND HEALTH 9/10
(Semester – students will take this course in ninth or tenth grade)

#854 Grades 9 and 10
The high school physical education program is designed to enhance the physical, mental, and social development of students through participation in a wide variety of physical activities. A key objective of the program is to promote student wellness and lifetime fitness. The Physical Education Department offers units designed to develop activity skills as well as physical fitness. Health will also be integrated into course content.

PHYSICAL EDUCATION 11/12 (semester)
#915 Grades 11 and 12
The high school physical education program is designed to enhance the physical, mental, and social development of students through participation in a wide variety of physical activities. A key objective of the program is to promote student wellness and lifetime fitness. The Physical Education Department offers units designed to develop activity skills as well as physical fitness.

LIFETIME FITNESS FOR YOU (semester)
#927 Grades 10, 11, and 12
This course provides students with the opportunity to explore physical education outside of the traditional team sports setting. Students will engage in a wide variety of non-competitive fitness and leisure activities. The class is designed to promote lifelong participation in physical activities outside the spectrum of team sports.

STRENGTH TRAINING AND CONDITIONING (semester)
#856 Grades 10, 11, and 12
Strength Training and Conditioning is a must for any student who wishes to improve upon their muscular system. The main class objective is creating a better, well-rounded student through weight lifting activities. The class may include, but is not limited to, improving speed, agility, balance, coordination, body composition, and mental discipline. Only students who are serious about enhancing their physical abilities and enjoy working hard should consider this course.

APPENDIX A

ALTERNATIVE OPTIONS FOR EARNING CREDIT AND/OR MEETING SEQUENTIAL COURSE REQUIREMENTS

A. Alternative options for earning credit must relate directly to the achievement of Academic Standards. These options include:

1. Higher Education Courses. The following provisions apply to achieving Academic Standards in higher education courses:

   a. High School students eligible to enroll in a dual enrollment program from an accredited institution of higher education may be permitted to use the dual enrollment course to satisfy graduation requirements provided that:

      - The course is taught at the college level and is recognized by the higher education institution as a credit-bearing course.
      - The student satisfactorily completes the requirements of the college course.
      - A transcript of the completed college course is submitted by the higher education institution to the counseling office.

   b. If a student takes a college course during their cohort years (9-12), they will receive credit, but the grade will only be factored into the student's high school cumulative GPA if the course is used to satisfy the credit requirements in one of the four core academic areas (English, math, history, science).

   c. Student taking a college course will be responsible for all fees incurred.

2. Keystone Oaks Cyber Academy: Students may enroll and demonstrate academic achievement in the district's cyber school program, with prior approval from the high school principal. Credit will be awarded and student grade point average will be applied to their transcript. Students will be required to adhere to the KO Cyber program procedures outlined in the cyber program contract.

3. Education Experiences. Students may demonstrate achievement of Academic Standards and earn elective credit through completion of courses in accredited

educational programs outside the school which have a planned course format that meets Chapter 4 regulations and is approved by the principal in advance.

Credits earned in educational programs approved by the principal which do not follow
Chapter 4 regulations will be graded on a “PASS/FAIL” basis and will not be computed in the student’s grade point average.

APPENDIX B

Sample Course Waiver Form

Keystone Oaks High School

Course Waiver Form

Student Name: _____

Recommended Course: _____

Accelerated Course: _____

At Keystone Oaks High School, we encourage students to challenge themselves by taking rigorous courses that will help to prepare them for the curriculum of more advanced courses at the high school and post-secondary school. Additionally, since motivation and interest are important variables in student success, we realize that current academic performance may not predict future academic performance. Consequently, if you believe that your son/daughter is capable of being successful in this accelerated course, you may complete this form to request admission to the course. This course waiver form cannot be used to circumvent prerequisite courses.

Please provide a written rationale for your request which will help the principal to gain a better understanding of your child before rendering a decision. Also, understand that scheduling and staffing issues may prohibit a change to the recommended course at a later date. Additionally, while teachers typically offer extra support for their students, you should not expect the teacher to provide extensive tutoring for your child in this advanced course. If necessary, a meeting to discuss the recommendation will be held in the summer.

The teacher of the accelerated course may request a review of the placement with the student and parent at the mid-way point of the first nine-weeks in order to discuss the appropriateness of the placement.

Comments from both the child and the parent (Please use back or attach a separate sheet(s) of paper):

Student's Signature: _____

Parent's Signature: _____

Teacher's Signature: _____

Counselor's Signature: _____

Approved: _____ **Not Approved** (Reason): _____

_____

_____

Principal's Signature: _____ Date: _____

Keystone Oaks High School

Counseling Department

Dear_____,

Your child has selected a class(es) for the 2025-26 school year that has not been recommended. If your child insists on taking the class(es), please be advised that he/she may encounter difficulties. If you have any questions pertaining to your child's schedule or our rationale for not recommending the class(es), please contact your child's counselor as soon as possible. Otherwise, please sign at the bottom where indicated and select whether or not you would like your child's schedule to be changed to reflect the recommendation(s). Return this form to the High School Counseling Office at the address listed above by August 1st, 2025. You may also email the appropriate counselor to verify receipt of this notification and indicate if any changes are to be made.

CLASS(ES) NOT RECOMMENDED	CLASS(ES) RECOMMENDED
_____	_____
_____	_____
_____	_____

Sincerely,

_____ _____

Counselor Signature Date

Ms. Jennifer Tom – (412) 571-6067; tom@kosd.org

Ms. Nicole Varrenti – (412) 571-6068; varrenti@kosd.org

Ms. Lauryn Asmann – (412) 671 – 6090; asmann@kosd.org

- ○ Please change my child's schedule to include the recommended classes.
- ○ Please do not make any changes to my child's schedule.

_____ _____

Parent Signature Date

_____ _____

Student Signature Date

IMPORTANT: If your child's counselor does not receive this form or an email message by August 1st, their schedule will be changed and he/she will be enrolled in the recommended class(es) listed above.