# West York Area High School Course Selection Guide 2023-2024



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# Dear Student and Parent:

This course selection guide has been prepared for students and their parents to use in deciding which classes are best suited to the student's goals, interests, aptitudes and abilities. Selecting the most appropriate courses is the first important step in achieving an individual's educational goals. Please think carefully about the decisions you are making regarding educational programs for the next school year, as choices selected now will determine the assigned classes for the upcoming school year. Your choices now will help determine chances for success in future years of education or employment.

In the event that more information is needed about the course selection itself, college admissions, course requirements, or employer demands for the completion of certain courses while in high school, discuss your questions with a school counselor.

Make the very best use of your four years at West York Area High School. With the guidance of your counselor, teachers, and parents, carefully choose the classes that will help fulfill your needs and interests, as well as develop your talents and abilities.

With Bulldog Pride,

Carrie R. Jones Principal

**EVERY STUDENT EVERY DAY** 

# **GRADUATION REQUIREMENTS**

A summarization of the requirements for graduation is provided to assist you as you plan your course of study.

Class of 2024: Students must earn 28 credits and demonstrate proficiency in the Pennsylvania Academic Standards in order to graduate.

The following must be included:

4 credits
4 credits
3 credits
3 credits
3 credits
2 credits
1 credit .5 credit ***
.5 credit

Independent Living\*\* .5 credit

Class of 2025 and Beyond: Students must earn 29 credits and demonstrate proficiency in the Pennsylvania Academic Standards in order to graduate.

The following must be included:

English	4 credits
Mathematics	4 credits
Social Studies^	3 credits
Science^	3 credits
Arts/Humanities	3 credits
Physical Education	2 credits
Health	.5 credit
Safety Education	.5 credit
Personal Finance*	1 credit

<sup>^</sup>A 4th credit must be earned in either Science or Social Studies

<sup>\*</sup>Mathematics – The Personal Finance course offered through the Business Education department may be substituted for one math credit.

<sup>^</sup>A 4th credit must be earned in either Science or Social Studies

<sup>\*\*</sup>Students in this graduating class may substitute Personal Finance in lieu of Independent Living \*\*\*Students are no longer required to take Health II; therefore, only Health 1 (.5 credit) is required. This correction to the Course Selection Guide was made on 2.21.2023.

<sup>\*</sup>The Personal Finance course offered through the Business Education department may be substituted for one math credit.

The total credits for each subject area must be passed in order to qualify for graduation or early graduation. The remainder of the courses a student takes is based upon advice from counselors, parents, and teachers, as well as the student's identified areas of interest.

To advance from grades nine through twelve, the following credits must be earned. ALL requirements must be completed in order to participate in the graduation ceremony.

7 credits	10 <sup>th</sup> grade
14 credits	11 <sup>th</sup> grade
21.5 credits	12 <sup>th</sup> grade

Graduation

Total:

Class of 2024 28 credits Class of 2025 and Beyond 29 credits

# **EARLY GRADUATION AND EARLY RELEASE/LATE ARRIVAL**

# **EARLY RELEASE/LATE ARRIVAL (SENIORS ONLY)**

- Students who have earned 23.5 credits by the end of their junior year will have the ability to come in late or leave early
- At a minimum, two blocks per semester must be scheduled
- In order to be considered for Distinguished Honor Roll or Honor Roll, a student must schedule a minimum of 4 blocks of academic coursework per semester
- Co-curricular participation is subject to PIAA rule (maintaining a minimum of 2 credits per semester)

#### **EARLY GRADUATION**

Students participating in early graduation will not be included in valedictorian/salutatorian consideration or rankings. Students interested in early graduation should plan early with their parents and counselors to ensure all required courses are complete. Intent to apply for early graduation must be submitted for approval.

## **SENIORS**

- Students meeting all graduation requirements may elect to graduate early at the end of the first semester with administration approval
- Students will receive a diploma and will be treated as WYAHS alumni
- Students will be listed as a graduate (no longer active) no participation in academic or co-curricular programs
- Final class rank may be negatively impacted
- Students may participate in the end of year commencement ceremony. All students participating in the commencement ceremony are required to participate in all graduation practices.

# **JUNIORS**

- Students meeting all graduation requirements may elect to graduate early at the end of his/her junior year with administration approval
- Student's GPA does not affect class rank for graduating class
- Same as above students will be eligible to participate in the commencement ceremony but will not be recognized for honor status

# PENNSYLVANIA GRADUATION PATHWAYS/KEYSTONE EXAMS

The Keystone Exams, instituted by the PA Department of Education, are end-of-course assessments designed to assess student proficiency in the subject areas of Algebra, Biology, and Literature.

Act 158 of 2018 established a statewide graduation requirement for all high school students to pass the Keystone Assessments in Biology, Literature, and Algebra 1. Recently, Act 136 of 2020 updated existing statewide graduation requirements and states that:

Effective with the graduating class of 2023, students have the option to demonstrate postsecondary preparedness through one of four additional pathways that more fully illustrate college, career, and community readiness. Keystone Exams will continue as the statewide assessment Pennsylvania uses to comply with accountability requirements set forth in the federal Every Student Succeeds Act (ESSA).

Should students need options beyond Keystone proficiency, there are state defined pathways detailed below. These pathways apply to students who will graduate in 2023 and beyond.

The following table is NEW for all students:

West York Area School District Act 158/136 Graduation Pathways				
Option 1 or 2	Keystone Proficiency			
*Pass all three Keystone assessments in Algebra 1, Literature, and Biology OR achieve a Composite Score (combined) of 4452 across the 3 assessments.  If using a composite score, students must achieve at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two)				
Option 3	Alternate Assessment - students passed the Course or Keystone for each subject area. The student does not have a composite score of 4452 or higher.			
Students must have SAT: 1010 PSAT: 970 ACT: 21	ve one of the following:			

ASVAB: 31

ACT WorkKeys: Gold Level

AP Score of a 3 in the subject not passed

**Dual Enrollment Course** 

Completion of a <u>Pre-Apprenticeship</u> Program Acceptance in a 4 Year Non Profit college program

Option 4

**Evidence Based Pathway** 

Must pass the West York Keystone Course AND provide three Pieces of evidence from below.

#### Must include one of the following:

- ACT WorkKeys Silver Level
- AP Score of 3
- Acceptance into 4 year non profit institution
- Industry Recognized Credential
- <u>Dual Enrollment</u> Course In Subject

#### No more than 2:

- Satisfactory completion of a service learning project;
- Attainment of a score of proficient or advanced on a Keystone Exam;
- A letter guaranteeing full-time employment;
- A certificate of successful completion of an internship or cooperative education program;
- Or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0.

For more information regarding these requirements, you may visit the Pennsylvania Department of Education website <u>here</u>.

# PROJECT LEAD THE WAY COURSES

Project Lead the Way courses are non-weighted or weighted honors/AP level STEM classes that allow students to dive deeper into career pathways and investigations using hands-on lab experiences and inquiry modeled discussions and discovery. We offer courses in the Biomedical Pathway and the Computer Science Pathway. These courses are denoted as "PLTW" in the course descriptions.

# NJROTC PROGRAM

The Navy Junior Reserve Officers Training Corps is a credit-awarding elective curriculum focused on Citizenship Development and Leadership. It is designed to equip students with the skills needed to succeed in life – as a college student, as a career professional or in a trade. It is a full-year program which students may begin at the beginning of any year in their high school career. Intentionally designed to challenge each student both mentally and physically, the curriculum outcomes will be based upon each student's individual performance and level of

effort. Classroom instruction is augmented throughout the year by extra-curricular activities of community service, academic, athletic, drill and orienteering competitions, field meets, visits to naval or other activities, marksmanship training, and physical fitness training. Completion of 2 years of JROTC may make a Cadet eligible for accelerated pay grade assignment should they choose to enlist in one of the military branches. All courses in the program are open to students in grades 9-12 who desire to build a foundation of leadership, character and organizational skills. Curriculum includes an introduction to JROTC, basic military courtesies and customs, wear and care of the JROTC uniform, personal hygiene, military rank and insignia.

# **GUIDELINES FOR HONORS/ADVANCED PLACEMENT CLASSES**

To enter the Honors classes, the student should have successfully completed the prior course with a grade of 85% or higher and/or receive teacher approval. If the aforementioned criteria is not met, the student will be permitted to take the course with parent permission. To enter the Advanced Placement classes, the student must meet at least one of the three following criteria.

- 1. Have obtained a final grade of an A (92%-100%) in the Honors course immediately preceding the Advanced Placement course.
- 2. Have earned a 95% or higher cumulative grade point average.
- 3. Receive teacher approval.

# **COLLEGE IN THE HIGH SCHOOL COURSES**

College in the High School is a partnership between the University of Pittsburgh and West York Area High School allowing students the opportunity to earn both high school class credit and college credit all within a high school course. CHS courses generate University of Pittsburgh credits recognized by colleges and universities across the country. CHS courses are equivalent to their counterparts taught at the University of Pittsburgh.

Students wishing to take the course for college credit may do so by registering application materials and payment online through the University of Pittsburgh. Costs for the 2022-2023 school year are expected to be \$235 for 3 credits. (Subject to change per academic year.) Financial Aid is available.

# **DUAL ENROLLMENT**

Seniors and juniors will have the opportunity to participate in a Dual Enrollment program offered through the West York Area School District in conjunction with The Pennsylvania State University/York, York College of PA, Harrisburg Area Community College (HACC)/York Campus, University of Pittsburgh for College in the High School, and Mansfield University (online course offerings). Students are responsible for all fees associated with dual enrollment credits. Students, with the recommendation of a guidance counselor or the principal may, upon acceptance by the college or university, enroll in a course not offered through the high school and, upon successful completion, receive both high school and college credit for the course. Students may earn a maximum of 4 dual enrollment credits per year. Dual enrollment courses MAY NOT be used to satisfy required courses or any course offered in our course selection

guide (e.g. Eng 12, 4th Social Studies elective, 4th math, etc). Students who enroll in a dual enrollment course will be expected to complete the course in its entirety, in accordance with West York's drop/add requirements (no course dropped after day 10 of the course). Courses dropped at the college level beyond day 10 of West York's semester may receive a failing grade for the course and no credit will be earned. Additional courses offered at institutions outside our agreements will be considered on a case by case basis and will require principal approval. Considerations would be made for courses uniquely different from what is currently offered from existing partnership institutions or the current High School Course Selection Guide. A complete list of colleges and universities the district is affiliated with for dual enrollment can be found online under the "counseling" tab.

# **POST-SECONDARY GUIDELINES**

Students preparing for post-secondary admission are faced with a wide variety of admission requirements; therefore, students and parents are encouraged to check with potential post-secondary schools to ensure a clear understanding of **that** institution's requirements for admission. We highly recommend students take AP, CHS, Honors, or College Prep level courses when available. The following would meet the entrance requirements of four-year colleges:

English	4 years
Math	4 years or more
World Language	3 years of same language
Social Studies	4 years
Science	3 years minimum

<sup>\*\*\*</sup>Students are highly encouraged to take the SAT and/or ACT for a four-year college admission\*\*\*

For students interested in pursuing a two-year college, trade or technical school, it is advisable to take the following courses:

English	4 years
Math	4 years
Social Studies	4 years
Science	3 years

<sup>\*\*\*</sup>Students planning to pursue Division I or Division II athletics in college should refer to ncaa.org for specific <a href="Core Course">Core Course</a> requirements.\*\*\*

# **WEIGHTED COURSES**

All courses, unless otherwise indicated, are weighted one point.

#### **NINE POINT WEIGHTED COURSES**

- Advanced Placement Calculus I (AB)
- Advanced Placement Calculus II (BC)
- Advanced Placement Chemistry
- Advanced Placement Literature and

Composition

- Advanced Placement European History
- Advanced Placement Government
- Advanced Placement Physics I

- Advanced Placement Physics II
- Advanced Placement Statistics
- Advanced Placement US History
- Advanced Placement Geography
- CHS Statistics
- CHS Analytic Geometry & Calculus
- Advanced Placement Comparative Politics
- PLTW Advanced Placement

# **Computer Science Principles**

- Biology II
- CHS American Politics
- CHS Western Civilizations II
- Music Theory
- World Language V and VI
- Dual Enrollment Courses (approved institution

# **FOUR POINT WEIGHTED COURSES**

- All courses denoted as "HONORS"
- Human Anatomy and Physiology
- PLTW Human Body Systems
- PLTW Medical Interventions

- World Language III , IV
- Calculus
- PLTW Biomedical Innovations

# **GENERAL INFORMATION**

The following information is provided to better acquaint parents and students with the course offerings, requirements, and policies in grades 9 through 12.

The school district reserves the right to cancel any course(s) for which there is insufficient enrollment. If more students than can be accommodated choose an elective, seniors will be given preference since underclassmen may reschedule the elective the following year.

The school day is from 7:45 AM to 2:52 PM consisting of five blocks with four minutes passing time between periods. The "lunch and learn" period is between blocks three and four. During this time, students can eat lunch, attend club activities, or schedule time with teachers for academic interventions. Students in need of assistance to achieve academic standards can expect to be assigned to an extended learning opportunity during this period. Those determinations will be made based upon review of the results of standardized and district assessments.

One-credit courses will meet every day in the semester and 0.5 credit courses meet for one term (half the semester). Students must attempt a minimum of four credits per semester to be eligible for "Honor" status. Students and parents are encouraged to access the on-line grading system to view student grades throughout the semester.

The Career Internship is an opportunity provided for seniors and juniors who are interested in participating in a career-work related experience. Students who are interested in this program should schedule an appointment with their guidance counselor in order to express interest in the career internship and determine if the career choice is a realistic one for the student. The student, with the help of the counselor and/or internship coordinator, has the responsibility of obtaining the career internship. Career Internships will be given a grade of P (pass) or F (fail) at the conclusion of the internship.

The Independent Study program is designed for seniors who have demonstrated a high degree of motivation and the ability to work independently and who have an interest in furthering their knowledge in a specific area. For a student to qualify for independent study, the student must have successfully completed all courses in that specific curriculum area. Students interested in the Independent Study program should see their guidance counselor for complete information.

Vocational and technical education programs are available to students from West York at the York County School of Technology (YCST). Presently, students may elect to enroll in one of twenty-five trade or technical areas offered at the school. Students are eligible to attend the YCST upon successful completion of grade eight (8). During the 8<sup>th</sup> and 9<sup>th</sup> grade school year, an opportunity will be available to visit and apply to York County School of Technology. Tenth graders may also apply for admission but are restricted to select technical preparation programs. Tenth grade students must successfully complete ninth grade classes in the four major subject areas of English, math, science, and social studies for a total of four (4) credits in these areas. Students must have obtained a total of six (6) credits to be in grade 10. Students should see their counselor if interested in this opportunity.

Additionally, juniors and seniors may attend the York County School of Technology on a part-time basis for selected classes. Information as to available classes may be obtained through the Counseling Center. Seniors may also attend HACC Academy for half of the day where they can concentrate on various career programs. Please refer to the Career Education and Work section of the Course Selection Guide for specific details as to courses available.

# **SCHEDULE CHANGE PROCEDURE**

The selection of an appropriate schedule is an important consideration that deserves the careful attention of students and their parents or guardians. Please read the Course Selection Guide, consider carefully the courses that are available, and review the high school graduation requirements when planning a schedule. Students, guidance counselors and administrators will work together to create a balanced student schedule with regard to core subject areas and previous course accomplishments.

# Be reminded that students are scheduling courses for the entire year.

- 1. A window of opportunity to make any schedule change will be provided during the month of August for those students who are missing a class or must repeat a class. Students and parents should call the Counseling Center to schedule an appointment.
- Change requests will require administrative approval and will be accommodated based upon the master schedule and seating capacity. Schedule changes will not be made for teacher preferences or convenience purposes.
- 3. The administration reserves the right to rearrange a student's schedule in an attempt to balance class size or to accommodate a student's educational needs.

- 4. Any scheduling concerns should be brought to the attention of the student's counselor. Any changes must be approved by the administration.
- 5. Students are not permitted to add/drop classes after 10 school days from the day the course begins. Once a semester (or term course) begins, students are expected to remain in the scheduled courses.

# **COURSE DESCRIPTIONS**

# **ART**

The art courses are designed to give the student a survey study of art from primitive times to present with an in-depth study of media, techniques and materials. Upon completion of these courses, the student should have an adequate portfolio for entrance into an art school of choice.

# **CERAMICS I** - 1 credit

Prerequisite: 80% or higher in Sculpture I Open to students in grades 10, 11, and 12

This course will emphasize original ideas in clay and will deal with mostly functional pieces. Students will work with the potter's wheel, hand building, glazing and firing.

# **CERAMICS II** - 1 credit

Prerequisite: 80% or higher in Ceramics I Open to students in grades 11 and 12

This advanced course will reinforce concepts introduced in Ceramics I such as hand building, slab building and coil building. Working with different types of clay, students will explore in more depth throwing on the potter's wheel, glazing techniques and firing. Art history and contemporary clay works will be used as a basis of expression.

# **DRAWING AND PAINTING I - 1 credit**

Open to students in grades 9, 10, 11, and 12

This course is designed as an introductory course for students with little or no art experience. Students will learn the foundations of drawing through the use of pencil, charcoal, colored pencil and pastel chalk. Students will also experience color mixing and painting with watercolor and tempera paint. Students will develop a working vocabulary as they discuss and critique their own artwork, as well as that of others.

# **DRAWING AND PAINTING II** - 1 credit

Prerequisite: 80% or higher in Drawing and Painting I

Open to students in grades 10, 11, and 12

This advanced course will reinforce concepts introduced in Drawing and Painting I. Emphasis will be placed on life drawing, color theory and mixed media products. Students will be

expected to expand their independent work habits and provide more personal subject matter. Art history will be incorporated as a basis of expression.

#### **DRAWING AND PAINTING III** - 1 credit

Prerequisite: 80% or higher in Drawing and Painting II

Open to students in grades 11 and 12

This course, designed for third-year drawing students, builds upon concepts introduced in Drawing and Painting I and II. Students will use advanced materials and tools, as well as acrylic paint and canvas. Life drawing will also be emphasized through sketchbook and class assignments. Art styles and art history will be incorporated as a basis of expression. Students are expected to have an individual direction which they will be interested in exploring on a more independent basis.

#### **SCULPTURE I** - 1 credit

Open to students in grades 9, 10, 11, and 12

This course involves a study of three-dimensional, non-functional forms with an emphasis on design, materials, ideas and periods of sculpture. A variety of materials will be used. Some materials to be used are plaster, Styrofoam, clay, wire, wood and cloth. Drawing will be covered independently and in conjunction with assignments.

#### **SCULPTURE II** - 1 credit

Prerequisite: 80% or higher in Sculpture I Open to students in grades 10, 11, and 12

This course will involve a continued personal investigation into the use of various materials and ideas to solve problems that are three-dimensional and non-functional. A variety of materials will be used. Contemporary sculpture, as well as sculpture of the past, will be discussed. Some drawing assignments are required.

#### **SCULPTURE III** - 1 credit

Prerequisite: 80% or higher in Sculpture II Open to students in grades 11 and 12

This studio course will continue to explore non-functional ideas that are three-dimensional. Original thinking, design concepts and skills will be further developed through more advanced assignments.

Students wishing to continue with Art after successfully completing the advanced courses may do so with teacher permission and on an independent study basis.

# **BUSINESS EDUCATION**

# **ACCOUNTING I - 1 credit**

Open to students in grades 10, 11, and 12

Do your plans include a career in the business world? If so, then this class is for you. This course provides a strong foundation in basic accounting theory and procedures. You will learn essential accounting concepts as you complete the accounting cycle for a business. This course will give you an edge because all college business degrees require multiple accounting courses.

# WORD PROCESSING ESSENTIALS - 0.5 credit

Open to students in grades 9, 10, 11, and 12

This course will cover the essential computer skills that are necessary to become proficient in word processing and other foundation computer skills. This course will cover a thorough review of the keyboard and touch typing (the ability to type without looking at your keyboard). Students will use Google Docs to create a variety of word processing documents, will use email to effectively communicate with others, and develop a basic understanding of digital citizenship. Ultimately, students who complete this course will become faster and more accurate at keyboarding and will develop an understanding of the most essential computer skills needed to be proficient in using a computer.

# **COMPUTER APPLICATIONS I** - 0.5 credit

Open to students in grades 9, 10, 11, and 12

This course will cover the computer application skills that all students will use in high school, college and the workplace. Students will use MS Office and Google Workspace to create a variety of communication documents; prepare, manipulate, and graph data in spreadsheets; and create effective electronic presentations utilizing features available in presentation software. It is recommended that students take Word Processing and Essentials prior to this course, unless the student already possesses solid keyboarding and word processing skills.

# **COMPUTER APPLICATIONS II** – 1 credit

Prerequisite: 75% or higher in Computer Applications I

Open to students in grades 10, 11, and 12

Students will learn the most important computer applications needed for a future in the business world – spreadsheets, databases, presentations, and word processing. This class will focus heavily on Microsoft Office, but students will also be exposed to other applications available in today's business world. Students will create documents that utilize advanced concepts available in these applications. This course is ideal for students who are planning to attend college and/or considering a job in the business world.

# **COMPUTER SCIENCE ESSENTIALS (PLTW)** - 1 credit

Open to students in grades 9, 10, 11, and 12

This course is an excellent entry point for new high school computer science learners. Computer Science Essentials introduces students to coding fundamentals through block-based programming where they will have early success in creating usable apps. Students will learn about professional opportunities in computer science and how computing can be an integral part of all careers today. Finally, students will learn the power of text-based programming as they are introduced to the Python® programming language. Emphasis is placed on the development of computational thinking and collaboration skills. (Project Lead the Way Course - first course in the Computer Science pathway)

# CYBERSECURITY (PLTW) - 1 credit

Prerequisite: Successful completion of Computer Science Essentials Open to students in grades 10, 11, and 12



PLTW Cybersecurity gives students a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic thinking, computational thinking, and especially, "outside-the-box" thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security. (Project Lead the Way Course - second or third course in the Computer Science pathway)

# ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES (PLTW) - 1 credit

Prerequisite: Successful prior completion of Computer Science Essentials is strongly encouraged. Ninth graders who are interested in completing this course are encouraged to have completed Algebra I. Students must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 9, 10, 11, and 12

Using Python® as a primary tool, students explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation. This course is endorsed by the College Board, giving students the opportunity to take the AP CSP exam for college credit. (Project Lead the Way Course - second or third course in the Computer Science pathway)

#### **ENTREPRENEURSHIP** - 1 credit

Open to students in grades 10, 11, and 12

If you are someone who aspires to start your own business, consider learning about what it takes to be an entrepreneur. This course will explore concepts related to starting a business such as the researching and planning process, product inventory management, staffing responsibilities, financing your business, record-keeping, ownership responsibilities, global opportunities, and government rules and regulations. In addition, students will use computers,

spreadsheet software, word processing software, and presentation software for projects. If you plan to enter into the field of business, this course will be helpful in understanding the importance of entrepreneurship and the role entrepreneurs play in the economy.

# **INTRODUCTION TO BUSINESS** - 1 credit

Open to students in grades 9, 10, 11, and 12

This course covers a wide range of activities in the business world and gives students a basic understanding of the American economic system. Learn about forms of business enterprise, credit, careers, consumer decisions, ethics, leadership, marketing and financial management. This course covers the basics of the business world. If you are interested in a career in business, this course can help you narrow your focus to one of the many career opportunities in business.

#### **MULTIMEDIA VIDEO PRODUCTION - 1 credit**

Open to students in grades 10, 11, and 12

In this class, students will use video cameras, video production software, digital cameras, photo editing software, microphones, and other electronic devices to create videos and multimedia presentations. Other skills include creating sound files and using graphics, pictures, sounds, video, text, and motion in the production of different video projects. Learn how to use editing software to create, edit, and produce videos. Give yourself an edge by learning how to produce imaginative and captivating videos and presentations.

# MULTIMEDIA VIDEO PRODUCTION II - 1 credit

Prerequisite: Multimedia Video Production I and teacher recommendation Open to students in grades 10, 11, and 12

This course builds upon the skills and concepts learned in Multimedia Video Production I. Students enrolled in this class are members of the Bulldog News, The Daily Fetch, and will participate in the morning announcements, news segments, pre-recorded productions, and other video projects. If you are interested in the field of journalism or video production, this class is recommended.

# \*PERSONAL FINANCE IS A REQUIRED COURSE FOR STUDENTS IN GRADE 12 (open to students in grade 11).\*

# PERSONAL FINANCE - COLLEGE PREPARATORY - 1 credit

Open to students in grades 11 and 12

Personal Finance at the college preparatory level relies heavily on computer usage and independent work. You will gain hands-on experience in buying a car, renting an apartment, opening and maintaining a bank account, buying a house, making investment decisions and more before entering the "real world." Using simulations and first-hand experiences, students

will learn the money fundamentals necessary to survive in the 21<sup>st</sup> century economy. Special emphasis will be placed on topics and decisions that students will make in their lives immediately following the completion of their formal education. Additionally, a credit for the Personal Finance – College Prep class may be substituted for one math credit of the graduation requirements.

# PERSONAL FINANCE - BLENDED COLLEGE PREPARATORY - 1 credit

Open to students in grades 11 and 12

Personal Finance at the blended college preparatory level relies heavily on computer usage and independent work. This class meets using a "blended" schedule, meaning students will have a combination of in-class and on-line learning that will help to develop a student's time management skills. You will gain hands-on experience in buying a car, renting an apartment, opening and maintaining a bank account, buying a house, making investment decisions and more before entering the "real world." Using simulations and first-hand experiences, students will learn the money fundamentals necessary to survive in the 21<sup>st</sup> century economy. Special emphasis will be placed on topics and decisions that students will make in their lives immediately following the completion of their formal education. Additionally, a credit for the Personal Finance – College Prep class may be substituted for one math credit of the graduation requirements.

# PERSONAL FINANCE - CAREER/TECHNICAL - 1 credit

Open to students in grades 11 and 12

Personal Finance at the career/technical level operates on a traditional teacher-guided approach. You will gain hands-on experience in buying a car, renting an apartment, opening and maintaining a bank account, buying a house, making investment decisions and more before entering the "real world." Using simulations and first-hand experiences, students will learn the money fundamentals necessary to survive in the 21<sup>st</sup> century economy. Special emphasis will be placed on topics and decisions that students will make in their lives immediately following the completion of their formal education. Additionally, a credit for the Personal Finance – Career/Technical class may be substituted for one math credit of the graduation requirements.

# **PRINCIPLES OF MARKETING** – 1 credit

Open to students in grades 10, 11, and 12

This class explores the fundamentals of marketing and how consumers influence the way that products and services are developed, promoted, and sold. Students will work individually and collaboratively to complete activities related to product management, distribution, selling, marketing-information management, pricing, and promotion. Students planning on a career in business should take this course.

# STEPS TO SUCCESS - 1 credit

Open to students by Administrative placement only

Steps to Success is a course only available to Learning Support students and through the recommendation of the Learning Support teacher. The course focuses on self-awareness, work readiness, college preparedness, career readiness and taking the next steps to a successful future beyond high school.

# **CAREER EDUCATION AND WORK**

# **CAREER INTERNSHIP** – 1 credit

Open to students in grade 12 (two internships are permitted **each semester** during the senior year), grade 11 (one internship is permitted during the junior year)

The Career Internship is an opportunity provided for seniors who are interested in participating in a career related experience. This experience enables a junior or senior to learn about a specific career area in an appropriate setting. By interning in the specific career, the student will learn the skills needed for the job, the training that is necessary, and the opportunities for employment. Career Internship seniors will spend part of the school day in the career setting. Juniors may be approved in special instances where applicable.

The student has the responsibility to talk to the counselor and express his/her interest in the career internship to determine if the career choice is a realistic one for the student. Following this discussion, the student, with some help from the counselor and/or internship coordinator, has the responsibility of securing a career internship sponsor. The student needs to complete the Career Internship application, which includes the arrangements (hours, place, and expectations) made with the potential supervisor of the career internship, parent permission to participate in the internship, and signatures of appropriate school officials. A senior may be eligible for up to two blocks of interning for the school year. A junior may be eligible for an internship one block during the school year.

Requirements for the internship include completion of required paperwork, attendance at scheduled meetings with the Career Internship coordinator, journals, mid-semester and final evaluations from the internship site supervisor, and a final project. Journals will contain a minimum of weekly entries reflecting what the student has learned and in what specific activities the student has participated. Career Internships will be given a grade of P (pass) or F (fail) at the conclusion of the internship.

# **DIVERSIFIED OCCUPATIONS AND WORK EXPERIENCE** – 3-5 credits\*

\*Classroom instruction - 1 credit – full year Work Experience – 1 credit per semester (2 credits) HACC Academy – 1-4 credits per semester Open to students in grade 12

The purpose of this program is to provide a combination of high school instruction and work experience. Occupational training is conducted under the supervision of the district's Diversified Occupations teacher through a cooperative program with businesses and industrial

organizations. Students will be scheduled for three periods of classroom instruction per cycle. In addition to the classroom, students will be required to spend a minimum of 15 hours per week in supervised on-the-job training in approved occupational areas or attend HACC Academy. Upon satisfactory completion of all aspects of the program, students will receive 3-5 credits for the school year. Students receive a grade in the Diversified Occupations course. The D.O. Work Experience is pass/fail.

#### **HACC ACADEMY**

The West York Area School District is in a partnership with the HACC Academy in order to provide our seniors with occupational training and worksite experience. The program offers a combination of theory instruction and hands-on lab experiences. Students must be enrolled in the Diversified Occupations program in order to be considered for entrance to any HACC Academy programs.

HACC Academy is located at 2101 Pennsylvania Avenue in York. Transportation and specific equipment/clothing requirement costs based upon the selected course are the responsibility of the individual student. Please see a guidance counselor or the Diversified Occupations teacher for further details. Course offerings are as listed below.

# **AUTOMOTIVE TECHNOLOGY** – 2 credits (one semester)

Open to students in grade 12

The Automotive Technology program will train students for entry-level automotive technician jobs. The curriculum includes automotive theory, workshop safety, automotive systems and preventive maintenance, hand tools, shop equipment, diagnostic equipment and specialty tools, suspension and steering systems wheel alignment, engine performance, and brake systems. Students will learn about careers in the automotive industry and workplace skills. This program introduces students to vehicle Maintenance and Light Repair (MLR), and also the Pennsylvania State Inspection and Emissions process and requirements. Students will be required to pass two written exams and complete a hands-on test to earn a Pennsylvania State Inspection License. Students will be required to pass a computer Pennsylvania Emission test and take the computer based tactile exam to earn their Pennsylvania Emissions Inspection Certification.

# **WELDING** – 2 credits (one semester course)

Open to students in grade 12

The HACC Academy Welding course introduces students to technical information and hands-on experience in basic welding skills, including the interpretation of typical welding drawings and symbols, flat, vertical, horizontal, and overhead position shielded metal-arc welding, in addition to other types of welds and joints, identification of operating principles, testing and inspections, common flaws, and the principles of non-fusion welding, personal safety and proper use of shop equipment and tools, and math concepts, including whole numbers, common fractions, and basic math formulas associated with welding. Upon completion of the program, the

coursework will provide the student with the opportunity to take the American Welding Society certification test and/or pursue more advanced welding courses.

# **NURSE AIDE** – 1 credit (one semester course)

Open to students in grade 12

The Nurse Aide program is a traditional (face-to-face) program designed to develop sensitivity and competence in the basic tasks required to care for patients or residents in a variety of healthcare facilities. The program includes classroom, lab, and clinical experience. Its purpose is to provide the student with a basic level of knowledge and skills needed to care for patients, residents, or clients as set forth by the profession of nursing and regulated by the Commonwealth of Pennsylvania.

Successful completion of this course prepares you to take the National Nurse Aide Assessment Program (NNAAP) exam to enroll in the Nurse Aide registry for the Commonwealth of Pennsylvania. Students will learn basic tasks including assisting in transporting residents in wheelchairs, assisting with turning and positioning, bathing, bed making, catheter care, dressing, infection control, safety awareness, measuring and recording vital signs, range of motion exercises, and toileting. Students must have the ability to communicate verbally, and nonverbal, read, and write in English, as well as, possess empathy and compassion while working with older adults and their families.

# <u>PHYSICIAN OFFICE ASSISTANT - 2</u> credits (one semester course)

Open to students in grade 12

The Physician Office Assistant program prepares the student for an entry-level position in an outpatient healthcare setting such as a medical practice or health-related call center. Students will become familiar with the general workflow of an outpatient medical practice, gain an understanding of medical insurance, and will be exposed to basic PC skills and the use of electronic medical records. Critical thinking concepts and customer service skills and activities will be infused throughout the curriculum, as will generational and cultural diversity, where appropriate. Students will have the opportunity to take the *Certified Medical Administrative Assistant (CMAA)* exam at the end of the course.

#### Program Requirements:

- Students must be 18 years of age by the time they complete the program.
- Students must interview with staff from Healthcare Education Workforce Development <u>before</u> they can be accepted into the program

# **ENGLISH**

#### ENGLISH 9 - 1 credit

This course 1) leads you farther into the world of composition, 2) invites you to explore new worlds via literature, 3) provides you with opportunities to enhance your oral communication skills, 4) surrounds you with vocabulary, 5) extends your understanding and application of grammar, usage, mechanics, etc., and 6) introduces you to basic research skills. Students must consider their abilities and aspirations when selecting a level of English 9.

# Choose one of the following levels:

#### **ENGLISH 9 - HONORS**

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

This course is for the freshman who hopes to pursue English courses in the Honors program. Just as in College Preparatory, this course is designed for those students who plan to attend college in the future. This course requires the student to possess strong English skills and presents a very rigorous approach to writing, reading and vocabulary. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

# **ENGLISH 9 – COLLEGE PREPARATORY**

This course is for the student who is planning to attend college after high school. A stronger emphasis on writing, reading, and vocabulary is stressed in this course to begin the college preparation process. This course requires a strong background in English.

# **ENGLISH 9 – CAREER/TECHNICAL**

This course is for the student who is either planning to attend a technical school or is going directly into employment after high school. Fundamental skills in writing, reading, and vocabulary will be developed.

#### ENGLISH 10 - 1 credit

English 10 offers a comprehensive program of study in punctuation, composition, vocabulary, and literature. Topics of research and analysis complement the program. Students have opportunities to develop necessary skills for the more specialized reading and critical thinking required of them in their junior and senior years. Students must consider their abilities and aspirations when selecting a level of English 10. Students who do not demonstrate proficiency on the Keystone Literature Exam may retake the state assessment the following year.

# Choose one of the following levels:

# **ENGLISH 10 - HONORS**

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Honors English 10 explores the world of literature in a manner that prepares qualified students (see prerequisite) for the college experience. Areas of study include literary analysis, the modes of writing, vocabulary, grammar, research, and public speaking. Preparation for the Keystone Exam (taken at the conclusion of all English 10 courses) is built into the existing curriculum to ensure students are properly prepared for the test without detracting from the comprehensive curriculum. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### **ENGLISH 10 – COLLEGE PREPARATORY**

This course is for the academic student who is planning to attend college after high school. It provides a background of literature and vocabulary helpful to the college-bound student. It familiarizes students with research techniques, presentation skills, and improves organizational skills in composition. Preparation for the Keystone Exam (taken at the conclusion of all English 10 courses) is built into the existing curriculum to ensure students are properly prepared for the test without detracting from the comprehensive curriculum.

# **ENGLISH 10 – CAREER/TECHNICAL**

Career/Technical English 10 fulfills the requirements of the study of literature and language. It includes review of units of grammar, short writing assignments, vocabulary study, and selected literature. It is designed for the student who is planning to attend a technical school or is going directly into employment after high school. Preparation for the Keystone Exam (taken at the conclusion of all English 10 courses) is built into the existing curriculum to ensure students are properly prepared for the test without detracting from the comprehensive curriculum.

#### ENGLISH 11 - 1 credit

English 11 continues the comprehensive program of study in composition, vocabulary and literature. Assignments integrate research and presentation skills. Students must consider their abilities and aspirations when selecting a level of English 11.

# Choose one of the following levels:

#### **ENGLISH 11 - HONORS**

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

English 11 Honors presents a heavy array of literature, vocabulary, and writing experiences which require students to stretch their thinking skills. Students are asked to read and respond to literature at a level they will not yet have experienced. This course is designed for students who plan to attend college after high school and who are qualified for a more challenging course. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### **ENGLISH 11 – COLLEGE PREPARATORY**

This course provides students the opportunity to develop the English skills they will find necessary in a college setting or post-secondary setting. It emphasizes strengthening reading analysis, vocabulary in context, multi-paragraph writing, and grammar and usage.

# **ENGLISH 11 – CAREER/TECHNICAL**

Career/Technical English 11 presents students with a course to continue their development of writing, reading, vocabulary, and analysis skills. It is designed for the student who is planning to attend a technical school or is going directly into employment after high school.

# **ENGLISH 12** - 1 credit (AP Literature – 2 credits)

English 12 continues the study of literature and composition with an emphasis on world perspectives. The completion of a research paper is a required component of every level. Students must consider their abilities and aspirations when selecting a level of English 12.

# Choose one of the following levels:

**ENGLISH – ADVANCED PLACEMENT LITERATURE AND COMPOSITION** – 2 credits Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

A rigorous course of thinking, reading, and writing, The Advanced Placement Literature and Composition class will continue to develop a student's understanding and appreciation of language and literature. The course is intended to build upon the literacy background established in the continuum of Honors English courses available in grades nine to eleven. This course transcends comprehending literature and requires students to analyze literature and then organize ideas about literature into coherent essays. While the curriculum of the class will prepare students for the AP Literature and

Composition exam administered in May, the class is not simply "test prep." Instead, the college-level course melds reading and analyzing a variety of genres of literature by authors recommended by the College Board with intensive writing instruction in regard to organization, content, style, grammar, usage, and mechanics. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

# **ENGLISH 12 - HONORS**

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Seniors who take this course will read, evaluate and discuss various plays, novels, short stories, and poems from different cultures and perspectives. They will engage in advanced methods of rhetoric and literary analysis. The research paper will focus on an independently read work with literary criticism to develop essential collegiate writing skills. Through this course, students will develop critical thinking and questioning skills as well as a broader world perspective.

During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### **ENGLISH 12 – COLLEGE PREPARATORY**

This course is designed for the student planning to attend college after high school. Students will read and analyze several novels, plays, poems, and short works focusing on the theme of humanity from a world perspective. They will continue to develop their writing skills through the completion of analytical essays, informal writing assignments, and a persuasive research paper on a topic of their choice.

#### **ENGLISH 12 – CAREER/TECHNICAL**

This course allows students to further develop their fundamental English skills and is designed for the student who is planning to attend a technical school or is going directly into employment after high school. Students in this course will read and analyze several novels, plays, poems, and short works to develop strong reading comprehension skills. Students will also work on strengthening the organization and development of their ideas through completing text-based writing responses, analytical essays, informal writing assignments, and a research paper.

# **ENGLISH LANGUAGE** – 1 credit

Open to students by Administrative placement only (students with Administrative approval are

able to count this credit toward the required 4 credits of ELA).

This course is for students whose dominant language is something other than English. The focus is on reading comprehension, vocabulary acquisition, and developing listening, speaking and writing skills. There is a progression of language levels beginning with "newcomer," as determined by annual statewide assessment criteria.

#### **ENGLISH ELECTIVES**

The elective courses offered by the English department are in two categories: those offered every year and those offered every other year. Please take note of when a course is offered so that you may better plan for your high school classes.

# **COMMUNICATIONS** - 1 credit

Open to students in grades 11 and 12

Students in this class will explore multiple aspects of communication including intrapersonal, interpersonal, small group, organizational, and mass-communication. Students will also practice communication skills that will help them in any future academic environment. Students will learn the process of writing, practicing and delivering formal presentations, as well as how to apply the theory and practice of human communication in their daily lives.

# **CREATIVE WRITING** – 1 credit

Open to students in grades 10, 11, and 12

Using a workshop approach to the writing process, students will develop skills and techniques in creative writing. In order to stimulate a creative and critical approach to writing, students will read work from several genres and a variety of authors, poets and playwrights. Students will be required to maintain a portfolio of their work, and will be expected to work through all stages of the writing process. Students will write poetry, short fiction, drama, script writing, and several experimental essays as well as other formats which question and challenge the nature of writing. Students will also be required to develop proficiency in the criticism of written work with an emphasis on self-reflection.

#### **CREATIVE WRITING II - 1 credit**

Open to students in grades 11 and 12

Prerequisite: Creative Writing I

Building upon the skills established in Creative Writing I, students will expand their revision skills, continue to construct their portfolio, and explore different modes of writing. Sustained journaling will occur throughout the semester as a tool to overcome writer's block. A career exploration unit will grant students the opportunity to see how their creative endeavors can benefit them beyond West York's walls. Students must demonstrate resiliency and a passion for writing.

#### **CURRENT TOPICS IN READING I** – 1 credit

Open to students by Administrative placement only

This remedial class will utilize the READ180 curriculum, a balanced reading intervention approach which combines direct instruction, small group instruction, modeled and/or independent reading to serve students who are reading below grade level. The READ180 curriculum serves a maximum of fifteen students per class.

# **CURRENT TOPICS IN READING II** – 1 credit

Open to students by Administrative placement only

This remedial class will continue to utilize the READ180 curriculum, a balanced reading intervention approach which combines direct instruction, small group instruction, modeled and/or independent reading to serve students who are reading below grade level. The READ180 curriculum serves a maximum of fifteen students per class.

# JOURNALISM - 1 credit

Open to students in grades 10, 11, and 12

There are a lot of ways to find, gather and report what's happening in the world around you. Reporters get to work behind the scenes and tell the stories everyone wants to hear. The course will examine current events; history, ethics and law of journalism; editing and interviewing; coverage; and writing and reporting. Students will have the opportunity to produce news for video, online and print publications.

# THEATER ARTS - 1 credit

Open to students in grades 9, 10, 11, and 12

Have you ever wondered why some actors are so successful, and how they masterfully become someone else? This all-encompassing course examines various components of theater with an emphasis on character analysis and improvisation techniques. <a href="Participation is required and expected">Participation is required and expected</a>. Other topics of exploration include theater history, set design, blocking, and script writing. Be prepared to let your star shine!

# <u>THE DARK CORNERS OF THE MIND: MURDER, MADNESS, & MAYHEM</u> - 0.5 credit Open to students in grades 10, 11, and 12



Dig into the files of serial killers, unsolved murders, and the characters behind solving the crimes. Be prepared to explore the origins of these topics (murder, madness, & mayhem) through a study of romanticism as well as modern connections to how those ideas manifest themselves within today's literature and society in this half semester course.

#### WHY SO SERIOUS? A STUDY OF COMEDY - 0.5 credit

Open to students in grades 9, 10, 11, and 12



This course explores the works that make us laugh so hard it hurts. Students will read and interact with a variety of comedic writing as well as examine its historic beginnings to its modern influence. Units of study include the History of Comedy, Modern Comedy, The Face Behind the Comedy, Types of Comedy, and the Elements of Comedy in this half semester course.

# **FAMILY AND CONSUMER SCIENCES**

# FOODS I - INTRODUCTION TO CULINARY - 1 credit

Open to students in grades 9, 10, 11, and 12

This is an introductory course covering the basic principles of culinary arts, including: an extensive study of kitchen and food safety, sanitation, knife skills, measuring, kitchen math, and work skills. These skills will be practiced in lab situations while making a variety of recipes in various categories; including, but not limited to, quick bread, yeast breads, milk and cheese, eggs, pasta, and meat.

# **REGIONAL COOKING** - 0.5 credit

Prerequisite: 75% or above in Foods I - Introduction to Culinary

Open to students in grades 10, 11, and 12

This class will build upon the knowledge gained in Foods I - Introduction to Culinary through the study of regional and multi-cultural cooking. We will delve into culturally specific cooking techniques and foods. Students will choose their own regions to research and they will choose recipes from those regions to make in class.

# BAKING AND PASTRY I - 0.5 credit

Prerequisite: 75% or above in Foods I - Introduction to Culinary

Open to students in grades 10, 11, and 12

This class will build upon the knowledge gained in Foods I - Introduction to Culinary through an in depth look at baking techniques; including, but not limited to, pie crusts, cakes and basic cake decorating, advanced cookie making techniques, and decorating with royal icing.

# **BAKING AND PASTRY II** - 0.5 Credit

Prerequisite: 75% or above in Baking and Pastry I



This class will build upon knowledge and skills learned in Baking and Pastry I. In this course, you will delve deeper into the fine art of making pastries. Skills we will focus on include: decorating skills (on cakes, cookies, and cupcakes), different styles of icing, types and uses of meringue, and other tarts and pastries. Students will also learn about careers available in the world of baking and pastry.

#### **COOKING AND CATERING** - 1 credit

Prerequisite: 75% or above in Foods I - Introduction to Culinary

Open to students in grades 10, 11, and 12

The students in this advanced cooking class will work cooperatively to select products, produce designer foods, and distribute their products, realizing the benefits of cooking for a group or event. Students will also learn to convert recipes that serve a small number into recipes that will serve a crowd. In this course, we will create foods for activities within the community and our school.

# **HUMAN DEVELOPMENT I - 1 credit**

Open to students in grades 10, 11, and 12

Take a journey through the lifespan of human development from birth to teen years. Learn about physical, emotional, social, moral, and intellectual development. Grief, the importance of play, guidance and other factors affecting growth and development will be studied. There is also a strong focus on mental health, brain developmental and current research in the medical field. Students will observe children in a variety of settings.

#### **HUMAN DEVELOPMENT II- 1** credit

Prerequisite: 75% or above in Human Development I

Open to students in grades 11 and 12

This course is a comprehensive extension of Human Development I. This second level course includes the study of the human from teen years through death. Students will explore in-depth various topics including the human brain, various disabilities and disorders, the learning environment, abuse, stress, grief, and illnesses. There is a strong focus on Alzheimer's Disease and Spectrum Disorders. Many visitations to local preschools, specialty schools, and health care facilities will take place for hands-on engagement and direct observations. Students may need to provide their own transportation to some locations.

# **INDEPENDENT LIVING** - 0.5 credit

Open to grades 10, 11 and 12

This course will introduce students to the responsibilities, rewards and challenges of adult living. Topics covered will include: life skills, complex parenting issues, healthy relationships, and career readiness will be investigated. Students will gain skills in budgeting, safety, health, and independent living. Many current societal issues will be explored. This half credit course will meet every day for one term.

# **HEALTH, PHYSICAL EDUCATION AND SAFETY EDUCATION**

# **HEALTH I** - 0.5 credit

This is a required course.

Health I will include units on mental and emotional health, including decision-making, stress management, and substance use and abuse. Diet, nutrition and healthy lifestyles will be covered, as well as the body systems. Human sexuality and disease prevention will also be discussed.

# **SAFETY EDUCATION** - 0.5 credit

Required - must be taken during the freshman or sophomore year.

The course is designed to give students exposure to all areas of safety, including work safety, on-line safety, first aid, and vehicle safety. The goal of this course is not only to provide the student with accident and injury prevention and intervention skills, but also for the student to understand that sometimes actions as teenagers carry serious consequences. Safety Education also develops attitudes, appreciations, and understandings essential to safe and responsible living.

PHYSICAL EDUCATION -0.5 credit each (must take 2 credits by the end of the senior year)

The purpose of the Physical Education program is to teach skills, knowledge, attitudes and behaviors that lead to regular participation in fitness for one's lifetime. Students should read the following descriptions and determine the course that most closely meets their goals/interests.

Please note: Students should select their preferred course and a second choice to be most accommodating to their schedules.

## **GENERAL PE I**

This class will include a variety of activities including: team and individual sports, the rock wall, and recreational games. Classes will be split between those activities and fitness. Fitness elements will include weight training, cardio training, and some group fitness activities.

# STRENGTH TRAINING I

This class will focus on improving muscular strength, muscular endurance, body composition, flexibility, and agility through strength training. All classes will be held in the fitness center and will include a variety of programming principles that will meet each individual's goals. Course content will include basic anatomy, elements of strength programming, improving sports performance, and benefits to body systems.

# WALK/JOG/RUN

This class aims to develop an active and healthy lifestyle for all cardio levels. Various workouts and training sessions will challenge your ability and personal goals. The focus will be on body mechanics, physiological effects of cardiovascular activity, motivational techniques and emotional benefits of exercise. Heart-rate monitors and fitness training apps will be incorporated into workouts. The class will take place in the fitness center, indoor track, outdoor track, and school grounds. This class will inspire you to try new events and places a high value on your overall health.

# **TEAM SPORTS I**

This class will focus on various team sports that will teach sportsmanship, leadership, competitiveness, game strategy, and sport design through daily participation. Activities will take place in the gym and outside. Activities will include: basketball, volleyball, football, soccer, softball, ultimate frisbee, and floor hockey.

# **INDIVIDUAL/DUAL SPORTS**

This class will focus on activities that can be played by one or two people. These activities can be considered a sport or recreational activity. This is for individuals who do not like team sports and want to focus on their individual accomplishments. Examples of activities to be taught during this class are: bocce ball, badminton, pickleball, tennis, kan jam, spike ball, archery, rock wall, horseshoes, and corn hole.

#### **GROUP FITNESS**

This class is a high-energy interval training class that combines high and low impact aerobic moves with body weight exercises (push-ups, planks, crunches, squats, lunges and more), power and agility moves. It's the ultimate circuit workout delivering interval cardio and muscle conditioning drills to enhance overall fitness levels. Some activities would include boot camps, cross training, power yoga, pound workouts, cardio kick, and other current trends in group fitness.

#### **ADAPTIVE PE**

This is a class for students with diagnoses that prohibit them from participation in inclusive PE. **This class will be assigned to students on an as needed basis.** 

# **MATHEMATICS**

\*Students are required to take at least one math course in each of their first 3 years of high school. College bound students are encouraged to take Integrated Math 3 and other advanced math courses through their senior year.\*

# **INTEGRATED MATH 1A-1** credit

Open to students in 9-12

Integrated Math 1A is the first course in a three-course sequence. Students in this course will also be enrolled in Integrated Math 1B in the second term of the same school year. Content includes patterns of change, data analysis, modeling linear relationships, linear equations and inequalities, equivalent expressions, exponential growth and exponential decay. All students must successfully complete the Algebra I Keystone Exam which will be given at the conclusion of the Integrated Math 2 course.

#### INTEGRATED MATH 1B-1 credit

Prerequisite: Integrated Math 1A Open to students in grades 9-12

Integrated Math 1B is the second course in a three-course sequence. Students in this course will be enrolled in Integrated Math 2 during their next term of high school. Content includes two- and three-dimensional shapes, polygons and their properties, quadratic functions, factoring and its applications, probability, direct and inverse variation, systems of linear equations and inequalities. All students must successfully complete the Algebra I Keystone Exam which will be given at the conclusion of the Integrated Math 2 course.

# INTEGRATED MATH 2-1 credit

Prerequisite: Integrated Math 1B or Algebra 1 Open to students in grades 10, 11, and 12

Integrated Math 2 is the third course in a three-course sequence. Content includes coordinate models, transformations, regression and correlation, functions and function notation, nonlinear systems, common logarithms, exponential equations, trigonometric methods, probability models, and expected value. All students must successfully complete the Algebra I Keystone Exam which will be given at the conclusion of this course.

# **INTEGRATED MATH 3**-1 credit

Prerequisite: Integrated Math 2 or Honors Integrated Math 2

Open to students in grade 10, 11, 12

Integrated Math 3 is the final course in the Integrated Math sequence. This course is required for students wishing to take Precalculus. Content includes geometric and algebraic reasoning and proof, statistical reasoning; inequalities, similarity and congruence, polynomial and rational functions, circles and circular functions, inverse functions, and recursion and iteration.

# **HONORS INTEGRATED MATH 2**-1 credit

Prerequisite: Algebra 1

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grade 9 or 10

Honors Integrated Math 2 is the first course in the Honors sequence. Content includes direct and inverse variation, systems of linear equations and inequalities, coordinate models, transformations, operations of matrices, functions and function notation, nonlinear systems, common logarithms, exponential equations, trigonometric methods, probability models, and expected value.

# **HONORS INTEGRATED MATH 3-1** credit

Prerequisite: Honors Integrated Math 2

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grade 9 or 10

Honors Integrated Math 3 is the second course in the Honors sequence. Content includes geometric and algebraic reasoning and proof, statistical reasoning; inequalities, similarity and congruence, polynomial and rational functions, circles and circular functions, inverse functions, and recursion and iteration.

# ADVANCED ALGEBRA/TRIGONOMETRY- 1 credit

Prerequisite: Integrated Math 3 or Honors Integrated Math 3

Open to students in grades 10-12

This course strengthens and builds upon the fundamental concepts developed in prior Integrated Math classes. Algebra concepts are based on memorable activities and concrete models. Course concepts include: rational functions, polynomial functions, logarithmic functions, trigonometric functions, and conic sections. Within each chapter, students will solve equations, sketch graphs, and apply their acquired knowledge to solve meaningful problems.

# PRE-CALCULUS - 1 credit

Prerequisite: Advanced Algebra/Trigonometry, Integrated Math 3, or Honors Integrated Math 3 Open to students in grades 10, 11, and 12

This course is intended for those students advised by their teacher to continue in this level of math. Course concepts include: introduction to models; area between curves; logarithms; sinusoidal functions; algebra for college math courses; modeling and trigonometry; and limits. The use of mathematical models is a recurring theme throughout the course. Concepts of Calculus are investigated with considerable depth. Earlier concepts are reviewed and practiced throughout the course.

#### **HONORS PRE-CALCULUS** - 1 credit

Prerequisite: Honors Integrated Math 3

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11, and 12

Honors Pre-Calculus is the third course in the Honors pathway. Introductory calculus theory is introduced and used throughout the course. Topics include sequence and series, limits, exponential and logarithmic functions, Trigonometry, derivatives, and conic sections. This course is designed for students interested in pursuing a four-year college degree.

# **CALCULUS** - 1 credit

Prerequisite: Precalculus or Honors Precalculus

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11, and 12

Calculus is an academically rigorous course, but is not designed to prepare for the AP exam. Course concepts include: functions; derivatives and their uses; application of derivatives; exponential and logarithmic functions; integration and its applications; integration techniques and experience with the application of calculus to business, economics, and other fields.

# ADVANCED PLACEMENT CALCULUS I (AB) - 1 credit

Prerequisite: Honors Precalculus or Calculus

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11 and 12

This course prepares the students to take the Advanced Placement Calculus AB exam given in the spring. Course content includes: advanced concepts from Calculus; areas by Riemann sums and definite integrals; integrals by anti-differentiation and by substitution and First Fundamental Theorem of Calculus to find definite integrals; first-order separable differential equations; work with retired AP tests to prepare for the actual test; absolute extrema; applications of integration to area, volume, rectilinear motion, business, social sciences, etc.; Rolle's Theorem; Intermediate-Value Theorem; and Mean-Value Theorem. It is recommended students have their own graphing calculator (83, 84, or 89) for use at home. For in class use, appropriate graphing calculators will be available for students.

# ADVANCED PLACEMENT CALCULUS II (BC) – 1 credit

Prerequisite: "A" or "B" in AP Calculus AB.

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11 and 12

This course continues the work done in Advanced Placement Calculus I (AB) and prepares the students to take the Advanced Placement Calculus BC exam given in the spring. Course content includes: advanced topics from AP Calculus I (AB); graphs, derivatives, integrals, and application of polar, vectors, and parametric functions; first-order non-separable differential equations; integration by parts and simple partial fractions; improper integrals; advanced applications of integration including arc length and logistic curves; polynomial approximations

and series; and work with retired Advanced Placement tests to prepare for the actual BC exam. It is recommended students have their own graphing calculator (83, 84, or 89) for use at home. For in class use, appropriate graphing calculators will be available for students.

# **PROBABILITY AND STATISTICS** - 1 credit

Prerequisite: Integrated Math 2, Honors Integrated Math 2

Open to students in grades 10, 11, and 12

It is recommended that all students take this course prior to their senior year. This course includes an introduction to the concepts of probability and statistics. Course content includes: design, conduct and experiment; random sampling; graphic results; technology to organize and analyze data; validity of sampling in a study; predictions of outcomes; calculate probability and odds of both discrete and continuous situations; determine confidence intervals; perform an experiment and generalize its results to an entire population; draw and justify a conclusion regarding validity of probability or statistical argument.

# **ADVANCED PLACEMENT STATISTICS** – 2 credits

Prerequisite: Honors Precalculus or Precalculus

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11 and 12

This year-long course prepares the students to take the Advanced Placement Statistics test given in the spring. It is designed to have students analyze data with calculators and computers, conduct classroom experiments, carry out individual and group projects which foster important classroom discussion pertaining to topics such as methodology and inferences, and perform simulations involving probabilistic concepts. The AP Statistics students will be active, engaged learners. Course content includes: basic statistics; describing, exploring, and comparing data; probability; probability distributions; normal probability distributions; estimates and sample sizes; hypothesis testing; inferences from two samples; correlation and regression, multinomial experiments and contingency tables; analysis of variance; statistical process control; nonparametric statistics; and projects, procedures, and perspectives. Students will use TI-84 Plus graphing calculators daily.

#### **KEYSTONE ATTAINMENT** – 1 credit

Open to students who need additional mathematics support or who have not passed the Algebra Keystone Exam

Students may be assigned to this course by Administrative placement only.

This course will emphasize an in-depth understanding of the skills, concepts, and procedures in Algebra I. Students will model, analyze, solve, and evaluate complex problems, including real-world problems. Concepts will include: simplifying, using properties, and performing operations with real numbers and expression; write, solve, and graph linear equations and

inequalities; solve and graph linear systems of equations and inequalities; and use data analysis to analyze, calculate, interpret, make predictions based on multiple sets of data, and interpreting the results.

# CHS – ANALYTIC GEOMETRY AND CALCULUS 1 – 1 credit (4 college credits)

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Skill in algebraic manipulation is essential. Trigonometry and two years of high school algebra or precalculus are required. A score of 76 or higher on the ALEKS placement examination.

Open to students in grade 11 and 12

Full Year Course

This course is the standard first course in a basic calculus sequence required for all mathematics, science, engineering, and statistics students. Topics covered in this course include functions and graphs, limits, derivatives, trigonometric functions, application of the derivative, integral, applications of the integral, and exponential and logarithmic functions. As time allows, the College in High School course may include in its syllabus the differentiation of the logarithmic and exponential functions, which is the first topic in Calculus II at Pitt.

# **CHS - BASIC APPLIED STATISTICS –** 1 credit (4 college credits)

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

This is a course that follows the curriculum of the University of Pittsburgh's Mathematics department. Students may earn four college credits from the University of Pittsburgh upon the successful completion of this course.

Open to students in grade 11 and 12

This is a course that follows the curriculum of the University of Pittsburgh's Mathematics department. This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, probability, hypothesis testing, correlation and regression, the analysis of variance, and contingency tables. Students will learn how to use the statistical computer package MINITAB. **During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.** 

# <u>CHS - APPLIED STATISTICAL METHODS</u>— 1 credit (4 college credits)

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

This is a course that follows the curriculum of the University of Pittsburgh's Mathematics

department. Students may earn four college credits from the University of Pittsburgh upon the successful completion of this course.

Open to students in grade 11 and 12

This is a course that follows the curriculum of the University of Pittsburgh's Mathematics department. This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression, the analysis of variance, and Chi-square tests. Students will learn how to use the statistical computer package MINITAB. During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

# **MUSIC**

BAND/CHOIR - 2 credits (Runs each day - full year course)

Open to students in grades 9, 10, 11, and 12

Students interested in band and/or choir should take this course! All students will have the opportunity to explore both instrumental and vocal music from various time periods.

Band: Music from the various periods of musical history is studied and performed in concerts and recitals. Through sectional and full band rehearsal, stress is placed on the technical, analytical, stylistic, and musical aspects of band and ensemble performance. All students are required to do home practice on selected band music. Various evening and weekend performances will be involved. Students desiring membership in the band for the first time should contact the instructor before selecting this course.

Choir: The purpose of the Choir is to provide the student an opportunity for growth through the study and performance of choral music from the various periods of music history. In addition, developing an understanding of basic music terms and symbols, as well as proper vocal techniques, tone production, choral diction, choreography, and stage presence are emphasized. Various evening and weekend performances will be involved.

Band experience is also available in the following co-curricular organizations (no academic credit earned):

Marching Band Woodwind, Brass and Percussion Ensembles Jazz Ensemble (also available to bass, guitar, and piano students by audition) Marching Band Front

<sup>\*</sup>See the Band Director for more information on these organizations.

From the High School Choir, the following co-curricular select vocal group is available by audition (no academic credit earned):

Legacy - Note: It is recommended that members be participating members of choir.

### **BASIC GUITAR** – 1 credit

Open to students in grades 9, 10, 11, and 12

This course offers <u>beginning</u> instruction for students who have <u>no previous experience</u> with guitar. The class will introduce students to basic guitar techniques, musical notation and rhythm, and the performance of melodies and chords in a variety of styles including folk, rock, classical, and country. No previous musical training is necessary and instruments are provided. This course is not recommended for students who have previous guitar experience. Students with any previous guitar experience must see the instructor before selecting this course.

### **BASIC PIANO** - 1 credit

Open to students in Grades 9, 10, 11, and 12

Basic Piano is open to all students and is designed to teach basic piano keyboard skills to beginning players who have no previous experience with piano. Students will work on note reading, chords, rhythms, and piano technique. Students will work in a piano lab setting, with much of the work being done independently. Access to a piano outside of class is not necessary. This course is not recommended for students who have previous piano experience. Students with any previous piano experience must see the instructor before selecting this course. Maximum number of students accepted to take this course is 11.

### **INTRODUCTION TO MUSIC TECHNOLOGY** – 1 credit

Open to students in grades 9, 10, 11, and 12

The course allows students the opportunity to explore the many uses and possibilities of technology in music. Included will be the use of Digital Audio Work Stations (DAWs). Students will be able to discover and access a variety of sounds, work on creating original compositions, use computers to print scores and learn sequencing techniques. There are no prerequisites for the course but a solid understanding of beat and meter is strongly encouraged and the ability to read music will be helpful, but not essential. If you already know how to do this at home, this is not the course for you. Maximum number of students accepted to take this course is 10.

### **MUSIC THEORY** - 1 credit

Prerequisites: Experience in band or choir, or with a guitar or keyboard instrument. **Students** must be able to read music prior to taking this course.

Open to students in grades 10, 11, and 12

Music Theory class provides an introduction to the fundamentals of music necessary for arranging, composing and analyzing music of all styles. The course will cover the fundamentals

of music notation, melody, chords, harmony, vocal and instrumental arranging, ear training and original compositions which will be performed. The course should be most relevant for students performing in an instrumental or vocal group, those studying voice, keyboards or any instrument and have an interest in composing and the structure of music. **Anyone planning to major in music during college should consider this course.** 

### **POPULAR MUSIC** – 1 credit

Open to students in grades 9, 10, 11, and 12

Major areas of concentration for this course will be Rock Music (1950 to present) and Jazz Music (1900 to present). This course will include listening to music, watching video clips, research, and discussion. Current topics in music will also be a part of this class including the MTV Video Awards, the AMA's, and the Grammy Awards.

## **SCIENCE**

A 4th credit must be earned in either Science or Social Studies.

All students are required to take Biology.

All students (and their parents) should carefully consider the course level they select.

- Honors courses are designed for those students who plan on majoring in science, engineering, math, or medical related fields while in college. These courses will move at an accelerated pace, thus covering more information and requiring more independent work.
- <u>College Prep</u> courses are designed for those students who plan on enrolling in a non-science related post-high school college program OR entering a science or technology related 2-year technical program.
- <u>Applied</u> courses are designed for students of all abilities who are planning to enter a technical school in a non-science related field or are going directly into employment following high school.

Several science courses have prerequisites; please read the descriptions carefully. Courses listing math classes as a prerequisite rely heavily on student use of mathematical problem solving. Students who are unsure of their choice of science courses should consult a science teacher or a guidance counselor.

# BIOLOGY I (Honors, College Prep or Applied) - 1 credit

Choose one of the following levels. All 9th grade students must take a Biology I class.

The Biology Keystone Exam will be taken at the conclusion of the Biology I class. Students who are unsuccessful in passing the Biology Keystone Exam may be assigned to a Keystone remediation class.

## **HONORS BIOLOGY I**

Open to students in grade 9

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as

specified on page 7 of this Course Selection Guide.

This course will explore how scientists analyze their work, how the structures of life are related to the functions of life, how life uses chemistry, how the inheritance of genetic information can be predicted, and how evolution affects life. The material in this course is similar to that of College Prep Biology I, but topics will be discussed in more detail and at an accelerated pace. Students will be given the opportunity to expand their scientific knowledge by completing assignments independently and by working in small groups.

Laboratory work is included in this course. During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

### **COLLEGE PREP BIOLOGY I**

Open to students in grade 9

This course is designed to provide a background in the cell and its major functions, processes and environmental relationships from the level of the biological compounds to the level of genetics, and the relationship between cells and microorganisms. Areas of study include ecology, biochemistry, cell biology, and genetics. Laboratory work is included in this course.

#### <u>APPLIED BIOLOGY I</u>

Open to students in grade 9

The emphasis in this course will be on the fundamental principles of biology; including ecology, biochemistry, cell biology and genetics. Laboratory work is included in this course.

### **CHEMISTRY I (Honors, College Prep, or Applied)** – 1 credit

Open to students in grade 10 Choose one of the following levels.

### **HONORS CHEMISTRY I**

Prerequisite: 90% in Integrated Math 2. Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Chemistry is the study of the composition, structure, properties and reactions of matter. The material in this course is similar to that of College Prep Chemistry I, but topics will be discussed in more detail, with more advanced mathematics, and at an accelerated pace. Emphasis is placed on laboratory work so that students correlate chemistry to the scientific processes of experimentation, observation, the formulation of laws and the development of theories. Lab work requires students to use mathematical skills to solve problems and analyze results. At least a 90% in Integrated Math 2 is recommended in

order to be successful in this class. During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

### **COLLEGE PREP CHEMISTRY I**

Prerequisite: 80% in Integrated Math 2

Chemistry is the study of the composition, structure, properties, and reactions of matter. Emphasis is placed on laboratory work so that students correlate chemistry to the scientific processes of experimentation, observation, the formulation of laws and the development of theories. Course content and lab work requires students to use mathematical skills to solve problems and analyze results.

#### **APPLIED CHEMISTRY I**

Applied Chemistry will use a thematic approach to allow students to learn chemistry as it relates to the real world around them. Experiments and inquiry activities are used to introduce concepts such as the properties of matter, chemical and physical changes, scientific models and theories, and the chemistry of the environment. End of unit projects allow for students to creatively show their understanding of the material.

### PHYSICS I (AP, Honors, College Prep, or Applied) – 1 credit

Choose one of the following levels.

### **ADVANCED PLACEMENT PHYSICS I**

Open to students in grade 11

Prerequisite: Integrated Math 2 or higher math. Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

AP Physics I is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and simple harmonic motion. Students completing this course may take the AP Physics I test for college credit.

#### **HONORS PHYSICS I**

Open to students in grade 11

Prerequisite: 80% in Integrated Math 2 or higher math.

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Physics is a hands-on study of the physical world around us. Those interested in careers in science, engineering, computer technology, or medicine should consider this course. You will analyze concepts and applications of motion, force, energy,

momentum, and selected topics in modern physics. This course is highly technology and laboratory based and uses science and advanced math to develop problem solving and teamwork skills. Several design projects give creative opportunities to explore physics concepts.

### **COLLEGE PREP PHYSICS I**

Open to students in grade 11

Prerequisite: Integrated Math 2 or higher math.

Physics is a hands-on study of the physical world around us. In this course, students will analyze concepts and applications of motion, force, energy, and electricity. Science and math are used to develop problem solving and teamwork skills. A design project gives creative opportunities to explore physics concepts. A minimum of 80% in Integrated Math 2 or a higher math class is recommended in order to be successful in this class.

### **APPLIED PHYSICS I**

Open to students in grade 9

Applied Physics is a general study of the physics that affects our daily lives. In this course students will use lab-based inquiry activities and basic algebraic computations to study ideas of mechanics, sound, light, electricity, and magnetism as they relate to everyday activities such as transportation, sports, entertainment, and amusement parks.

## **SCIENCE ELECTIVES**

## **ADVANCED PLACEMENT CHEMISTRY** - 2 credits

Prerequisite: Honors Chemistry I (80% minimum)

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11 and 12

This is a year-long, two credit course that will prepare students to take the AP Chemistry Exam. The course is recommended for students planning further studies in either physical or biological sciences, including careers in the health sciences. Emphasis is placed on studies of chemical equilibria as it applies to various chemical systems. Strong mathematical skills are required since applicable problem solving is an integral part of the course. The laboratory work is devoted to qualitative (descriptive) and quantitative (numerical) analysis. The structure of matter, kinetic theory of gases, chemical kinetics, the basic concepts of thermodynamics, and introductory organic chemistry are topics in this advanced placement type course. During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### **ADVANCED PLACEMENT PHYSICS II** – 1 credit

Prerequisite: AP Physics I or Honors Physics I (80% minimum), Pre-Calculus Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11 and 12

AP Physics II is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. Emphasis is on conceptual understanding through a variety of lab work, as well as application through problem solving. This course is essential for students planning a career in science, technology, engineering, or medicine.

### **ASTRONOMY** - 1 credit

Open to students in grades 9, 10, 11 and 12

Why do stars twinkle? Is it possible to fall into a black hole? Will the sun ever stop shining? How will our universe end? Since the first glimpse of the night sky, humans have been fascinated with the stars, planets, and universe that surrounds us. This course will introduce students to the study of astronomy, including its history and development, basic scientific laws of motion and gravity, the concepts of modern astronomy, and the methods used by astronomers to learn more about the universe. Additional topics include the solar system, the Milky Way and other galaxies, the sun and stars, and the universe as a whole. We will also explore the possibility that aliens exist and whether they have ever visited Earth, and we'll study human exploration of space, including a likely mission to Mars in your lifetime.

#### **BIOLOGY II** - 1 credit

Prerequisites: College Prep or Honors Biology I <u>and</u> Chemistry I (80% minimum)
Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.
Open to students in grades 11 and 12

This laboratory-based college-level course is suggested for those considering careers in biology or any of the allied health fields. Major areas of study include micro- and macro-biology with a special focus on evolutionary relationships. This class is fast paced and will require the student to work independently. Students will also be expected to think critically and expand their scientific knowledge through class discussion, labs, small group projects, and independent assignments.

### BIOMEDICAL INNOVATIONS (PLTW) – 1 credit

Prerequisite: Principles of Biomedical Science, Human Body Systems, Medical Interventions Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11, and 12

This is the fourth and final course in the PLTW Biomedical Pathway. In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

### **ENVIRONMENTAL SCIENCE** - 1 credit

Prerequisite: Any level of Biology I

Open to students in grades 10, 11, and 12

This course focuses on exploring the world around us and how humans interact with the natural world. Topics include: composition of the biosphere, ecology & biodiversity, energy for electricity and transportation, conservation, and environmental law. Students taking this course will be participating in various field lab experiences and also touring several local facilities relating to the course curriculum. Students will also be encouraged to take on an independent project relating to increasing awareness of an environmental issue or starting an initiative to better the environment of our school or local community. The objective of this course is for students to understand how the success of the living world depends on our decisions and actions.

### **HUMAN ANATOMY & PHYSIOLOGY – 1** credit

Prerequisite: College Prep or Honors Biology I (80% minimum)

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11, and 12

This college-level course is designed for students interested in pursuing a career in any of the health-related fields. A systematic approach to the human body will be taken and various organ systems will be covered. The anatomy of the system identifies and relates the individual part to the whole, the physiology of the system provides an understanding of the function of the parts of the system, and the pathology of the system relates to a specific disorder to the abnormal functioning of the whole organism. Students will be engaged in numerous dissections, including the cat dissection, throughout the semester and are **required** to fully participate.

#### **HUMAN BODY SYSTEMS (PLTW)** – 1 credit

Prerequisite: Principles of Biomedical Science (or instructor approval)

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11, and 12

This is the second course in the PLTW Biomedical Pathway. Those students with serious interest in a career in the biomedical field should consider taking this course. In this course, we will explore the structure and function of the human body and investigate what makes all human bodies the same, and what makes each unique. There will be an in-depth study of body systems by looking through the lenses of Identity, Communication, Power, Movement, Protection & Homeostasis.

### MEDICAL INTERVENTIONS (PLTW) – 1 credit

Prerequisite: Principles of Biomedical Science and Human Body Systems
Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11, and 12

This is the third course in the PLTW Biomedical Pathway. Those students with serious interest in a career in the biomedical field should consider taking this course. Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

### OUR DYNAMIC PLANET: EARTH, AIR & WATER - 1 credit

Open to students in grades 9, 10, 11, and 12

We live in the absolutely best piece of real estate that we know of in the universe – it's like having beach-front property in Malibu. We will study the features of our planet that have allowed life to flourish since it began so long ago. We will study minerals and rocks and the processes that have made them over time. We'll peek under the oceans and the freshwater that are so crucial to our existence. Finally, we will study the atmosphere and its properties that give us our daily weather patterns that affect us so much. By signing up for this course not only will you increase your knowledge and understanding of planet Earth, but more importantly, you will come to appreciate just how good we have it here and how we can be good stewards of our home.

### PHYSICS II – 1 credit

Prerequisite: CP Physics I or higher (80% minimum), Integrated Math 2 or higher Open to students in grades 11 and 12

Have you ever wondered how your phone actually works? Why are X-rays so dangerous? What happens as you approach the speed of light? Physics II continues the study of the physical world around us. The course covers fluid mechanics, thermodynamics, electricity and magnetism,

optics, and selected topics in modern physics. Emphasis is on conceptual understanding through a variety of hands-on lab work, as well as application through problem solving. This course is designed for students who have an interest in understanding the world around them.

## **PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)** – 1 credit

Open to students in grades 9, 10, 11, and 12

This is the first course in the PLTW Biomedical Pathway. If you are interested in learning more about biomedicine or simply curious about careers and experiences in the biomedical field then this is the course for you. You will participate in four themed units of study throughout the semester and will use concepts of forensics, biology, and anatomy to investigate each theme. These themes include forensic investigation, medical skills, investigating epidemics, and biotechnology. Several biomedical lab skills will be introduced in this class and this will be the stepping stone into the other Biomedical Pathway classes. (Project Lead the Way Course - first course in the biomedical pathway)

### **ROBOTICS** - 1 credit

Open to students in grades 9, 10, 11, and 12

Recommended Prerequisite Course: Electronic Systems

This course is designed to give students hands-on experience with the fundamentals of engineering, electronics, robotic functions, and programming. Students taking this course will be using the Vex-V5 Clawbot and its parts to complete a series of challenges that are both controlled and autonomous. No prior experience in robotics is needed but students should expect to test their critical thinking and problem-solving skills in order to be successful.

### **SCIENCE OF SPORT** – 1 credit

Prerequisite: Completed any level of Biology I, Chemistry I, and Physics I Open to students in grades 10, 11 and 12

The world of sports is full of practical applications of the sciences learned during your time at West York. If you want to know why chocolate milk is great after a workout or why Michael Phelps is the greatest swimmer of all time, this is the class for you. Students will apply concepts that include fueling the body, biomechanics, enhancing performance, safety equipment, and environmental impacts of facilities.

#### **ZOOLOGY** - 1 credit

Prerequisite: Any level of Biology 1

Open to students in grades 10, 11, and 12

Zoology is a branch of biology that focuses on animals, as the different phyla of invertebrate animals (including sponges, cnidarians, flatworms, roundworms, annelids, mollusks, arthropods, and echinoderms) and vertebrate animals (including fishes, amphibians, reptiles, birds, and mammals) will be studied. Each phylum is studied with emphasis placed on the

animal's structure, physiology, and development, including various evolutionary and classification concepts. This course will involve various laboratory investigations, class discussions, small group projects, and/or independent assignments. Students will also be engaged in numerous dissections and are **required to fully participate in those dissections**.

## **SOCIAL STUDIES**

A 4th credit must be earned in either Science or Social Studies.

## HONORS AMERICAN CULTURES II - 1 credit

Prerequisite: Students must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grade 9

American Cultures II is a continuation of the eighth-grade history course, American Cultures I. Students will review geography and examine the political, social, economic, and military aspects of the United States from 1920 to the present. Students will use a textbook, supplementary reading, cooperative learning activities, and a variety of audio and video materials. Individual and group research projects will be required. Writing will be emphasized and class participation is required. This honors level course will challenge students who work at a more rigorous pace. There will be emphasis on reading skills, writing skills, research, and class presentations. During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

### **AMERICAN CULTURES II** - 1 credit

Open to students in grade 9

American Cultures II is a continuation of the eighth-grade history course, American Cultures I. Students will examine the political, social, economic, and military aspects of the United States from 1920 to the present. Students will use a textbook, supplementary reading, cooperative learning activities, and a variety of audio and video materials. Individual and group research projects will be required. Writing will be emphasized and class participation is required.

### **HONORS WORLD CULTURES** – 1 credit

Prerequisite: Students must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grade 10

This course encourages students to develop a more mature understanding of the world, its cultures, its political and economic systems, and its issues. A thematic approach to the course provides a framework from which students can make connections and comparisons across geographical regions, as well as develop an understanding of past and present challenges facing cultures, societies, and the natural world.

This honors level course will challenge students who work at a more rigorous pace and will emphasize reading and writing skills, research, and class presentations. Students will also complete weekly current events assignments and will study the world's major political and geographical features. During the summer prior to taking the course, students must complete a summer assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### WORLD CULTURES - 1 credit

Open to students in grade 10

In World Cultures, students will study and discuss the history and culture of the Middle East, Africa, Asia, Latin America, and Europe. Students will begin with basic concepts of culture and community, and will then examine the "non-Western world," discussing the important people, events, and achievements of each specific area. The course will also contain a comparative analysis of the religions of these areas. In order to link past to present, the present status of each area and culture will also be discussed. Throughout the semester, students will develop social studies skills, including geography, critical thinking, and writing skills.

### HONORS AMERICAN POLITICAL SYSTEM AND PA GOVERNMENT – 1 credit

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grade 11

This course will explore the characteristics of the American political system and the government of Pennsylvania. It will emphasize practical political skills and knowledge for the citizen. Students will analyze and interpret the relationship of government and the economy in an effort to understand the political affairs of the United States. The course will also contain application of the legislature, constitutional convention, and political parties, while examining the concepts of democracy, the American election process, the basic functioning of the national government and how the economy functions. This course will emphasize current events related to government, politics, and economics. Writing and reading will be emphasized and class participation is required. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

### AMERICAN POLITICAL SYSTEM AND PA GOVERNMENT - 1 credit

Open to students in grades 11

This course will explore the characteristics of the American political system and the government of Pennsylvania. It will emphasize practical political skills and knowledge for the citizen. The students will examine the concepts of democracy, the American election process, the basic functioning of the national government and how the economy functions. This course will include an emphasis on current events related to government, politics and economics. Writing will be emphasized and class participation is required.

### LIFE APPLICATION OF SOCIAL STUDIES - 1 credit

Open to students by Administrative placement only

L.A.S.S. is a course only available to Learning Support students and through the recommendation of the Learning Support teacher. The course focuses on a combination of Psychology, Sociology, Criminology, and Economics. Throughout the course, the students will take a deeper look into each of these topics and, when applicable, apply them to real-life scenarios.

## **SOCIAL STUDIES ELECTIVES**

### **ADVANCED PLACEMENT EUROPEAN HISTORY – 2 credits**

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11 and 12

The AP program in European history is designed to provide students with the analytical skills and factual knowledge necessary to deal with the problems and materials in a survey of European history from the end of the medieval period to the collapse of communism during and after 1989. The course follows the curriculum and expectations set for European history by the College Board, and demands that students complete reading and writing workloads equivalent to full-year introductory college courses. Students will learn not only large quantities of historical information (from both primary and secondary sources) but also how to assess and evaluate that information, applying it to the solution of interpretive problems. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

## ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS - 1 credit

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grade 11 (with instructor approval) and 12

This course is an intense study of the American political system and the American government. Students will learn important facts, concepts, and theories pertaining to U.S. government and politics. They will also understand typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures). Finally, students will analyze and interpret basic data relevant to U.S. government and politics. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### **ADVANCED PLACEMENT UNITED STATES HISTORY** – 2 credits

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10, 11, and 12

The AP program in United States history is designed to provide students with the analytic skills and factual knowledge necessary to deal with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.

#### **ADVANCED PLACEMENT HUMAN GEOGRAPHY** – 1 credit

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10 - 12

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

### ADVANCED PLACEMENT COMPARATIVE GOVERNMENT AND POLITICS - 1 credit

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 10 - 12

AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

#### CIVIL WAR- 1 credit

Open to students in grades 11 and 12

This course will survey the major events and themes of the Civil War era. It will include the rise and destruction of slavery, the nature of antebellum American society, sectionalism, Northern and Southern resources, the political crisis of the 1850s, various aspects of the war itself, the contributions of Abraham Lincoln, the successes and shortcomings of the various Reconstruction plans for the Union in the postwar period, the ways in which Reconstruction methods affected Northerners, Southerners, and Freemen and the legacies of the Civil War era.

### **CRIMINAL JUSTICE** – 1 credit

Open to students in grade 12

This course will introduce students to the major fields of study within our criminal justice system. The students will examine the role of police in society, the formation of American law, who a criminal is, who a victim is, the juvenile justice system, and crime and punishment. Students will build a strong working vocabulary as it relates to the various issues and topics discussed as well as analyzing possible solutions for the future. Class participation and a willingness to collaborate are imperative.

### **ECONOMICS** - 1 credit

Open to students in grades 11 and 12

This course will explore the characteristics of the American Economic System. It will emphasize practical economic skills and knowledge for the citizen. The student will examine the unique features of the American free-enterprise system, micro-economics, macroeconomics, and the stock market. This course will also include a constant awareness of current events. It is recommended that students choosing this course have earned above average grades in previous social studies classes.

## MODERN AMERICAN MILITARY HISTORY - 1 credit

Open to students in grades 11 and 12

This survey course includes the study of American military history from 1945 to the present as well as the military campaigns conducted by Americans during this period. In addition to studying strategy, tactics, and weapons, issues such as the social composition of the armed forces, the influence of new technologies on warfare, the tension between "professional" and "citizen" soldiers, popular attitudes toward war and the military, and the effects of war on American society will be explored.

### **WWI/WWII** - 1 credit

Open to students in grades 10, 11, and 12

This course covers America's role in the world wars from 1900 until the early years of the Cold

War. Students will review the causes of both conflicts as well as their impact on the world and the United States. In addition to studying the key ideas, leaders, battles, and weapons, the course will focus on the daily life of soldiers in these global conflicts. From this course, students should have a better understanding of the magnitude of WWII and what role the home front plays in war efforts.

### **SOCIAL PSYCHOLOGY - 1 credit**

Open to students in grades 11 and 12

This course provides an overview of psychology. Students will learn theory and the practical application of that knowledge. This course explores the basis of human behavior, studying personality development, memory and learning, and abnormal psychology. Social issues are threaded throughout the course, as well as the study of group dynamics and culture. Discussion is a major aspect of the course.

#### THE WORLD CRIES: GENOCIDAL STUDIES – 1 credit

Prerequisite: 80% or higher in World Cultures

Open to students in grades 11 and 12

This course will expose students to the problem of international genocide from 1900 to the present and the impact of such atrocities on the development of world history. While a significant amount of time will be spent on the Jewish Holocaust during Nazi Germany, students will also study several examples of both government sponsored and ethnically triggered genocide around the world. Students will also study the psychology behind mass killing and what causes world and/or ethnic leaders to engage in such behavior. The final unit of the course will look at current "hotspots" of such activity and will examine the link between terrorism and genocide.

### **MODERN ISSUES** - 0.5 credit

Open to students in grades 11 and 12

This course explores the current political, cultural, social, economic and intellectual problems facing the world today. The topics covered are fluid to address the ever-changing world around us and the issues that most concern students. This course is designed for students to take an active approach to the research and the understanding of the topics covered allowing them to form their own opinions. Discussion will be a large part of the course and imperative to success. This course will cover a broad range of topics spanning several subjects and curriculums.

### **HISTORY OF SPORT**- 0.5 credit

Open to students in grades 9, 10, 11, and 12

This history elective will examine the development of sport(s) in America. Our historical study

will focus on helping students gain a better understanding of the inner relationship that sports has on social, economic, cultural, and political forces that are at work in the United States as well as the world. We will examine the historical context as well as the significance of race, gender, ethnicity, and social class. We will do our historical investigation through readings, primary sources, audio, and visual materials as well as class discussions.

### **CHS - AMERICAN POLITICS – 1** credit (3 college credits)

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

This is a course that follows the curriculum of the University of Pittsburgh's History department. Students may earn three college credits from the University of Pittsburgh upon the successful completion of this course.

Open to students in grade 11 and 12

This is a course that follows the curriculum of the University of Pittsburgh's Political Science department. It is an intense study of the American political system and the American government. Students will know important facts, concepts, and theories pertaining to U.S. government and politics. They will also understand typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures). Finally, students will be able to analyze and interpret basic data relevant to U.S. government and politics. **During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment.** 

### CHS – WESTERN CIVILIZATIONS II - 1 credit (3 college credits)

Prerequisite: Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

This is a course that follows the curriculum of the University of Pittsburgh's History department. Students may earn three college credits from the University of Pittsburgh upon the successful completion of this course.

Open to students in grades 11 and 12

This introductory level course will handle topics in modern European history with special focus given to the period from the Age of Absolutism to the Cold War. This course will introduce major questions of historical process and will emphasize chronological, comparative, and contextual reasoning and the construction of original arguments grounded in historical evidence, both primary and secondary. During the summer prior to taking the course, students must complete a summer reading assignment. Students who fail to complete the summer assignment will NOT be dropped from the course and will receive the appropriate grade for that assignment. Western Civilizations I is NOT a prerequisite for this course.

## **TECHNOLOGY EDUCATION**

### **ARCHITECTURAL DESIGN AND DRAWING** – 1 credit

Open to students in grades 10, 11, and 12

Students will gain an introductory experience into the world of architecture. Basic skills in the design and layout of residential housing will be covered. This class will utilize drafting tools, 3D design software, and modeling techniques to design structures. Students interested in entering a technical or engineering field of study are encouraged to take this course. Students will be required to pay for materials that are not provided by the school district.

### **ELECTRONIC SYSTEMS** – 1 credit

Open to students in grades 9, 10, 11, and 12

Electronic Systems covers the principles of electricity and electronics. Students will use bread-boards, and printed circuit boards to explore various electronic principles and how components are used in both AC and DC circuits. Students will also explore advanced circuit design, digital circuits, and communication devices. Basic residential home electrical circuits will also be covered, along with project construction and electrical testing equipment. Questions about the experiments will require students to think critically about the procedures they are performing. Students will be required to pay for materials that are not provided by the school district.

### **ENERGY, POWER, AND TRANSPORTATION** – 1 credit

Open to students in grades 9, 10, 11, and 12

Energy, Power, and Transportation is a broad-based course designed to introduce students to the basic concepts and principles of energy, power, and transportation. During the course, students will study scientific and mathematical concepts pertaining to the above listed areas of study. Lab activities may include, but are not limited to, wind turbine design challenge, mousetrap vehicles, CO<sub>2</sub> dragsters, rockets, and airplane design challenge. Students will be required to pay for materials that are not provided by the school district.

### **GRAPHIC COMMUNICATIONS** – 1 credit

Open to students in grades 9, 10, 11, and 12

Graphic Communications is an introductory course that explores the technological processes used to produce and deliver both graphic and electronic media. The students will have exposure to three main aspects of Graphic Communications: Digital Photography, Graphic Design and Printing Technologies. In the photography unit, students will use professional-grade digital cameras to learn how to control exposure and how to take better-looking photos. Students will also get experience in hands-on printing when they operate the offset lithography press and screen print. Finally, students will learn the basics of logo design and learn how to create visual images using the Adobe Creative suite. Students will be required to pay for materials that are not provided by the school district.

#### **IMAGING TECHNOLOGIES** – 1 credit

Prerequisite: Graphic Communications Open to students in grades 10, 11, and 12

Imaging Technologies is an advanced graphics course dealing with technologies such as digital photography, digital image manipulation, and graphic design. The students' photography experience will include composition, photographic techniques, editing, manipulation, and printing. Students will have the opportunity to learn computer programs such as Adobe Photoshop and Illustrator. Students will be required to pay for materials that are not provided by the school district.

### **INTRODUCTION TO DRAFTING AND DESIGN** – 1 credit

Open to students in grades 9, 10, 11, and 12

This course is designed to teach the fundamentals of design and computer aided drafting. Students will learn to use 3D modeling software to create drawings of mechanical parts. Throughout the course a variety of design problems will be presented for students to solve. Students will be required to pay for materials that are not provided by the school district.

## **INTRODUCTION TO ENGINEERING TECHNOLOGY** – 1 credit

Prerequisite: Physics and Honors Algebra II or Algebra III
Recommended: One Tech. Ed. class: Architectural Design & Drawing, Intro. to Drafting & Design, Materials Tech., or Wood Tech.
Open to students in grades 11 and 12

This course is designed for those students interested in pursuing a career in engineering technology or related fields. The course will prepare students for further education and a career in these fields by introducing them to three main engineering disciplines: mechanical, electrical, and civil. Students will be introduced to the principles and theories of the engineering process through a project-based curriculum where they will then apply these concepts. Approximately half of the course will be spent in a classroom setting focusing on the scientific principles necessary to design and troubleshoot the various projects, while the other half will be spent in a production lab applying the principles through construction of the project. Through this approach, students will better understand the academic concepts as well as the hands-on skills required to be successful in the technical disciplines. Both a Physics and a Technology Education teacher will team-teach this class. Students interested in entering a technical or engineering technology field are encouraged to take this course. Students may be required to pay for some materials required to complete the projects.

### **HONORS INTRODUCTION TO ENGINEERING** – 1 credit

Prerequisite: Minimum of 80% in CP Physics or above and Honors Algebra II or Algebra III Recommended: Pre-calculus and One Tech. Ed. class: Architectural Design & Drawing, Intro. to Drafting & Design, Materials Tech., or Wood Tech.

Must qualify under the requirements for Honors/Advanced Placement classes as specified on page 7 of this Course Selection Guide.

Open to students in grades 11 and 12

This course is designed for those students interested in pursuing a career in engineering or related fields. The course will prepare students for further education and a career in these fields by introducing them to three main engineering disciplines: mechanical, electrical, and civil. Students will be introduced to the principles and theories of the engineering process through a project-based curriculum where they will then apply these concepts. Approximately half of the course will be spent in a classroom setting focusing on the scientific principles necessary to design and troubleshoot the various projects, while the other half will be spent in a production lab applying the principles through construction of the project. Through this approach, students will better understand the academic concepts as well as the hands-on skills required to be successful in the engineering and technical disciplines. Both a Physics and a Technology Education teacher will team-teach this class. Students interested in entering a technical or engineering field are encouraged to take this course. Students may be required to pay for some materials required to complete the projects.

### MANUFACTURING ENTERPRISE – 1 credit

Prerequisite: Materials Technology and Wood Technologies

Open to students in grades 10, 11, and 12

Manufacturing Enterprise is the 3rd level production course. The course focus of study deals with advanced material processing techniques, methods of manufacturing, marketing, business practices, designing tooling for production, and enterprise opportunities. Students will be required to pay for materials that are not provided by the school district. Please note the prerequisites listed above.

## MATERIALS TECHNOLOGY - 1 credit

Open to students in grades 9, 10, 11, and 12

This course is designed to provide an understanding of the characteristics and properties of industrial materials and the processing of industrial materials into consumer goods. The students will investigate the properties of metallic, polymer, composite, and wood materials. Attention is given to the planning and design of products, the safe and appropriate use of tools and machines, as well as the development of safe work habits. Students will be required to pay for materials that are not provided by the school district.

### **PRINTING TECHNOLOGIES** – 1 credit

Prerequisite: Graphic Communications Open to students in grades 10, 11, and 12

Printing Technologies is an advanced graphics course dealing with advanced printing technologies, computer design and layout, and image manipulation. Specific attention will be given to the composition, design, and layout of publication products. Students will have in-

depth experiences with screen printing, offset press printing, and T-shirt design. Students will be required to pay for materials that are not provided by the school district.

#### **WOOD TECHNOLOGIES** – 1 credit

Prerequisite: Minimum of 75% in Materials Technology

Open to students in grades 10, 11, and 12

In this advanced woodworking course, students will be able to apply techniques learned in Materials Technology as well as more complex operations. Basic residential construction techniques will also be discussed. Students will be required to pay for materials that are not provided by the school district.

### **SMALL GAS ENGINES** – 0.5 credit

Open to students in grades 9, 10, 11, and 12

This course is designed to provide an understanding of the theory and operation of small gas engines. Students will explore both 2 and 4 stroke engines, along with the power equipment they are used in. Students will use tools and machines to troubleshoot, disassemble, repair, and reassemble engines. All subsystems of engines will be discussed.

## **WORLD LANGUAGES**

## **EXPLORATORY GERMAN & SPANISH** – 1 credit

Do you want to learn about German and Spanish music, food, and dance? This is a pre-Level 1 German and Spanish introduction that explores the culture and language of German and Spanish speaking countries. One marking period will be spent studying Spanish and one marking period will be spent studying German for a full semester of cultural exploration.

#### <u>GERMAN</u>

**GERMAN I** - 1 credit

Prerequisite: 70% or higher in English

This is an introduction to the fundamentals of German. All basic skills will be covered: listening, speaking, reading and writing. Special emphasis is placed on pronunciation and skills of listening, speaking and comprehending. German culture will be discussed and compared with American Culture. This is the beginning of basic vocabulary and grammar studies, to which more will be added each successive year.

**GERMAN II** - 1 credit

Prerequisite: 70% or higher in German I

This course continues with the approach used in German I. The fundamentals of grammar are continued with special attention placed on pronunciation, listening, speaking and understanding, and reading and writing of simple paragraphs. German traditions and lifestyles are discussed and compared to ours.

**GERMAN III** - 1 credit

Prerequisite: 75% or higher in German II

German III adds to the structures learned in German I and II. More advanced and complicated grammar forms are learned. Reading selections are on a higher level and more culture and geography is studied through various reading selections. Emphasis is also placed now on writing short paragraphs or essays and using spoken German during the class period.

**GERMAN IV** - 1 credit

Prerequisite: 80% or higher in German III

In this course, all the speaking, writing and reading skills learned up to this point will be continued on a more rapid level. The most difficult forms of German grammar will be learned and used in the skills of reading, writing and speaking. Topics dealing with life and current events in Germany will be discussed, as well as the culture of Germany, Switzerland, and Austria.

**GERMAN V** - 1 credit

Prerequisite: 80% or higher in German IV

In this course, the four basic skills of reading, writing, listening and speaking are geared to the advanced levels. Extemporaneous speaking, comprehension of the language, reading of periodicals and composition writing are all part of German V. Short novels and videos are used for reading and listening practice.

Students wishing to continue with German after successfully completing the advanced course may do so with teacher permission and on an independent study basis.

#### **SPANISH**

**SPANISH I** - 1 credit

Prerequisite: 70% or higher in English

In this course students will learn about the Spanish-speaking world. In addition, students will learn the basics of the language, how to talk about food, families, friends, school, transportation, possessions, getting around in a city, how to talk about activities and places, how to make plans, tell about events, and ask questions. Emphasis is placed upon grammar fundamentals, listening, reading, writing, and speaking skills. Students will be able to communicate in Spanish from the early stages of the course.

## **SPANISH II** - 1 credit

Prerequisite: 70% or higher in Spanish I.

This course will review the topics of Spanish I. In addition, you will also learn how to describe objects and people, to talk about time, weather and daily life, and to discuss special plans and vacations. You will also learn to talk about health and wellness, sports and pastimes. Continued emphasis is placed on speaking, listening, reading and writing skills, as well as grammar fundamentals. In addition, you will also learn more about the Spanish-speaking world.

# SPANISH III - 1 credit

Prerequisite: 75% or higher in Spanish II.

This course is conducted principally in Spanish. You are expected to use Spanish as the primary language of communication in class. You will review the things learned in Spanish II and you will learn how to make purchases of clothing and shoes. You will learn more about foods, restaurants, markets, and stores. You will learn to use the telephone and to make travel arrangements and use a map. Greater emphasis is placed on speaking and listening skills. Reading, writing, and grammar study is continued. You will continue to learn about the Spanish-speaking world.

## **SPANISH IV** - 1 credit

Prerequisite: 80% or higher in Spanish III.

This course is conducted principally in Spanish. It is the primary language of communication in class. You will continue building your vocabulary and reading skills extensively and you will refine your grammar skills. Geography and culture of Spanish-speaking countries continue to be highlighted. Spanish language films supplement the course work to enhance student understanding of Hispanic culture.

#### SPANISH V - 1 credit

Prerequisite: 80% or higher in Spanish IV

This course is conducted in Spanish and you are required to participate fully in Spanish. You will continue vocabulary building and grammar review and you will polish your writing skills. Hispanic culture is highlighted in a variety of ways, including text and film.

Students wishing to continue with Spanish after successfully completing the advanced course may do so with teacher permission and on an independent study basis.

