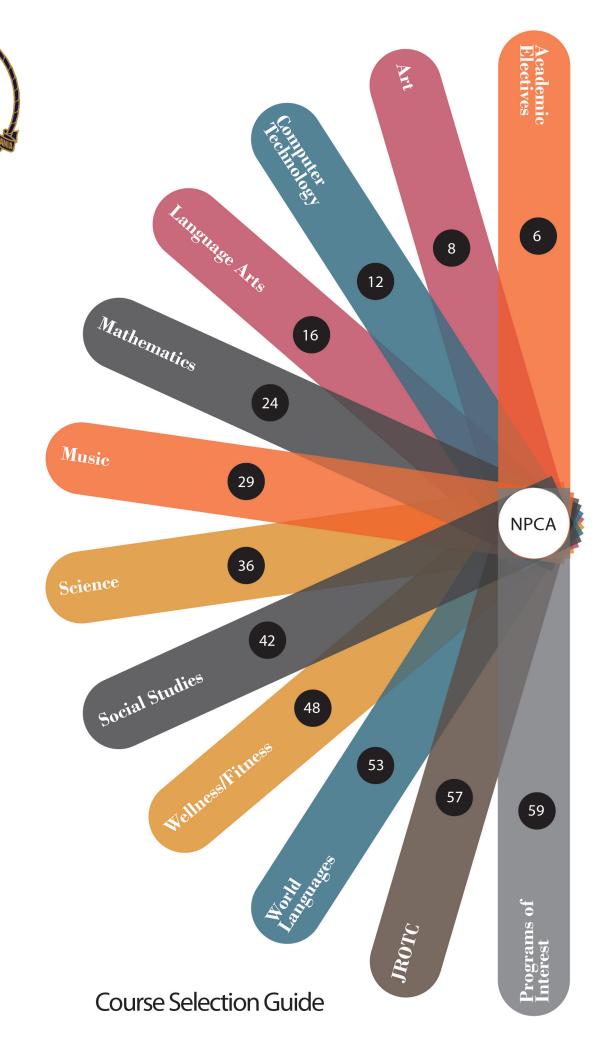
Northwest Pennsylvania Collegiate Academy





A minimum of 29.0 credits (grades 9-12) is required for graduation from Collegiate Academy. These credits shall include:

Language Arts	4.0 credits
Mathematics	4.0 credits
Science	4.0 credits
Social Studies	4.0 credits
Wellness & Fitness	1.5 credits
World Language	3.0 credits
Research	0.5 credits
Advanced Computer Applications	0.5 credits
Electives	7.5 credits

TOTAL CREDITS

29.0 credits

Board-Approved Graduation Requirements

All Collegiate Academy students are required to take a minimum of three (3) Advanced Placement or Dual Enrollment courses before they graduate.

When a student doubles up on classes in a core subject area, he or she is not permitted to take a year off. For example, if a student doubles up in science after her sophomore year she must schedule a science class in both her junior and senior year.

All Collegiate Academy graduates must apply to a four-year college or university during their senior year.

Students who plan to graduate early must meet all above graduation requirements. Students choosing this option must schedule a meeting with a guidance counselor at the end of the tenth-grade year to develop an early graduation plan.

All students must score proficient or advanced on the Algebra, Biology, and Literature Keystone Exams.

College Board administers thirty five Advanced Placement* (AP) courses and exams across twenty subject areas. Collegiate Academy offers more than twenty AP courses to students. The only requirements are a strong curiosity about the subject of the course and the willingness to work hard. During the course of a four year high school career at Collegiate Academy, students are expected to take three Advanced Placement Courses. Through AP exams, students have the opportunity to earn credit or advanced standing at most of the nation's colleges and universities.

College Board lists these advantages of taking AP courses:

- Provide a head start on college-level work.
- Improve writing skills and sharpen problem-solving techniques.
- Develop the study habits necessary for tackling rigorous course work.
- Demonstrate maturity and readiness for college.
- Show willingness of student to push to the limit.
- Emphasize commitment to academic excellence.
- Explore the world from a variety of perspectives, most importantly the student's.
- Study subjects in greater depth and detail.
- Assume the responsibility of reasoning, analyzing, and understanding.

Recent research shows that the single most important indicator of a student's potential for success in college is the rigor of his/her high school coursework.

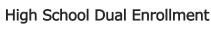
AP Exams are a significant part of the AP Program and students are expected to take the exam. Courses are taught by AP trained, dedicated teachers who lay the groundwork for student success on the exams.

We recognize the additional rigor of Advanced Placement courses by allowing students taking Advanced Placement courses to schedule a one semester academic enhancement for each two Advanced Placement courses; no more than one academic enhancement per semester may be scheduled.

For answers to frequently asked questions regarding the Advanced Placement Program, please visit http://www.collegeboard.com/student/testing/ap/about.html.

*Advanced Placement Program is a registered trademark of the College Board.





Collegiate Academy has a partnership with local colleges whereby junior and senior students have the opportunity to take college courses for high school credit in core subject areas. Core college courses are weighted as an Advanced Placement course and will be factored into the student's GPA; elective college courses receive Collegiate Honors weight. College courses and grades appear on the student's report card/transcript along with the grades earned in Collegiate Academy courses. Many students have benefited from this program; however, it does require initiative and self-discipline on the student's part to maintain good grades in both areas.

These college courses are offered as an enhancement to the Collegiate Academy course offerings and are completely optional. The colleges offer them at a greatly reduced tuition, and each school has a different cost per credit. Students must purchase their own books and provide their own transportation. While every effort is made to schedule Collegiate Academy classes around the college courses, students assume responsibility for making up Collegiate Academy course work missed while attending college classes. Students can also take summer and evening college courses for dual enrollment credit. Rigorous high school course work, including dual enrollment courses and Advanced Placement courses, enhance a student's chances of admission at highly select colleges as well as prepare them for college level rigor.

Please note that every college has its own policy on accepting the college credit earned through this dual enrollment program. Some colleges will only accept college credit that was not counted as high school credit; some colleges may not accept a course that is a required course in the student's intended major. Students can check the credit transfer policy of most colleges on the individual college websites.

High school dual enrollment is an excellent way for juniors and seniors to earn college credit at a reduced rate while completing the required credit for high school graduation. Students have enriched their knowledge in certain subject areas in anticipation of a rigorous choice of major and/or have pursued courses of interest simply to expand their own knowledge. Any student scheduling a college course as a required high school course in language arts, math, science, social studies, and/or world language must do so in the fall semester to ensure availability and avoid credit shortages, which would endanger graduation. Students must also register for dual enrollment courses and go through the Collegiate Academy guidance department in advance of the course start date. A student may not schedule dual enrollment courses in the middle of a Collegiate Academy semester if the student is failing or doing poorly in a current Collegiate Academy course. These courses are meant for enrichment of Collegiate Academy curriculum. All dual enrollment courses must be approved by Collegiate Academy administration or the guidance department.

In order to schedule dual enrollment classes, students and a parent/guardian must sign a contract (found in the back of this course book) agreeing to abide by all and policies of Collegiate Academy and the college.



Academic Enhancement is a class that offers students the opportunity to utilize a portion of the school day to work on projects, homework, or studying for exams. By building academic enhancement periods into a student schedule, the amount of instructional time and the total number of credits a student will have upon graduation are reduced. For these reasons, it is vital that students choose whether to take an academic enhancement with great discretion. In addition, students taking academic enhancement are expected to be working throughout the period. This time is not to be used as downtime, time to rest, or free time. To encourage the proper utilization of academic enhancement and for the reasons above, students will be limited to 1 academic enhancement for every 2 AP classes with a maximum of 2 academic enhancements in a school year. Dual enrollment students may schedule academic enhancements at the same time as a college class in order to facilitate travel and missing Collegiate courses. These academic enhancements will be scheduled with a counselor at the start of each semester.



#1728 1 Credit Grades

AP Seminar Prerequisites

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in researchbased written essays, and design and deliver oral and visual presentations, both individually and as part of a team. The course aims ultimately to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

#1726 1 Credit Grades 10, 11, 12

AP Research **Prerequisites**

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question of their choosing. Students further the skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense

#6096 .5 Credits Grade 9

Introduction to Academic Sports League Prerequisites

This course introduces students to the Academic Sports League (ASL). The course emphasizes skills that will prepare students for success in the full-year ASL class, which they can take the following year. These skills also prepare them for success at competitions. Subjects covered include: (1) general knowledge of music fundamentals (2) general knowledge of art fundamentals (3) general knowledge of language and literature fundamentals and (4) General knowledge of economics, both micro and macro fundamentals.

SAT Prep Prerequisites: None

This course is designed to prepare students for the SAT. Through practice exercises and quizzes, the students develop strategies and skills needed to achieve success on the math, verbal, and writing sections of the test, focusing on sentence completion, reading comprehension, standard written English usage, and impromptu essay development. Students will take ownership of their own progress, as this course focuses on individual student growth. All work will be student-centered, with significant peer interaction and individual reflection. Student progress will be monitored via a baseline test, frequent checks, and comparison to PSAT results.

#6094 1 Credit Grades 10, 11, 12

#5512

.5 Credits Grades 11, 12

Academic Sports League Prerequisite: Introduction to ASL

This class is for students who have a love of reading and competition. It prepares students for competition at the local level through Academic Sports League and at the regional and state level through the United States Academic Decathlon (USAD). The course is a compilation of ten areas important to college-bound high school students: Language and Literature, Mathematics, Science, Social Studies, Economics, Art, Music, Speech — prepared and impromptu — Interview, and Essay. Students are divided into three levels: Honors, QPA 3.75 and above; Scholastic, 3.0 to 3.74; and Varsity, below 3.0. These divisions allow students to compete with other students of with similar ability. Although the same ten areas are studied every year, the specific material within the ten subjects will vary. The science may be biology, chemistry, or physics; the social studies may be a specific time period or a specific geographical area; the language and literature may include a novel, play, or poetry; and the fine arts areas may focus on a specific period or genre.



#6902 .5 Credits Grades 9, 10, 11, 12 Art I

Prerequisites: None.

Art I is open to all students regardless of their previous art experience. Students will have the opportunity to develop skills by using a variety of drawing and painting media. They will be given instruction in shading, figure drawing, perspective and painting techniques. This class will present the elements and principles of design as well as color theory.

#6904 .5 Credits Grades 10, 11, 12 Art II

Prerequisite: Art I.

Take the next step to elevate your art skills. Art II will afford the serious art student the opportunity to improve his or her artistic ability through a variety of two-dimensional experiences. The focus is on working with pencil, Conté crayon, charcoal, and pastels in a range of drawing assignments. Students create a self-portrait, still life, and landscape in acrylics, and they complete weekly assignments that will be critiqued by members of the class.

#909 .5 Credits Grades 10, 11, 12 Art III

Prerequisites: Art I and Art II.

It's time to show off your creativity. Armed with the fundamentals of Art I and Art II, students will now produce artwork that reflects personal style and inner expression. Students complete assignments that offer a greater freedom to personalize artwork and showcase creativity. Students will work in drawing and painting media to produce art that is unique. Students are expected to complete a weekly assignment and sketchbook.

and glaze their own pottery.

#6912 .5 Credits Grades 9, 10, 11, 12

This course is an exciting adventure that will introduce students to ceramic clay and the ceramic process. Students discover the properties of clay, and they learn about its history and its uses



Ceramics II Prerequisite: Introduction to Ceramics.

This course continues the creative clay adventure and builds on students' prior experiences while broadening their knowledge and improving their skills in ceramics. Students construct a variety of projects that include clay modeling, three-dimensional slab construction and low-relief sculpture. Students use a variety of different glazes and surface treatments. They also assist in the preparation, loading, and unloading of the kiln.

as a functional and decorative art form. Students experience clay-preparation techniques, and explore slab, coil and pinch pot

construction through assigned projects. Students design, decorate,

#6914 .5 Credits Grades 10, 11, 12

Advanced Ceramics
Prerequisites: Introduction to Ceramics and Ceramics II.

This course is designed for the serious ceramics students who are dedicated to furthering their knowledge, skills, and creative endeavors in clay. All projects are built on the foundations of Ceramics II. Students gain knowledge and skill at a higher level, using hand building and the potter's wheel. They are actively involved in the individual design of each proposed project. Students need to spend additional time working after school due to the complex nature of the projects. Students will demonstrate an understanding of ceramic vocabulary and pug clay, and assist in loading and unloading the kiln. They will incorporate art history themes into their work and decorate projects using a variety of methods. Focus on quality construction will be a top priority. Over and under glazes are used, and students must maintain a notebook with sketches and design proposals. Students are responsible for fees or cost required to complete final projects.

#6916 .5 Credits Grades 11, 12



#6918 .5 Credits Grades 11, 12 Ceramics Studio Prerequisites: Ceramics I, Ceramics II, and Advanced Ceramics.

This course is designed to expand on the skills and ideas of the serious ceramic student. Various ceramic artist studies are examined and replicated. Students explore ceramic techniques including refining hand-building skills and advanced wheel throwing. Students deal with more complex and conceptual forms. Additionally, students are challenged to use prior ceramic knowledge and skills to create new and inventive pieces. Every effort is made to accomplish the goals and objectives in a timely and efficient manner that will allow the students the optimum opportunity to excel in their work. Over and under glazes are used, and students are required to maintain a notebook with sketches and design proposals. Students are responsible for donating a predetermined piece to the school art gallery.

#6946 .5 Credits Grades 9, 10, 11, 12 **Cartooning Animation** Prerequisites: None

This course introduces the student to the history and development of cartooning. Students create cartoon characters, set them into a sequence of time frames, and eventually animate them with computer software. They also work with clay animation using stopmotion animation.

#6926 .5 Credits Grades 9, 10, 11, 12

Art & Design Prerequisites: None

This course allows students to experience the excitement of being a graphic artist and combine a love of fine art with the diversity of computer design. Students develop skills in layout, design, and illustration. Students use traditional fine arts media as well as computer and photo-editing software to create art work. Through a series of products, students create graphic compositions that test their ability to blend text with imagery that is visually pleasing, marketable, and balanced.

#6932 1 Credit

Grades 11, 12

Art/Ceramics/Art and Design/Cartooning and Animation/AP Art History/AP

Take a trip from the prehistoric caves of Altramira to present studios of contemporary artists. This class is an introduction to Western art and architecture with attention to non-European cultures. This progressive course introduces students to artists, schools and movements, chronological periods and specific dates, and the subjects, styles, and techniques of particular works of art. Students explore varying contexts of ideas and social/historical situations in which works of art have been created. Students gain an appreciation of art from various times and cultures, and they learn about the materials and processes in the creation of art and architecture from class lectures, readings of the text, videos, and slide presentations. Each student must give a detailed presentation of an artist, period or style of art, or a specific work of art.

Advanced Placement Studio Art Prerequisites: Art I and Art II.

This course is designed for the highly motivated art student committed to producing quality, two-dimensional artwork. The student artist creates a portfolio of artwork over the course of the school year. Each portfolio comprises three sections: a quality section made up of five matted works of art; a section made up of twelve compositions showing diversity in a variety of mediums; and a series of twelve compositions documenting the student's exploration of a specific area of concentration that he or she designs. Members of this class are exposed to demonstrations and videos aimed at presenting a variety of approaches and techniques in drawing and painting.

#6934 1 Credit Grades 11, 12



#6840 .5 Credits Grade **Advanced Computer Applications** This class is required for all freshmen.

This course is designed to reinforce existing formatting skills and to acquaint students with the advanced features of Microsoft Word, PowerPoint, and Excel. The course also provides students with the formatting skills used in the educational and business world.

#6820 .5 Credits Grades

11, 12

Introduction to Programming

Prerequisite: Advanced Computer Applications.

Advanced computer students learn basic coding using the two most popular and current languages. They develop structured coding methods, debugging skills, and logic for efficient problem solving.

#6818 .5 Credits Grades 10, 11, 12

Computer Aided Design Prerequisite: None

Using the latest software for 3D engineering design, students explore unique design techniques. Students use Autodesk Inventor, a parametric solid modeling design software package. Hands-on experiences allow students to explore the exciting field of Computer Aided Engineering. Students use basic drawing principles as well as advanced computer-aided drawing techniques. Inventor is used extensively by the robotics team members to design our robot.

Webpage Design Prerequisites: Advanced Computer Applications and some digital imaging experience.

Students learn about the tools and techniques used by web publishers. They become familiar with internet protocol used for HTML and web page editors/browsers. Students also have the opportunity to work with Adobe Dreamweaver, a popular web publishing program, and Adobe Flash.

#6824 .5 Credits Grades 10, 11, 12



Advanced Computer Applications/Intro to Programming/Computer Aided AP Computer Science/Media Production/3D Modeling/Desktop Publishing Design/Webpage Design/Digital Imaging (Photo)/Video Editing

Photo/Digital Imaging Prerequisite: Advanced Computer Applications.

This is an in-depth study of digital photography and current technologies. Students study camera selection and manipulation of setting. Students explore the history of photography, learning about its scientific and technological developments, important innovators in the field, and relevance within diverse cultural contexts. Students write and speak about aesthetic, technical, and expressive aspects of design. They learn about qualities in a photograph, learning to critique their own and others work. Students work with a greater level of autonomy and are expected to pursue their own interests and develop an individual voice. Students explore the significance of photography and learn about the critical and varied application it has to the modern working world.

#6812 .5 Credits Grades 9, 10, 11, 12

Digital Media Editing Prerequisites: Advanced Computer Applications.

Using advanced digital editing software, students use the power of Photoshop to create works of art. Students learn how to access the interface and utilize its expansive features and tools. Creative composition, image manipulation, and enhancement are studied. Students also have the opportunity to study and analyze the work of professional photographers.

#6822 .5 Credits Grades 9, 10, 11, 12



#6814 .5 Credits Grades 9, 10, 11, 12 Video Editing Prerequisite: None

This course is an introductory class designed to provide students with practical, hands-on experience in video production, broadcasting, and video/audio editing. In addition, this course provides instruction and training in the pre-production and post-production phases of video project development. Students who successfully complete this course will be prepared to enter a broadcast journalism or advanced video production class; this course serves as a prerequisite for our broadcast journalism and King TV classes. During the course each student will be taught the basic skills of operating a video camera, the essential principles of how to capture high quality video and audio, how to edit video and audio, and how to tell a compelling story by combining video, audio and the editing process.

#6836 1 Credit Grades 11, 12 Advanced Placement Computer Science Prerequisite: Introduction to Programming.

Students build on the knowledge they acquired in Introduction to Programming. Students learn enhanced structuring techniques/ methodologies, advanced data structures, and further problem definitions. Students also refine their program design and debugging skills.

#1860 1 Credit Grades 11, 12

Media Production

Prerequisites: Digital Imaging and Broadcast Journalism.

This technology-based course acquaints students with the tools of media production and basic concepts of production and increases their awareness of media technology. Students learn the fundamentals and techniques involved in the design and production of visual messages. Students produce various print, video, and mixed-media projects that will be used to promote the mission and vision of Collegiate Academy.

3D Modeling

Prerequisite: Computer Aided Design.

animations as part of our yearly competition.

Students are introduced to 3D Studio Max, one of the best 3D design and animation programs in the world. This program is used by architects for presentations and by the entertainment industry to create feature films like X-Men 3 and The Incredibles. Students start by building simple 3D shapes and later develop full animated movie clips. 3D max is used by our robotics team to create several

#6832 11, 12

.5 Credits Grades



Advanced Computer Applications/Intro to Programming/Computer Aided AP Computer Science/Media Production/3D Modeling/Desktop Publishing Design/Webpage Design/Digital Imaging (Photo)/Video Editing

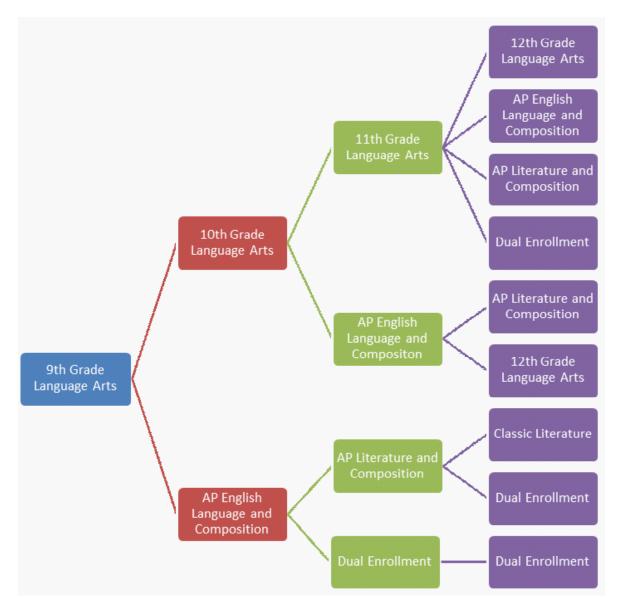
Desktop Publishing Prerequisite: None

This class is designed for students interested in publication design or those who want to be members of the yearbook or news magazine staff. Students are introduced to the concepts of design and the basic elements of desktop publishing using Adobe In-Design. Students construct an individual newsletter, create a title page spread for a magazine article, produce a magazine ad, generate a brochure, and design newspaper and yearbook pages.

#6816 .5 Credits Grades 9, 10, 11, 12



Production/Womens and Africian American Literature/Creative Writing/Broadcast Journalism/Television Practium-King TV



#1882 .5 Credits Grade 9 and all transfer students

Research

This course is designed to prepare the student for the requirements of research paper writing. This skill is necessary to complete the research paper that is required in all Language Arts classes and many of the other disciplines at Collegiate Academy. It is a vital skill in all college/university course work. Students are given intensive instruction in all phases of the research process, from selection of a topic to the publication of an actual paper. The course follows the Modern Language Association of America (MLA) format for textual citation. The course also teaches the retrieval of information from traditional sources to the latest electronic resources.

This class is required for all freshmen and transfer students. Successful completion of all steps in the research process is required in order to pass this course.

#1408 1 Credit Grade

This course is aligned with the Common Core State Standards and introduces the development of college-level writing skills, with a focus on literary response and practice in argumentative and informative modes of writing. Students embark on an exciting literary journey through various short stories, poems, informative essays, Shakespearean and Greek tragedies, and novels. Language Arts 9 begins the development of the strong analytical skills necessary for success in later Language Arts and other AP classes. Students analyze fiction and non-fiction and are exposed to APstyle objective testing and essay writing. PSAT, SAT, and Keystone Exam skills will also be a major focus of the course, including but not limited to, the development of vocabulary and critical reading skills. Required summer reading: Of Mice and Men by John Steinbeck. Incoming freshmen must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

Composition/Classic Literature of the Western World/Journalism/Media Composition/AP Literature and Studies/Yearbook/News Magazine/Theater Arts/Theatrical

Production/Womens and Africian American Literature/Creative

Writing/Broadcast Journalism/Television Practium-King TV

#1508 1 Credit Grade 10

Language Arts 10

Beginning with an examination of two failed utopias, this course continues to engage students in an exploration of humans' desire for a perfect world. We consider what is important in an ideal society and discuss the issues that complicate our world. By reading and responding to novels, short stories, poetry, essays, and drama, students continue to develop their appreciation of literature, critical thinking, and writing skills. They also expand their ability to respond meaningfully to literature through interpretation and analysis. Students write in a variety of modes including narrative, expository, and argumentative. Students also study college-level vocabulary and develop PSAT, SAT, and Keystone Exam skills. Successful completion of every step of a research paper in MLA style is required to pass this class. Required summer reading: Fahrenheit 451 by Ray Bradbury. All sophomores must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

Language Arts 11

This is a survey of American literature, incorporating the literary periods from Native American through Postmodernism. Students study various short stories, poetry, essays, and plays. Language Arts 11 is intended to engage students in college-level thinking, discussions, writing, and research. Students develop analytical skills, evaluate literary criticism, and further their understanding of literary devices in order to respond critically to the literature they read. Additionally, students hone their vocabulary and other skills needed for PSAT, SAT, and Keystone Exam tests. Successful completion of every step of a research paper in MLA style is required to pass this class. Required summer reading: All students taking Language Arts 11 must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

#1608 1 Credit Grade 11



Writing/Broadcast Journalism/Television Practium-King TV

#1708 1 Credit Grade

12

Language Arts 12

This course focuses on early literary developments of England from the early Middle Ages to the present. Emphasis is on the major writers and their contributions to changing concepts of literary form and content. The year's study will conclude with contemporary societal viewpoints as expressed in modern works of literature. Students analyze argument and compose essays addressing both sides of an argument. The analysis of Latin/Greek rooted vocabulary and literary terminology will continue with this course. Students enhance their critical thinking and analytical writing skills by completing a variety of essays. Successful completion of every step of a research paper in MLA style is required to pass this class. Required summer reading: All students taking Language Arts 12 must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

#1610 1 Credit Grades 10, 11, 12 Advanced Placement Language and Composition Prerequisites: Exemplary completion of Language Arts 9 or 10.

This course has two equally important goals. First, it prepares students to succeed on the Advanced Placement Language and Composition test, which is administered in May. Second, it offers students the chance to work at a college level, providing excellent preparation for the challenges and demands they will face in college. The class focuses on the rhetoric of literary nonfiction. Students work to develop as writers by integrating into their own writing the rhetorical skills they study in the writing of master authors. Students also read a number of classic American novels and study advanced vocabulary that will contribute to their success on the AP, SAT, and ACT tests. A fully documented research paper that meets all required criteria is required for successful completion of this class. Students should also be committed to the careful reading and critical analysis of fiction and non-fiction. (Please refer to the Advanced Placement page of the course book.)

Required summer reading: All students taking AP Language must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

Advanced Placement Literature and Composition Prerequisites: Successful completion of AP English Language and Composition and a commitment to the careful reading and critical analysis of literature.

#1710 1 Credit Grades 11, 12

The overall description of this intensive course is defined by the College Board. Advanced Placement Literature and Composition is a college-level course that engages students in careful reading and critical analysis of imaginative literature. Through the close reading of selected texts that include short fiction, novels, drama, and poetry, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Students enhance their critical thinking and analytical writing skills by completing a variety of essays as well as a formal MLA documented literary criticism research paper that is a requirement for graduation.

Required summer reading: All students taking AP Literature must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

Classic Literature of the Western World Prerequisites: Successful completion of AP Language and AP Literature. #1720 1 Credit Grade 12

This course is designed for juniors and seniors who have completed both AP Language and AP Literature, although some students may be concurrently enrolled in AP Literature. Students explore the foundations of Western thought and literature, which encompasses important works from 2500 B.C. through the present. Historical context and cultural traditions serve as guides for study. Students complete a fully documented research paper that examines the critical literary elements or historical importance of chosen selections. Required summer reading: All students taking Classic Literature must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.



Language Arts/AP Language and Composition/AP Literature and Composition/Classic Literature of the Western World/Journalism/Media Studies/Yearbook/News Magazine/Theater Arts/Theatrical Production/Womens and Africian American Literature/Creative

Writing/Broadcast Journalism/Television Practium-King TV



Writing/Broadcast Journalism/Television Practium-King TV

#1854 . 5 Credits Grades 9, 10, 11, 12 **Journalism**

What are your First Amendment rights, and why are they important to us? How does the media impact your life and people's perceptions of the world and others in it? Students explore these questions on a daily basis through class discussions, group and individual projects, and writing assignments. The newspaper is only the beginning as students read, watch, and evaluate various modes of the media and become acquainted with journalistic techniques including interviewing, research, and composition of various types of articles. This class is a foundation for News Magazine, Yearbook, and KING TV.

#1822 1 Credit Grades 10, 11, 12 Yearbook

Prerequisites: Journalism and Desktop Publishing.

The selective, highly self-motivated, and creative members of the yearbook staff are responsible for the successful production of our yearbook, The Collegian, using Jostens Yearbook Avenue. These students design all aspects of the yearbook and cooperate as a team with one goal in mind: the best yearbook ever! Students use Adobe InDesign to create the yearbook. A teacher recommendation is required to enroll in this class. Recommendation forms will be available second semester.

#1828 1 Credit Grades 10, 11, 12

News Magazine Prerequisites: Journalism and Desktop Publishing.

This is a hands-on course in which students sell advertisements to pay for the issues and utilize the writing process to generate news, feature, and editorial pieces for publication in a professional quarterly news magazine, The Pride. Students also maintain and promote the online form of the magazine, and utilize InDesign and Photoshop to create original layout designs for the publication. Students are responsible for the entire process of creating a news magazine and maintaining the accompanying website. Prerequisites: Journalism and Desktop Publishing. A teacher recommendation is required to enroll in this class. Recommendation forms will be available second semester.

This one-semester course introduces students to the fundamentals of acting and theatre, including the historical development of the stage. Students are introduced to many aspects of technical theatre. Basic acting techniques and terminology are covered through improvisation, scripted rehearsals, and performance.

#1834 .5 Credits Grades 9, 10, 11, 12

#1836 .5 Credits

Grades 10, 11, 12



Composition/Classic Literature of the Western World/Journalism/Media Composition/AP Literature and

Africian American Literature/Creative Studies/Yearbook/News Magazine/Theater Arts/Theatrical

Writing/Broadcast Journalism/Television Practium-King TV

Production/Womens and

Theatre Arts II Prerequisite: Theatre Arts I.

This one-semester course allows students to continue to improve acting skills through improvisation, scripted rehearsal, and performances with a higher concentration on character development and script interpretation. A greater involvement in technical theatre and design are included in this class. Students learn about the many careers available in the world of theatre. Participants are required to view theatrical productions throughout the semester and compose reviews of the many aspects of the production.

Theatrical Production Prerequisites: Theatre Arts I and II.

The focus of this one-semester class is the production of the school theatrical productions. Using the skills learned in previous theatre classes, the students work on all aspects of the school's productions, including publicity, set design/construction, costume design/construction, lighting, sound, makeup, and props, as well as stage management and direction. Students also continue working on performance skills through acting exercises. Participants are required to view theatrical productions throughout the year and compose reviews of the many aspects of the production. This course may be taken more than once.

#1840 (first semester), #1842 (second semester) .5 Credits Grades 10, 11, 12



Writing/Broadcast Journalism/Television Practium-King TV

#1857 .5 Credits Grades 10, 11, 12

Women's and African American Literature Prerequisite: Language Arts 9

This course devotes the first quarter to women's literature and the second quarter to literature written by African Americans. The first quarter will focus primarily on works written by women in the late 19th and the entire 20th century. One main goal of the course is to attempt to answer these questions: Why study women's literature separately? How is women's literature different than work written by men? Our understanding of the works we read are enhanced by consideration of the historical contexts in which they were written. The second quarter focuses on literature written by African Americans. One main goal is to attempt to answer these questions: Why study African American literature separately from literature written by others? How is African American literature different than work written by others? Because understanding the historical context of this literature is especially important in order to fully appreciate it, this course is structured chronologically, beginning with the Colonial period, and moving through the Antebellum, Reconstruction, Harlem Renaissance, Protest, Black Aesthetics, and Neorealist periods.

#1852 .5 Credits **Grades** 11, 12 Creative Writing

Prerequisites: Language Arts 9 and Language Arts 10.

This is a course for the student who loves to read and write—the creative soul. Students work within a workshop atmosphere, providing and accepting critiques of their own work and the work of others. There is also be in-depth discussion of some classic and contemporary work by established writers. Creative Writing provides opportunities for students to refine their creative writing skills and abilities beyond those developed in the required English courses. This course encourages students to see creative writing as a unique way of thinking, and as a means of constructing and conveying meaning. Students in the creative writing course are encouraged to explore and develop their own ideas. Through experiences in creative writing, students are encouraged to explore connections between their own writing, the writing of others, and the broader world around them.



Composition/Classic Literature of the Western World/Journalism/Media Africian American Literature/Creative Studies/Yearbook/News Magazine/Theater Arts/Theatrical Production/Womens and

Writing/Broadcast Journalism/Television Practium-King TV

Composition/AP Literature and

Behind the camera or in front of the camera, it's covered in Broadcast Journalism. This course introduces students to all aspects of broadcast news and video production, including shooting, editing, and adding special effects to video, as well as writing and reporting for the small screen. Students in this class gain experience in all three phases of production. They also work in teams to create a series of video projects, including public service announcements, music videos, and news packages.

Media Studies

This class explores the history of media, including early advertisements, radio broadcasts, television, motion pictures, and the internet. Students analyze how these types of media have evolved over time to meet the needs of a modern society. This is a hands-on class in which students will have many opportunities to work in groups; there is very little lecture. The class is as interesting as students make it. Students create an advertising campaign for a unique product; perform radio skits; create videos, blogs, and websites in order to present information to their classmates; and utilize the most recent information on the internet to understand what the modern media is. This is a great class for students interested in marketing, television, motion pictures, the internet, and the future of all types of media.

#1862 .5 Credits Grades 9, 10, 11, 12

#1800

1 Credit Grades

10, 11, 12

Television Practicum (KING-TV) Prerequisites: Journalism I and Broadcast Journalism I, teacher recommendation, and audition.

"Three. Two. One. Take tape with audio full; ready camera one on a two shot in three, two, one. Cue anchors and open their mics." This pressure-filled atmosphere of live TV is intended to excite and motivate students. Students are required to arrive at the studio at 7:40 in the morning and work in their various positions until 8:20 every morning. This course allows students to put all the communication theories and production techniques to work as they produce daily, weekly, and specialized video packages to be broadcast to the rest of the school. The classroom is an actual television studio where students combine their on-air and behind the scene talents to broadcast live every morning. Students rotate positions throughout the year and find themselves in the role of a technical director, audio or tape engineer, a graphics or camera operator, an anchor, or possibly a producer.



Grade 9	Grade 10	Grade 11	Grade 12
Algebra I	Geometry	Algebra II	Trig/Pre-Calc
			College Algebra
			AP Statistics
Geometry	Algebra II	Trig/Pre- Calculus*	AP Calaculus AB
		College Algebra/Trig	AP Calculus BC
			AP Statistics
			Statistics

#3910 .5 Credits Grade

Algebraic Concepts

This course is designed to provide a foundation for algebra and geometry. Students review the order of operations with rational numbers, solve linear equations and inequalities, introduce graphing in the coordinate plane and reinforce the properties of exponents.

#3402 1 Credit Grade

Algebra I

This course is the building block of the high school mathematics curriculum. Students learn the applications and terminology of Algebra. This course is designed to help students succeed in future mathematics classes in the high school and college environment. This class focuses on reading and writing mathematically, communicating with mathematical terminology, and developing organizational skills.

#3915 1 Credit Grade

This course is a companion course to Algebra I. It focuses on operations with real numbers, solving equations, inequalities, and linear systems.



Algebra Trigonometry/AP Calculus AB/AP Calculus BC/AP Statistics/Problem Alegbraic Concepts/Algebra/Geometry/Trigonometry Precalculus/College

Geometry

Prerequisite: Algebra I.

#3502 1 Credit Grades 9, 10

This course focuses on learning concepts in plane and solid Euclidean Geometry, starting with the basics --- points, lines, planes and angles – and working into two-dimensional figures such as triangles, polygons and circles. Students concentrate on area of two-dimensional figures, surface area, and volume of three-dimensional figures and coordinate geometry. The curriculum is aligned with the topics covered on the ACT and SAT standardized tests.

Algebra II Prerequisite: Algebra I.

This course furthers students' knowledge of algebraic concepts and increases skills in algebraic computations. Algebra II constantly reviews concepts covered in Algebra I. Functions covered include linear, quadratic, polynomial, radical, and rational. Students are exposed to imaginary numbers, rational exponents, logarithms, and an introduction to probability and statistics. Students learn how to use graphing calculators in preparation for standardized tests.

#3602 1 Credit Grades 10, 11

 ${
m Mathematics}$



#3806 1 Credit Grades 10, 11, 12 Trigonometry/Pre-calculus Prerequisites: Geometry, Algebra II.

Trigonometry with Pre-Calculus develops the skills necessary to be successful in Calculus. The course includes the study of advanced algebra topics: polynomial, rational, logarithmic and exponential functions, graphs and asymptotes. Trigonometric topics include right triangle, functions, graphs, identities, equations, formulas and laws. The final segment of the course will introduce limits for Calculus. This course is intended for those students planning on taking AP Calculus.

#3802 1 Credit Grades 11, 12 College Algebra/Trigonometry Prerequisites: Geometry and Algebra II.

This course focuses on advanced algebra concepts: polynomial and rational functions, exponential and logarithmic functions, graphs of functions, systems of equations, and inequalities. Trigonometric topics include functions and graphs, right and oblique triangles, identities, equations, complex numbers, formulas, and laws. This course is intended for those students pursuing a non-mathematical or scientific field of study.

#3904 .5 Credits Grades 9, 10, 11, 12 **Problem-Solving Strategies**

The basis of this class is the teaching and learning of strategies that people in the world of work use when solving problems. Specifically, students develop problem solving strategies, communication skills and attitudes, all in a team environment.

Advanced Placement Calculus BC Prerequisite: Trigonometry/Pre-Calculus.

This course consists of the first two semesters of college calculus. The topics covered in this class include all the topics in AP Calculus AB, along with further topics of improper integrals, sequences, series, and parametric, polar and vector functions. It is expected that the student taking AP Calculus BC will seek college credit by taking The AP exam for Calculus BC. This course extremely challenging and should be taken by the hardest-working

mathematics students seeking a career in a mathematics, science or

#3704 1 Credit Grades 11, 12

Alegbraic Concepts/Algebra/Geometry/Trigonometry Precalculus/College Algebra Trigonometry/AP Calculus AB/AP Calculus BC/AP Statistics/Problem

Advanced Placement Statistics Prerequisite: Algebra II.

engineering field.

This course consists of a comparable semester course in Statistics available in most colleges or universities. It is expected that students who take this advanced placement course in Statistics will seek college credit for this class. The course consists of the major concepts and tools for collecting data, while analyzing and drawing conclusions from that data. Students are exposed to four broad conceptual themes: (1) Exploring Data: Describing patterns and departures from patterns, (2) Sampling and Experimentation: Planning and conducting a study, (3) Anticipating patterns: Exploring random phenomena using probability and simulation, and (4) Statistical inference: Estimating population parameters and testing hypotheses. A secondary goal of this course is to give students the knowledge to be better consumers and learners. Students should be able to see or question the validity of statements or information presented to them in everyday life. Statistics is an integral part of many other subject areas; a well-rounded basic knowledge will benefit students through understanding concepts and relationships in other subjects such as the physical and social sciences.

#3714 1 Credit Grades 11, 12



#3712 1 Credit Grade

12

Statistics

Prerequisite: Trig/Pre-calculus or College Algebra/ Trigonometry. *This class is open only to seniors.*

This course provides an overview of the essential concepts in statistics. Students learn how populations can be described by fundamental mathematical calculations. The importance of measures of central tendency is emphasized. Probability, sampling techniques, confidence intervals, and hypothesis testing are also discussed. The broad goal of this course is to illustrate the wide application of statistical techniques across many different professional fields.

#3702 1 Credit Grade 11, 12

Advanced Placement Calculus AB Prerequisite: Trigonometry/Pre-Calculus.

This course features a course of study comparable to that of calculus courses in colleges and universities. It is expected that students who take an advanced placement course in calculus will seek college credit, college placement, or both for institutions of higher learning. The course consists of elementary functions and topics in differential and integral calculus as well as their applications. This course emphasizes a multirepresentational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally.

Prerequisite: Basic ability to read music is preferred, but not necessary.

#8614 1 Credit Grades 9, 10, 11, 12



ntroduction to Band/Introduction to Orchestra/Wind Ensemble/Orchestra

Jazz Band/Classical Piano/Girls Chorus/Womans Chorus/Chamber

This is an entry-level instrumental music class designed to teach students who have little to no previous musical training how to read music and play a traditional band instrument, such as flute, clarinet, saxophone, trumpet, French horn, trombone, baritone, tuba, or percussion. Students learn basic music theory, musical terms, proper playing technique, as well as develop a sense of belonging and performing with an ensemble. The students will perform in at least one concert in the spring. This course helps to prepare students for other instrumental ensembles such as Concert Band or Jazz Band I.

Wind Ensemble

Prerequisites: Experience playing a woodwind, brass, or percussion instrument. A placement audition is required.

This course is for the student who has previous experience playing a woodwind, brass, or percussion instrument and who can read music at an intermediate level or higher. Students learn about and perform contemporary styles of music, classical transcriptions, marches, and standard concert band repertoire. Students learn scales, articulations, and basic music theory, and they work together through ensemble playing as well as sectional rehearsals. Wind Ensemble will perform in two concerts throughout the year, one in the winter and one in the spring. The Wind Ensemble is also required to perform at graduation.

#8616 1 Credit Grades 9, 10, 11, 12

Introduction to Orchestra

This is an entry-level instrumental music class. This course is designed to teach students who have little to no previous musical training how to read music and play an orchestral string instrument, such as violin, viola, cello or double bass. Students learn basic music theory, musical terms and concepts, proper playing technique, and individual and ensemble performance skills. The students will perform in two required performances throughout the year, one in the winter and one in the spring. This course helps prepare students for joining Orchestra

#8590 1 Credit Grades 9, 10, 11, 12



#8602 1 Credit Grades 9, 10, 11, 12 Orchestra

Prerequisites: Experience playing an orchestral string instrument. A placement audition is required.

This course is for the student who can read music at an intermediate level or higher and who has experience playing an orchestral string instrument: violin, viola, cello, or double bass. Students perform a varied repertoire of music including orchestral transcriptions, multicultural works, classical pieces, and original pieces for string ensembles. The orchestra will perform in two concerts throughout the year, one in the winter and one in the spring, but they may be called upon for other occasions. Students experience a sense of cooperation and teamwork as they rehearse in both small sectionals and as a larger ensemble during Orchestra class.

#8702 1 Credit Grades 9, 10, 11, 12 Jazz Band I

Prerequisites: Experience playing a musical instrument. A placement audition is required.

This 18-20 piece ensemble is open to intermediate level saxophone, trumpet and trombone players, and rhythm section musicians. The jazz rhythm section consists of a drummer, a pianist, a bass player, and a guitar player. Since jazz bands have a specific and limited instrumentation, this group is highly selective and is by audition only. Jazz I will perform in two concerts a year, one in the winter and one in the spring. Students learn about contemporary styles of jazz music, jazz standards, and original compositions through performance and listening. Students also learn the skill of improvisation and experience a sense of cooperation and teamwork as they rehearse in both small sectionals and as a larger ensemble.

#8704 1 Credit Grades 9, 10, 11, 12

Jazz Band II

Prerequisites: Experience playing a standard jazz band instrument. A placement audition is required.

This 18-20 piece ensemble is open to advanced level saxophone, trumpet and trombone players, and rhythm section musicians. The jazz rhythm section consists of a drummer, a pianist, a bass player, and a guitar player. Since jazz bands have a specific and limited instrumentation, this group is highly selective and is by audition only. Jazz II will perform in at least two concerts a year, one in the winter and one in the spring, but they may be called upon to perform on other occasions. Students learn about contemporary styles of jazz music, jazz standards, and original compositions through performance and listening. Students also learn the skill of improvisation and will experience a sense of cooperation and teamwork as they rehearse in both small sectionals and as a larger ensemble.

#8626 1 Credit

Grades



ntroduction to Band/Introduction to Orchestra/Wind Ensemble/Orchestra

Jazz Band/Classical Piano/Girls Chorus/Womans Chorus/Chamber

This course is designed for advanced student musicians who want to hone their skills as chamber music performers and soloists. Students will rehearse in small chamber ensembles consisting of woodwind, brass, string, and percussion. Students will become stronger musicians and independent thinkers as a result of this course.

Grade 9 Girls Chorus

Prerequisites: Must be able to match pitch. Some choral experience is helpful. Pianists may audition to serve as accompanists.

This chorus is an excellent introduction to the Collegiate Academy Vocal Department. It does not require an audition and is open to all freshman girls. In addition to preparing choral selections for concert performances, portions of the class are conducted in the manner of a group voice lesson. Students focus on building a foundation of correct vocal and choral techniques. They receive instruction in breath control, the development of a clear and open vocal tone, and vocal range expansion. Music-reading skills - including sightsinging, rehearsal techniques, and singing group harmonies – are addressed. Students with previous choral experience also have the opportunity to develop leadership skills. In addition to improving individual vocal skills and preparing students for more advanced vocal ensembles at Collegiate, the group dynamics of this class provide a wonderful vehicle for the development of friendships and a sense of belonging.

Women's Chorus

Prerequisites: Must be able to match pitch. Enrollment is by audition only. Pianists may audition to serve as accompanists.

This course is an intermediate-level choral group open to girls in grades 10-12. Students continue to address the development of correct vocal techniques and music-reading skills through the use of more advanced choral literature, performing both three- and four-part selections. A variety of musical styles, including classical, spirituals, Broadway, and pop/contemporary selections, are used throughout the year. Students sing in a variety of foreign languages and will be introduced to a cappella singing.

#8863 1 Credit Grade 9, girls only

#8956 1 Credit Grades 10, 11, 12



#8957 1 Credit Grades 9 (boys only) 10, 11, 12 **Chamber Singers**

Enrollment is by audition only. Qualified pianists may also serve as accompanists.

This course is an advanced-level traditional mixed choral group. This prestigious 40-50 member ensemble regularly performs for both school and community events. They have also performed at Disney World and often travel to other such venues. Choral selections range from classical works like Handel's Messiah and Mozart's Requiem to spirituals, Broadway and contemporary works. While an emphasis is placed on a cappella singing, students also perform with live instrumentation. Students from this group consistently qualify for Region II, PMEA State Honors and All-Eastern Choruses. Prerequisites: Ninth-grade boys may also audition for this class. Girls in grades 10–12 are required to have taken at least one year of a Collegiate Academy vocal ensemble class.

#8978 1 Credit Grades 10, 11, 12 **Advanced Voice**

Prerequisites: Must be able to sing on pitch. Some choral experience is helpful. Enrollment is by audition only.

For the serious singer, this audition-only course provides group and private vocal instruction. Students displaying exceptional ability work to develop correct vocal techniques and music reading skills, and in the process develop confidence and poise in solo performance situations. Audition preparation will be also addressed. Students sing in a variety of musical styles including Broadway, classical, and art songs, and they are required to perform in foreign languages. Quarterly Master Classes will be conducted and two recitals will be presented each year.

#8983 1 Credit Grades 10, 11, 12

Music Theory

Prerequisites: Must be able to read music and match pitch. Previous study of an instrument or voice. Recommendation of music teacher.

For the student interested in music composition and/or considering music as a college major, this course provides the tools necessary to get started. This course prepares students to take the AP Music Theory exam, which is offered in alternating years. The fundamentals of music — such as notation, rhythm, intervals and chords — are addressed, as well as an introduction to melodic elements and beginning four-part chorale writing in the style of Bach (Common Practice). Ear-training (aural skills) is a major aspect of the course. In addition to classroom instruction, students work with online aural skills resources as well as the Auralia Ear-training computer program. Students are also required to learn basic solfegge (sight-singing). Students should be able to read both bass and treble clefs.

Prerequisites: Students are required to have taken at least one year of a Collegiate Academy vocal ensemble class. Enrollment is by audition only.

#8972 1 Credit Grades 10, 11, 12



For the advanced singer, this select group of 14-15 singers performs vocal jazz music in the style of Manhattan Transfer and New York Voices. They have performed at Disney World and have been featured at key Jazz Erie events. Each year, Collegiate Academy Vocal Jazz presents Singing Valentines, which is a yearly fundraising event. In addition to preparing concert selections, this group focuses on the unique characteristics of vocal jazz, such as improvisation. Singers practice improvisation or "scatting" every class and listen to jazz greats like Ella Fitzgerald, Billie Holiday, Mel Torme and Nat King Cole. When performing, students sing with individual microphones and a sound system. Stage presence, vocal projection and blend, and microphone technique are also addressed. Students perform a cappella, as well as with CD accompaniment, piano accompaniment and live instrumentation, often combining with Jazz Band II. Students from this class have been selected to perform with the PMEA State Vocal Jazz Ensemble. This ensemble is considered an "Ambassador Ensemble" for Collegiate Academy, performing regularly for Erie's Public Schools and in the Erie community.

Advanced Placement Music Theory
Prerequisites: Music Theory. Must be able to read music
and match pitch. Previous study of an instrument or voice.
Recommendation of music teacher. Student must take a
written pretest and an aural skills test.

#8984 1 Credit Grades 10, 11, 12

This college level—course provides instruction in advanced music theory skills and prepares students to take the Advanced Placement Music Theory examination. The course begins with a review of the material covered in the Music Theory course and moves into more complex skills including advanced analysis, four-part writing, secondary dominants and modulations. Aural skills will continue to be developed by using more advanced levels of melodic and harmonic dictation in the classroom, and with the Auralia program. Also included will be sight-singing examples. Students who successfully pass the AP exam may be rewarded college credit and/or be equipped to test out of level 1 college music theory. Each student composes an original work at the end of the year for presentation to the class.



#8486 .5 Credits Grades 9, 10, 11, 12

Guitar I

This entry-level guitar class is designed to teach students who have little to no previous musical training how to read music and play acoustic guitar. Students learn basic music theory, musical terms, and proper playing technique, as well as individual and ensemble performance skills. This course helps prepare students for Guitar II.

#8488 .5 Credits Grades

Guitar II

Prerequisite: Guitar I.

9, 10, 11, 12

This is an intermediate level guitar class designed to teach students who have some musical training on how to read music and play acoustic guitar. Students will continue instruction in music theory, musical terms, and proper playing technique, as well as individual and ensemble performance skills.

#8522 .5 Credits Grades 9, 10, 11, 12

Piano I

This course is designed to provide the beginner with a foundation in basic piano technique and music reading. Students develop a working knowledge of the rudiments of musical notation and music theory for the purpose of developing the ability to play and accompany simple songs. No experience in piano or music is necessary, just a desire to learn.

Piano II

Prerequisite: Piano I or one year of prior piano experience.

This course is designed to provide students with intermediate and/ or advanced piano technique and music reading. Students will build upon foundational knowledge of the rudiments of musical notation and music theory for the purpose of developing the ability to play and accompany songs. #8526 .5 Credits Grades 9, 10, 11, 12



Introduction to Band/Introduction to Orchestra/Wind Ensemble/Orchestra Jazz Band/Classical Piano/Girls Chorus/Womans Chorus/Chamber

Singers/Advanced Voice/Vocal Jazz/Music Theroy/AP Music Theroy

 $\mathbb{M}_{\mathrm{USiG}}$



Career Track	Freshman Year	Sophomore Year	Junior Year	Senior Year
Biologist /	Honors	Honors	AP Chemistry	AP Biology
Geneticist	Biology	Chemistry Human Biology	Organic Chemistry	Anatomy/Physiology
		Anat/Physiology		
Pre-Med/ Pre-Vet/	Honors	Honors	AP Chemistry	AP Biology
Pre-Dental/	Biology	Chemistry	Organic Chemistry	AP Physics
PT/Nursing/		Anat/Physiology	Anatomy/Physiology	Organic Chemistry
Health Professions				
Chemist/	Honors	Honors	AP Chemistry	AP Biology
Biochemist/	Biology	Chemistry	Organic Chemistry	AP Physics
Pharmaceutical		Human Biology		Freshwater and
Chemist				Marine Biology
Engineering:	Honors	Honors	AP Chemistry	AP Physics
Mechanical,	Biology	Chemistry	Organic Chemistry	AP Environmental
Chemical,				Engineering
Electrical				
Environmental	Honors	Honors	AP Chemistry	AP Physics
Engineer	Biology	Chemistry	Engineering	AP Environmental
Civil Engineer,				Engineering
Architect				
Earth Science/	Honors	Honors	AP Chemistry	AP Environmental
Enviro. Science/	Biology	Chemistry	AP Biology	Freshwater and
Meteorology/		Human Biology		Marine Biology
Oceanography				
NON-Science	Honors	Honors	Human Biology or	Anatomy or AP area
Majors	Biology	Chemistry	AP area of interest	of interest

#4502 1 Credit Grade

Biology

What are living things made of and what makes them work? How can a molecule hold instructions to make living things? Biology is learned through the process of investigating chemistry, cell structure and function, genetics, evolution, classification and taxonomy, and ecology. This required freshman course builds the use of logic, creativity, and analytical skills in an inquiry-based setting to teach the fundamentals of biology

Concepts in Physical Sciences

This course is designed to prepare students in the Performing Arts Magnet School for Honors Biology. Students will study scientific thinking, best practices for lab work, and a wide range of biological and physical sciences, including basic chemistry, biochemistry, cells, ecology, nature of science, conservation of matter and energy, and evolution.

#4835 1 Credit Grade

#4602

1 Credit Grade 10



Engineering/Human Anatomy and Physiology/AP Biology/Organic Science/Chemestry/Human Biology/AP Physics/Principals of

Chemistry Prerequisite: Biology

Many natural phenomena can be explained by understanding what happens on the molecular level. Students see these mysteries unravel as they study the interactions between and among different types of matter. Students are introduced to the basic concepts of inorganic chemistry, including but not restricted to atomic theory, periodicity, quantitative calculations in chemistry, writing and balancing equations, bonding theory, stoichiometry, acid and bases, solution chemistry, and ideal gas law applications. The course includes extensive lab work relating the lecture material to real-life situations. Formal lab reports are required.

Human Biology Prerequisite: Biology.

Have you ever wondered about the various aspects of life on Earth? Do you seek a deeper understanding of humanity's impact upon life on this planet? Are you looking for a course that will help you prepare for AP Biology, AP Chemistry, AP Environmental Science, Anatomy and Physiology or any science laboratory course? Then Human Biology is for you. The great strides made in biology have had a deep impact on our understanding of human health, disease, and environmental issues. In this class we explore best lab practices, environmental issues, human health and disease, and current biotech issues in order to help the students prepare for the latest careers in medicine and environmental studies. Students learn how to extract DNA using electrophoresis, and then compare the genomes of various organisms. Computer modeling, digital microscopy, bioethics and applying life processes in order to make a product or solve a problem will be part of the curriculum. This intensively hands-on course will increase your understanding of the interactions between humans and the environment we live in.

#4512 1 Credit Grades 10, 11, 12



#4706 1 Credit Grades 11, 12 Advanced Placement Physics 1

Prerequisites: Biology, Chemistry, Geometry and Algebra II. A scientific calculator is required for this class.

Did you ever wonder where you could actually use all that math you learned in Algebra II? This course uses Algebra II level math to relate matter, motion, and energy. Expect laboratory activities to measure, analyze, and predict the physical world around us. Also, expect problem solving activities with extensive use of mathematics. Areas covered include classical mechanics, heat, wave phenomena, and electricity.

#4708 1 Credit Grades 12 Advanced Placement Physics 2

Prerequisites: AP Physics 1. Concurrent enrollment in calculus is recommended. A scientific calculator is required for this class.

Do you want to learn even more about the topics covered in AP Physics 1? This course continues where AP Physics 1 left off and provides students with the opportunity to receive college credit. Expect a more intense program of critical thinking and analytic mathematical problem solving based on lecture, group collaboration, and independent study. Topics include fluid mechanics, thermal physics, atomic and nuclear physics, and quantum mechanics and more in-depth classical mechanics.

#4832 1 Credit Grades 11, 12 **Principles of Engineering**

Prerequisites: Concurrent enrollment in, or completion of, AP Physics 1 and Computer Aided Design.

The purpose of this class is for students to gain hands-on experience in the engineering field by researching and developing solutions to problem-based projects using the design cycle. The concept of the design cycle, research, design modeling, building, testing, and review are required for each project. FIRST® Robotics participants and students interested in pursuing an engineering career will find this class helpful.

Human Anatomy & Physiology Prerequisites: Biology and Chemistry. Concurrent enrollment in AP Biology is recommended.

#4802 1 Credit Grades 11, 12

Unlocking the mysteries of the human body continues to be a monumental challenge. Every day there are new diseases to cure, technological advancements to implement, and ethical decisions to make. What will we face in the future? The content material will particularly benefit students planning careers in the medical or health science areas. The introductory topics of anatomical terminology and body tissues provide the foundation for the study of the body systems. Anatomy (structure) as related to physiology (function) and diseases of the body systems are emphasized through lectures, group and project work, dissections, and laboratory activities.

Advanced Placement Biology Prerequisites: Biology and Chemistry.

#4508 1 Credit Grades 11, 12

Scientists have determined much of what makes living things work at the cellular level, systems level, and environmental level, yet many questions remain unanswered. This course examines what we know and what we don't know about living things. It also investigates the evidence supporting our ideas. This course teaches all of the topics found in the first two freshman biology courses and the first two labs at a typical university. Twelve AP labs are required. It is strongly recommended that students also take or have taken the AP Chemistry and Anatomy and Physiology courses. Students will be prepared to take the Advanced Placement Biology exam in the spring.

Advanced Placement Organic Chemistry Prerequisite: Chemistry.

This is an entry-level survey course of organic chemistry that will cover a large number of topics. This class is meant to introduce the basic principles of organic chemistry to students looking to pursue science-based majors in college and allows them to develop a solid background before taking it at the college level. Subjects will include, but not be limited to, alkanes, alkenes, alkynes, nomenclature, reactions, aromatic hydrocarbons, stereochemistry, halogenated compounds, reaction mechanisms, and analysis of functional groups.

#4606 1 Credit Grades 11, 12



#4608 1 Credit Grades 11, 12 Advanced Placement Chemistry Prerequisites: Biology and Chemistry.

This class is designed for the mathematically and scientifically minded student looking for a challenge. Students are introduced to topics and concepts covered in a college freshman chemistry course of both lecture and lab. They attain a depth of understanding of fundamentals and a competence in dealing with chemical problems. The course contributes to the development of students' ability to think clearly and express their ideas, orally and in writing, with clarity and logic. An emphasis is placed on complex quantitative calculations related to chemistry. Topics covered include, but are not limited to, chemical foundations, atoms, molecules and ions, stoichiometry, chemical reactions, solution chemistry, gas laws, thermo chemistry, atomic structure, periodicity, bonding theory, orbital theory, liquids and solids, colligative properties, kinetics, chemical equilibrium, acids and bases, spontaneity, entropy, free energy, electrochemistry, and nuclear chemistry. Laboratory work is an integral part of the class. It is strongly recommended that students take this class in direct succession to Chemistry. Students will be prepared to take the Advanced Placement Chemistry Exam in the spring.

#4838 1 Credit Grades 11, 12

Freshwater and Marine Biology Prerequisites: Biology and Chemistry.

While this course is designed to prepare students to compete successfully in the Ocean Bowl competition, it is not a requirement of the course to compete. Topics will cover chemical and biological factors of freshwater and ocean water. It is a hands-on course with several labs designed to help student's problem solve and think critically. It will utilize higher-order thinking skills: data collection and analysis, problem-solving, Common Core strategies, and the Next Generation Science Standards. Concepts in this class will include an integration of all sciences: biology, chemistry, earth science, environmental science, physical science, geology, and geography.

Advanced Placement Environmental Science Prerequisites: Biology and Chemistry.

#4816 1 Credit Grades 11, 12

"Now I truly believe that we in this generation must come to terms with nature, and I think we're challenged, as mankind has never been challenged before, to prove our maturity and our mastery, not of nature but of ourselves" (Rachel Carson, Silent Spring).

As this course progresses, students will view the world differently, become informed decision-makers, and grow to be stewards of the environment. The study of environmental science, in relation to the earth, is a combination of the physical, chemical, earth, and biological sciences. Topics covered include but are not limited to: ecosystems, biodiversity, population, resources, energy, pollution, urban planning, and sustainability. The study of economics and environmental law play an integral role in understanding the dynamics of the human impact on the earth. Field trips, laboratory exercises, group and project work, and individual assignments will enhance the content material. Students will be prepared to take the Advanced Placement Environmental Science exam in the spring.



Science/Chemestry/Human Biology/AP Physics/Principals of Engineering/Human Anatomy and Physiology/AP Biology/Organic



Economics/AP European History/AP Psychology/Inernationa Relations/Socialogy

#2410 1 Credit

Grade

World Geography

Students will experience the diversity of our world through the study of Geography and discover the challenges of our modern world through the examination of various cultures, climates, environments, governments, landforms, regions, and resources of the world.

#2412 1 Credit Grade Advanced Placement Human Geography

Advanced Placement Human Geography is a college-level course in which students investigate, in great detail, how Human Geography impacts our daily lives and decision-making. Human Geography is the study of the patterns and processes that have shaped our understanding, use, and alteration of the Earth's surface. Geographers ask the questions like "Where?" and "Why?" Where is the world's population distributed and why? What is the impact of that distribution on our planet? Where is folk culture clustered? Where is the optimal place to locate a new business, and why? Why do industries face problems? Why do boundaries with states cause problems? Students will study basic geographical concepts and apply geographical thinking to population, economic, and political data. They will study cultural geography, urban geography, agricultural geography, economic geography, and environmental geography. Advanced Placement Human Geography students will employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences.

#2402 1 Credit Grade: 10

World History Cultures

Is the nature of mankind good or evil? Why do we have wars? Do the good guys always win? We can theorize about this or listen to pundits on television. This course focuses on the modern era, which begins with the French Revolution in 1789. Students will be introduced topics like the Enlightenment, the French Revolution, the Industrial Revolution, European Nationalism and Imperialism, World War I and the Russian Revolution, the Great Depression, World War II, and the Cold War.

Rome wasn't built in a day, but do you think you have what it takes

ancient Egypt and continue past the fall of the Berlin Wall into the Global War on Terror. Or is that the War on Global Terrorists? The focus of this course is the intensification of international contacts, and it is truly global in scope. It thus embraces ancient empires and

city states in Europe, Asia, Africa, and Mesoamerica; the expansion of Islam; the Dark Ages and the Crusades; empires in China and India; Mongol dominance; the Renaissance, Reformation, and Scientific Revolution; European exploration, Spanish conquest

of the Americas, and the Atlantic Slave Trade; Absolutism, the Enlightenment, and the American and French Revolutions; the spread of nationalism and industrialization; European dominance and global colonization; both World Wars, the Cold War and worldwide independence movements; and finally the new international system being created in the 21st Century. As a survey course it will focus on themes throughout history that serve as unifying threads, helping students to put what is particular about each period or society into a larger framework, and providing ways to make comparisons over time. These themes include the impact of interaction in and among societies; the relationship of change and continuity across the world; the impact of technology and demography on people and the environment; the importance of social and gender structures; the triumph and failures of cultural and intellectual developments; and changes in the functions and

to learn it in one? This is a college-level course and will require extensive reading by the student. We begin with the study of



American History/AP US History/AP US Goverment and Politics/American Goverment and Politics/American Goverment and Economics/AP Macro

Economics/AP European History/AP Psychology/Inernationa

Relations/Socialogy

Sociology

This course provides a basic understanding of the many areas within the field of sociology. Although the study of society goes back hundreds of years, we use the contemporary (1960s and later) examples and themes in our course work. Students gain the knowledge in the discipline to understand and apply basic sociological theories to a variety of events seen in everyday life. Areas of study include family, gender relations, popular culture, American culture, social stratification, class and power, and the roots of social conflict.

structures of political systems at home and abroad.

#2844 .5 Credits Grades: 11, 12



American History/AP US History/AP US Goverment and Politics/American Economics/AP European History/AP Psychology/Inernationa

Modern American History #2602 1 Credit

Grade

11

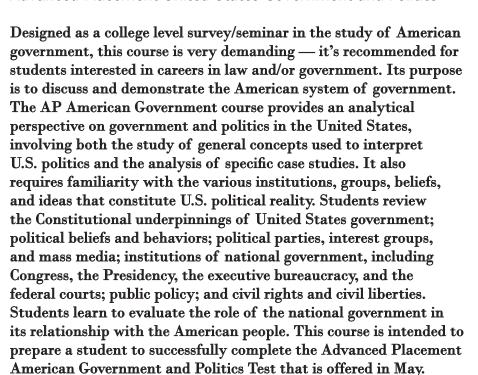
American history is not only the story of famous heroes and heroines but also of ordinary people. Remarkable leaders like Washington, Jefferson, Lincoln, Theodore and Franklin Roosevelt, and Ronald Reagan have guided the country in times of crisis, while other men and women have been outstanding in business, science and education. But America's greatness also rests on the hard work and dedicated effort of countless "real" Americans, whose names we will never know. Throughout history, Americans have looked for new frontiers, pushing ever westward to build new towns and adding new states. Now Americans are looking forward to the frontiers of space. History is not only about yesterday's events but also about today's headlines and tomorrow's news. Ordinary people from many different backgrounds like you are the people who really write history. This is why we study history because you are part of it! As we study American History we will use the themes of government, geography, diversity, economics, culture, foreign relations, and science and technology to understand history. Our study of American History will begin in 1890s with the events leading up to the Spanish American War – the war that propelled America on to the world scene and began its ascent to the superpower it is today. This course will enhance students' knowledge and understanding of American History and increase their ability to decipher facts, dates, and events in order to bring history to life. Students will have a unique understanding of American society and how it has survived and prospered. This course will also tie together what the student learned last year in World History and what the student will learn next year in AP American Government and Politics.

#2716 1 Credit Grades 11, 12

Advanced Placement United States History

This course offers an intense and timely approach to the social, economic, and political aspects of American History. We will examine the complex historical forces shaping peoples lives at various moments in our past through lectures, discussions, outside readings, research, and presentation projects. Topics include but are not limited to the beginnings of democracy, depression, war, westward settlement, civil and political rights, technological changes, and other issues that affect or have affected the plurality of our population. Students will be given the opportunity to understand and appreciate several important eras in American History including the struggle over the Constitution, the Civil War and Reconstruction, the Great Depression, World Wars I and II, the Cold War, and the many presidencies which shaped our great nation. Students completing the course will be prepared for the Advanced Placement exam at the end of the school year.

2710 -Advanced **Placement** United States Government and Politics 1 Credit Grade 12



American Government and Economics

This course examines theory and the practical applications of government and economics. The first semester analyzes the role of government and the importance of civic responsibility. It includes a broad overview of the basic principles on which country was founded; how those principles are reflected in the Constitution and the Bill of Rights; and the role of the federal, state, and local governments. The course then shifts to practical applications, including the views of both major and minor political parties, the role of the media, and civic responsibilities. The second semester examines the basic principles of economic and helps seniors focus on financial independence. Students learn about economic basics: scarcity, supply and demand, pricing, and elasticity. Macroeconomics topics including GDP, interest rates, unemployment, inflation and taxes will provide students with an understanding of how the national economy affects their lives. Students also learn about planning for a career, personal finance and investing, budgeting, credit and consumer protection. This course consists heavily of group projects, cooperative learning, outside research, public speaking and teacher directed in-class activities.

#2620 1 Credit Grade 12



Geography/World History Cultures/AP World History/Modern

Economics/AP European History/AP Psychology/Inernationa

Relations/Socialogy

Goverment and Politics/American Goverment and |



Economics/AP European History/AP |

Advanced Placement Macroeconomics #2712 1 Credit

> Why does our money have value? Is it really a good idea for our government to strive for a balanced budget? Why should we care about the economics of other countries? What makes up our GDP? AP Macroeconomics is a course that looks at the United States economy as a whole as well as how the world's different economies affect each other. We know our resources, including money, are scarce. So how do we most effectively allocate them? AP Macroeconomics analyzes all parts of the economy and how they work together; it will help you understand the world with far greater depth. Macroeconomics is a mathematical and technical look at the economy and the course will require a time commitment outside of the classroom dedicated to reading, research, and problem solving.

#2708 1 Credit Grades: 11, 12

Grades

11, 12

Advanced Placement European History

What big problems do we face in this world and how can we help? How do we distinguish between fact and opinion in learning about these issues? These and many other questions are explored in Advanced Placement European History. Students acquire and hone skills of vital importance to succeed in college and in life, and will also learn about important pieces of the past. Every person should be equal. Every society is deserving of respect. Furthermore, we should be familiar with the broad outline of all human development and understand the basic beliefs of all large cultures. But Europe has a special place in the creation of the modern, technological society in which we live. Our language and our laws derive directly from the European experience. Philosophy, art, literature, economic theory, etc. are all part of this inheritance. The modern research university, and modern mathematics and science come from Europe. If you wish to understand the good and the bad of American society you must first learn about Europe.

#2714 1 Credit Grades:

11, 12



The AP Psychology course is a challenging and fascinating journey into the study of the mind and matters related to it. Throughout history people have sought to describe, explain, and predict human thoughts, feelings, and actions. This course exposes students to classic and contemporary views of the human struggle to adapt to the physical, psychological, and social worlds we inhabit. Have you ever wondered what déjà vu is? Why do some people have irrational fears of spiders or high places, while others are attracted to them? Is it our genes or our experiences that shape our personalities? What are dreams and what is their significance? How is the mind different from the brain? Do all animals have a conscious mind? To investigate these and other questions, this course delves into the realms of neuroscience, human development, sensation and perception, consciousness, learning theory, memory, intelligence, personality, and abnormal behavior. The student gains valuable knowledge and insight regarding mind-body interaction as well as interaction of the individual and society. The purpose of the Advanced Placement course in Psychology is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the facts, principles, and phenomena associated with each of the major sub-fields within psychology. They also learn about the methods psychologists use in their science and practice. The aim is to provide the student with a learning experience equivalent to that obtained in most college introductory Psychology courses. The Advanced Placement course in Psychology gives the student the chance to try college-level work in high school. A "qualifying" grade on the AP exam is accepted by thousands of colleges worldwide.

International Relations

In more ways than we realize, our lives have become internationalized. Information media have played a significant role in narrowing the information gap between nations. We can share opinions with citizens around the world via the Web. Turning on a television, we can witness a war, a riot, an earthquake, a military coup, a rebellion, a protest, or an election in a distant part of the world. Non-state actors, such as international corporations, are becoming increasingly important and much of what we buy is resourced, produced, or assembled overseas. Yet the fundamental problem of international relations continues to be the perennial question of conflict and violence within and between states. The world is coming together, and flying apart, faster than ever before. These changes create dangers and opportunities for all of us, but it isn't always easy to tell the two apart. To deal with this dilemma, the course provides students with the necessary historical background, theoretical concepts, and analytical tools to make sense of a complex and constantly changing world. This course is fast paced, taught at the college level, and will require extensive reading and participation by the student.

#2836 . 5 Credits Grades 11, 12

American History/AP US History/AP US Goverment and Politics/American Economics/AP Macro Economics/AP European History/AP Psychology/Inernationa Goverment and Politics/American Goverment and |



#9426 .5 Credits Grade: Wellness/Fitness I This class is required for all freshmen.

Begin the journey to vibrant health with this interactive wellness and physical education course. Can you locate your carotid and radial pulse? How intensely should you exercise? Determine your level of physical fitness using Fitnessgram testing. Discover selfesteem, proactive choices, and organizational techniques by Covey. In addition, students participate in a curriculum rich in cooperative activities to foster strong friendships. Upon successful completion, students will receive the American Red Cross certification in CPR and First Aid.

#9428 .5 Credits Grades: Wellness/Fitness II

Prerequisite: Wellness/Fitness I.

10

Continue the journey into vibrant health by exploring the consequences of risky behavior. Any risky behavior that interferes with life can be devastating to self, family, peers, and society. Alcohol and drug use, misuse, and abuse, along with other risky behaviors can affect our lives. Wellness II students study chronic and infectious diseases, and more importantly, disease prevention. Students also participate in a variety of lifetime fitness activities including badminton, volleyball, shuffleboard, Frisbee, and strength training.

#9524 .5 Credits Grade 11, 12

Principles of Athletic Training

Prerequisites: Wellness/Fitness I and II. Concurrent enrollment in, or completion of, Human Anatomy & Physiology.

Experience the career discipline of Sports Medicine as this class journeys into an interactive athletic training course. Sports Medicine programs encompass the health-related professions which prevent and manage injuries related to individuals and organized sports. Students study the dynamic human body from a myriad of perspectives: anatomy, kinesiology, injuries, rehabilitation, and exercise conditioning. The expertise of local professionals from the community is utilized as guest speakers, and shadowing opportunities are available. Athletic Training provides a strong foundation for career choices in Sports Medicine.

Prerequisites: Wellness/Fitness I and II.

#9526 .5 Credits Grades 11, 12



Explore your personal fitness and become a peer mentor for elementary students as you journey into the diversified class of Project B-Fit. Students will participate in a variety of aerobic activities such as brisk walking, step class, low impact aerobics, and paddleball. They are also trained to be B-Fit Leaders. Through the use of song, dance, exercise, and storytelling, this class impresses upon elementary students the importance of making positive healthy lifestyle choices.

Competitive Wellness

Prerequisites: Wellness/Fitness I and II.

Social interaction within a team setting is a vital aspect of vibrant health. Students develop these skills as they journey into the challenging course of competitive wellness. They must be willing to participate in a highly competitive environment and demonstrate responsible behavior. They will participate in the following team sport units: Basketball, Volleyball, Flag-Football, Soccer, and Softball. Each unit concludes with playoffs and a championship game. In addition, students are exposed to the psychological, sociological, and moral aspects of sport in our culture.

#9442 .5 Credits Grades 10, 11, 12

Sports Nutrition for Enhanced Performance Prerequisites: Wellness/Fitness I and II.

Journey into the nutritional domain to understand individual energy needs. This course brings the physiological effects of nutrition and physical activity in a powerful blend of theory and practice into the classroom. Content includes fueling the muscles, quick energy snacks, fluids, pre-exercise meals, recovery foods, supplementation, and eating disorders.

#9528 .5 Credits Grades: 10, 11, 12



#9522 .5 Credits Grades 10, 11, 12 Performance Fitness

Prerequisites: Wellness I. Concurrent enrollment in, or completion of, Wellness/Fitness II.

This course is designed to identify and apply individual wellness principles introduced in Wellness Fitness I & II, through situational learning and diverse fitness settings. At the end of this course students will have learned the necessary tools to design a personal fitness model that can be utilized throughout their lifetime. In addition to the promotion of wellness, students are exposed to several modes of fitness, such as Pilates/yoga, aerobics and/or step aerobics, Zumba, elements of martial arts, kickboxing, core strength/stability, circuit training, enhancing cardiovascular fitness, and resistance training.

#9604 .5 Credits Grades 9, 10, 11, 12 Jazz Dance I

Prerequisites: Wellness I. Concurrent enrollment in, or completion of, Wellness/Fitness II.

This course is designed for the beginning dancer with no previous dance experience who is looking for an introductory course of dance. Class is structured like professional jazz dance class, with a warm-up, across-the-floor progressions, center combinations, and group choreography. Students learn and develop basic rhythmic skills and weight shifts characteristic of Jazz dance, such as jazz runs, triplettes, chasses, jazz square, pas de bourées, battements, and leaps. We also view dances on video to further enhance our process and to further expose students to dance on a more global perspective. Students may also participate in community and school performances. Scheduling preferences will be given to upperclassmen when necessary.

#9606 .5 Credits Grades: 10, 11, 12

Jazz Dance II

Prerequisites: Jazz Dance I, or teacher permission based on previous dance experience and dance audition.

This course is designed for intermediate/advanced dancers with at least 3-5 years of previous dance experience who is interested in learning advanced skills and increasing their jazz dance vocabulary. Class is structured like a professional jazz dance class with a warmup, across-the-floor progressions, center combinations, and group choreography. Students will continue to learn and develop complex rhythmic skills and weight shifts characteristic of Jazz Dance I to include double and triple pirouettes, pas de bourées turns, layouts, and grandes jêtés. We also view dances on video to further enhance our process and to further expose students to dance on a more global perspective. Students may also participate in community and school performances.

Modern Dance I Prerequisites: Concurrent enrollment in, or completion of, Wellness/Fitness I.

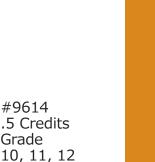
This course is designed for the beginning dancer with no previous dance experience who is looking for an introductory course of dance. This course consists of learning and performing basic levels of the Graham and Horton modern dance techniques. Class is structured like a professional contemporary dance class with a warm-up, across-the-floor progressions, center combinations, improvisation, and choreography. Students learn and develop movement skills and weight shifts characteristic of the Graham and Horton technique, such as fall recovery, contract release, swings, "flat back," and coccyx balance. We also view dances on video to further expose students to Modern Dance from a global perspective. Students may also participate in community and school performances.

Modern Dance II

Prerequisites: Modern Dance I, or teacher permission based on previous dance experience and dance audition.

This course consists of learning and performing intermediate to advanced levels of the Graham and Horton Modern dance techniques. Class is structured like a professional contemporary dance class, with a warm-up, across-the-floor progressions, center combinations, improvisation, and choreography. Students continue to learn and develop advanced movement skills and weight shifts characteristic of the Graham and Horton techniques, which include fortifications, stags, forced arch, tilts, and bison jumps. We also view dances on video to further expose students to Modern Dance from a global perspective. Students may also participate in community and school performances. Scheduling preferences will be given to upperclassmen when necessary.

#9612 .5 Credits Grades 9, 10, 11, 12





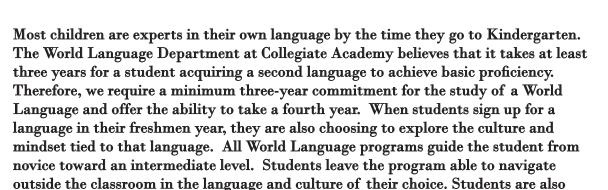
#9618 1 Credit Grades 9, 10, 11, 12 9618 – Performing Arts Dance (CADENCE) Prerequisites: Audition or teacher permission.

This course is the pinnacle of the dance program at Collegiate Academy. These students perform in a variety of performances and must demonstrate mastery of the fundamentals of dance. Students earn placement in this class based upon their performance audition. This class is the most advanced dance class offered at Collegiate Academy.

#9616 .5 Credits Grade 9, 10, 11, 12

Hip Hop Dance

The course is designed for the novice dancer with no previous dance experience, or an experienced dancer looking for a fun, new experience in dance. Class is structured like a traditional Hip Hop dance class with a warm-up, center combinations, group choreography, and improvisation/freestyle. Students learn and develop basic rhythmic skills and weight shifts to enhance learning and the performance of Hip Hop, such as body isolations, drops, body bounce, up-rocking, house dancing and popular street dances, and elements of breakdancing. We view dance on video to further enhance our process, to expose students to dance on a global perspective and to increase our knowledge of this unique, rich and vibrant culture. Students also participate in school performances. Scheduling preferences will be given to upperclassmen when necessary.



able to study two World Languages simultaneously, beginning in their sophomore year

Advanced Placement World Language

- and many do! Welcome to the Global Village!

Students who want to continue their study of languages beyond the third year have the option of taking Advanced Placement classes in each language. These courses focus on preparing students for success on the AP test by training them to read, write, comprehend, and speak their target language with intermediate proficiency. Specifically, students work to develop the ability to understand the spoken target language in various contexts; they develop the vocabulary sufficient for reading newspaper and magazine articles, literary texts, and other non-technical writing without dependence on a dictionary. Finally, students develop the ability to competently speak and comprehend the target language. Advanced Placement language study is not for the weak of heart; it is an extremely demanding course of study, but equally rewarding. Students acquire skills that they will use throughout their lives in our global society. Keep in mind that some universities offer up to 12 credits for a high passing score on the AP exam!

Spanish

With more than 400 million speakers worldwide, Spanish is the fourth most spoken language in our world. It is an official language of the United Nations, the European Union, NAFTA and OPEC. Being able to communicate in the Spanish language and culture gives one a competitive edge anywhere in the Western Hemisphere as well as in Europe.

Not only is Spanish spoken in four of the seven continents, but one can also hear the language and experience the culture right here in Erie, Pennsylvania. With more than fifty million Spanish speakers in the US, it is the first language of one out of ten people in our country. It is crucial for our students to study this language to reach global and local opportunities that are right here, right now.



Latin

Isn't Latin old and dead? Not at Collegiate Academy! We are one of very few programs at any level (middle school, high school, college, and graduate schools) which treats Latin as an actual language—we learn to speak in Latin! We treat Latin for what it is—a vibrant, beautiful, and fun language. Students learn to communicate in Latin on the first day of class, and, before you know it, you are expressing thoughts and emotions and asking questions in a language that has been spoken for over 2,000 years. In addition to language studies, we also look at the culture and history of both the Roman people and also their neighbors, such as the Greeks and Egyptians. We look at the art that everyday people created, as well as the archaeological remains that tell us how these people, who were just like you and I, lived. If you ever want to study the Romance languages (such as Spanish, French, and Italian) or German, you will have a head start since Latin is the foundation for all of these languages! In addition, we have borrowed many words and grammatical constructions into our own English language, so studying Latin builds a strong foundation in both vocabulary and grammar—crucial elements for success on the SAT, AP exams, college courses, and even job applications. Latin has been spoken/studied for thousands of years by people such as Julius Caesar, St. Augustine, Dante, Chaucer, Shakespeare, Thomas Jefferson, Winston Churchill, J.K. Rowling, and Mindy Kaling. Now you have the chance to join this amazing club!

German

If a student wants to learn a language that is spoken almost everywhere, study a people who are true leaders in the 21st century, and become familiar with a rich culture that is very closely tied to our own, then they should consider the study of German. German is the most common mother tongue in Europe. That makes sense, since Germany is the largest economy in the European Union and the third largest in the world! For those interested in business, the European Central Bank is headquartered in Frankfurt. More than 1,100 companies from German-speaking countries have subsidiaries in the United States and more than 750 US companies are at work in Germany!! Studying German expands career options: German is used in the fields of science, engineering, the arts, math, software production, publishing, and travel! The Internet extension .de is the second most common after .com, which means that Germans are the world's second largest presence on the Web. We can thank German inventors for the printing press, the automobile, the Fahrenheit thermometer, the X-ray, and even the MP3 digital music format. German is also surprisingly easy to learn. English is a Western Germanic language and the two languages have numerous similarities.

German Americans make up one of the largest heritage groups in the United States. The traditions which German immigrants brought with them have become an integral part of our American heritage, including the names of many cities and towns. Studying German culture helps our understanding of American culture, too!

1950 – Latin I 1 Credit Grades 9, 10, 11, 12	1940 – German I 1 Credit Grades 9, 10, 11, 12	1924 – Spanish I 1 Credit Grades 9, 10, 11, 12
1952 – Latin II	1040 G	1926 – Spanish II
1 Credit	1942 – German II	1 Credit
Grades 10, 11, 12	1 Credit Grades 9, 10, 11, 12	Grades 9, 10, 11, 12
1954 – Latin III		1928 – Spanish III
1 Credit		1 Credit
Grades 10, 11, 12	1944 – German III 1 Credit	Grades 10, 11, 12
1956 – Latin IV 1 Credit	Grades 10, 11, 12	1930 – Spanish IV 1 Credit
Grades 10, 11, 12	1948 - Advanced	Grades 10, 11, 12
, .	Placement German	
1958 – Advanced	Language	1932 - Advanced
Placement Latin	1 Credit	Placement Spanish
Language	Grades 11, 12	Language
1 Credit	•	1 Credit
Grades 11, 12		Grades: 11, 12





Collegiate Academy offers half-credit elective credits for courses taken using the Rosetta stone program. (These classes do not count as World Languages credits.) These courses are taken online using the Rosetta Stone software with a classroom teacher as a guide. Students work at their own pace but may accelerate to take additional credits and languages as they are able.

These courses may not take place of any portion of the three required credits of World Language needed for graduation (Latin, Spanish, Mandarin or German), but are meant to add additional experience and electives for those students who are interested in other languages. The available courses and their numbers are listed below.

All classes are half-credit, honors-level classes.

1988a	ARABIC I H (R)	\mathbf{H}	Langua	age	.5	
	ARABIC II H (Ŕ)	\mathbf{H}	Langua		.5	
	ARABIC III H (Ŕ)	\mathbf{H}	Langua	_	.5	
	ARABIC IV H (R)	\mathbf{H}	Langua		.5	
	ARABIC V H (R)	\mathbf{H}	Langua		.5	
	()		O	O		
1989a	JAPANESE I H (R)	\mathbf{H}	Langua	age	.5	
	JAPANESE II H (Ŕ)		Langua		.5	
	JAPANESE III H (É			Langua	age	.5
	JAPANESE IV H (R	,		Langua		.5
	JAPANESE V H (R)		Langua	_	.5	
	,		Ü	U		
1990a	FRENCH I H (R)	\mathbf{H}	Langua	age	.5	
	FRENCH II H (R)	\mathbf{H}	Langua	_	.5	
	FRENCH III H (R)	\mathbf{H}	Langua		.5	
	FRENCH IV H (R)	\mathbf{H}	Langua		.5	
	FRENCH V H (R)	\mathbf{H}	Langua		.5	
	()		O	U		
1991a	RUSSIAN I H (R)	\mathbf{H}	Langua	age	.5	
	RUSSIAN II H (Ŕ)	\mathbf{H}	Langua	_	.5	
	RUSSIAN III H (Ŕ)	\mathbf{H}	Langua	_	.5	
	RUSSIAN IV H (R)		Langua		.5	
	RUSSIAN V H (R)	\mathbf{H}	Langua		.5	
	()		O	U		
1992a	ITALIAN I H (R)	\mathbf{H}	Langua	age	.5	
1992b	ITALIAN II H (R)	\mathbf{H}	Langua		.5	
	ITALIAN III H (R)	\mathbf{H}	Langua		.5	
1992d	ITALIAN IV H (R)	\mathbf{H}	Langua		.5	
1992e	ITALIAN V H (R)	\mathbf{H}	Langua	_	.5	

JROTC focuses on the development of better citizens by building skills in leadership, citizenship, life success, geography and wellness in a structured, interactive environment. It places an emphasis on service learning, community service, life skills and teen anti-drug efforts through both classroom and hands-on instruction through placement of cadets in leadership positions and participation in Integrated Teams.

All JROTC students will be required to properly wear the military uniform once a week and participate in a service learning project.



Level I JROTC

This course provides an opportunity for leadership, education and training. First-year cadets study leadership theory and application, foundations for success, communication / study skills, citizenship, military customs and courtesies, and history. They will also learn self-discipline, map reading and basic first aid. Emphasis is placed on positive conduct and attitude.

Requirements: Proper courtesy will be learned and displayed. Uniforms will be worn once a week. All cadets must maintain satisfactory grade or above to continue in JROTC.

#9962 1 Credit Grades 9, 10, 11, 12

Level II JROTC Prerequisite: Level I JROTC.

This course provides an opportunity for leadership, education and training. Second-year cadets expand their knowledge of first year subjects and assume leadership positions in the cadet CORPS. They study ethical values and principals of good citizenship along with American history and Government. Emphasis is placed on communication, both oral and written. Cadets are introduced to problem solving techniques and counseling.

Requirements: Proper courtesy will be learned and displayed. Uniforms will be worn once a week. Haircuts and proper grooming are required when in uniform. All cadets must maintain satisfactory grade or above to continue in JROTC.

#9964 1 Credit Grades 10, 11, 12



#9966 1 Credit Grades

11, 12

Level III JROTC

Prerequisites: Level I and II JROTC.

This course provides an opportunity for leadership, education and training. Students study leadership strategies, foundations for success, managing conflict, career planning, financial planning, citizenship in American history and government with continued practical work in leadership, drill, technology awareness, and methods of instruction. Map reading and physical training are also included.

Requirements: Proper courtesy will be displayed. Uniforms will be worn once a week. Haircuts and proper grooming are required when in uniform. All cadets must maintain satisfactory grade or above to continue in JROTC.

#9968

Level IV JROTC

Prerequisites: Level I, II, and III ROTC.

1 Credit Grades 11, 12

This course provides an opportunity for leadership, education and training. The fourth year is a self-study year with emphasis on leadership and communication along with preparations for college bound students. Demonstrate leadership potential as a role model, coach, and assistant instructor. Study service to the Nation and financial planning while practicing management skills, command and staff principals.

Requirements: Proper courtesy will be displayed. Uniforms will be worn once a week. Haircuts and proper grooming are required when in uniform. All cadets must maintain satisfactory grade or above to continue in JROTC.

Dual enrollment classes are offered as a voluntary educational option. Students assume a responsibility to fulfill all obligations of both the college and Collegiate Academy course-load. Students are to conduct themselves in an ethical and mature manner. Students must abide by the drop/add policy of each individual college and are responsible for knowing the deadlines and requirements for any such changes. No change in college schedule can be made without a signed schedule change form available in the guidance office.

Collegiate Academy students that elect to take college classes during the regular school day must agree to these conditions:

- Dual enrollment courses must be in a core subject area (English, math, science, social studies, world languages) in order to receive Advanced Placement credit.
- With administrative permission, other college courses can be considered as an elective for Collegiate Academy honors credit. All dual enrollment course selections must represent a progression forward in coursework and not a repetition of classes already completed.
- Dual enrollment college courses taken as a required core Collegiate Academy course must be taken fall semester to ensure successful completion of the course. Enrollment in a college core class winter or spring semester will be approved for elective credit only.
- Students are responsible for making up work for any Collegiate Academy class missed to attend college courses. While Collegiate Academy schedules will be adjusted as much as possible to accommodate dual enrollment classes there is usually at least one class missed on a regular basis. It is the responsibility of the student to follow the dual enrollment requirements of any Collegiate Academy class missed, which will include: weekly meetings with the teacher, as well as attending special help and meeting deadlines as specified. The student is responsible for keeping up with missed work on a weekly basis in accordance with the policy of the individual teacher.
- Students agree to follow the grading and attendance policies of the college and individual instructor.
- Students are to follow Collegiate Academy dress code every day of the Collegiate Academy school year.
- Students must provide their own transportation to and from the college course. Students have 30 minutes to report to their Collegiate Academy classes after their college class ends.
- With the exception of 8:00 am classes or after school classes, students must report to school prior to leaving for their dual enrollment class and must sign out at the attendance office before leaving for their class and sign in at the attendance office upon their return to Collegiate Academy. Students may not stay after dual enrollment courses to meet with professors or student groups without first obtaining administrative permission.
- Students who withdraw from their college course for any reason must have approval from the guidance office and follow all regulations of the college for dropping a course.
- In the event of a Collegiate Academy schedule change due to early dismissal or testing schedule (or for any other reason), dual enrollment students are required to inform any teacher involved that they will not be able to attend class and make up any missed work involved. Students are expected to attend college classes when there is no school at Collegiate Academy but college classes are in session.
- Conversely, any college schedule change (college spring break or difference in holiday schedule for example) that results in the student not having college class on a day that Collegiate has class will mean that the student is expected to be present in all periods of that Collegiate Academy day.

Remember that you are a representative of Collegiate Academy at all times, and your behavior reflects upon the school and the student body. Please conduct yourself within the expectations of Pride, Honor, Respect.

Student Signature	Date
Parent Signature	Date







The National Honor Society (NHS) is the nation's premier organization established to recognize outstanding high school students. More than just an honor roll, NHS serves to honor those students who have demonstrated excellence in the areas of Scholarship, Leadership, Service, and Character. These characteristics have been associated with membership in the organization since its beginnings in 1921. The Northwest Pennsylvania Collegiate Academy chapter of the National Honor Society was granted its charter in 1999, and its members have been serving our school and greater community ever since. Each year in September, rising juniors who have a grade

point average of at least 3.5 are invited to apply for membership. The application process includes demonstrating 25 hours of community service, obtaining two teacher recommendations and one coach recommendation (if applicable), and writing an essay on an experience related to scholarship, leadership, service, or character. It is important to note that students should be acquiring service hours before their junior year because they need 25 hours to qualify for acceptance in October of that year. A selection committee review applications and makes decisions about acceptance. In November juniors who are accepted are inducted into the NHS at a formal ceremony followed by a reception.

COMMUNITY SERVICE

Community Service Credit (Grades 9-12)

Description: Students at Collegiate Academy may earn 0.5 credit of documented community service, including a reflection piece with each completed activity. A maximum of one (1) credit may be earned in any one school year with one hundred twenty (120) documented service hours and appropriate Reflections for all hours submitted. Service Learning allows students the opportunity to "give something back" to the community in which they live while expanding their horizons beyond the world of school. Please note that Community Service hours are credits to appear on the transcript only and do not take the place of class credits needed for graduation.

Policies: Before performing a service in the community, students should get a copy of the community service form to be filled out by their site supervisor (an adult) and fill it out as soon as the activity is completed. The documentation of service hours must include a Reflection which focuses on the insights or benefits gained while participating in the service activity. Possibilities are very wide-ranging, from tutoring elementary students, to volunteering in a retirement home, or to coaching younger children in a sport. If a student is unaware whether or not an activity may be credited for community service, he/she should meet with the Community Service faculty member before taking part in the activity.

Dual Enrollment/Hational Honor Society/Community Service

Collegiate Academy Community Service Form Northwest Pennsylvania Collegiate Academy 2825 State Street Erie, Pennsylvania 16508

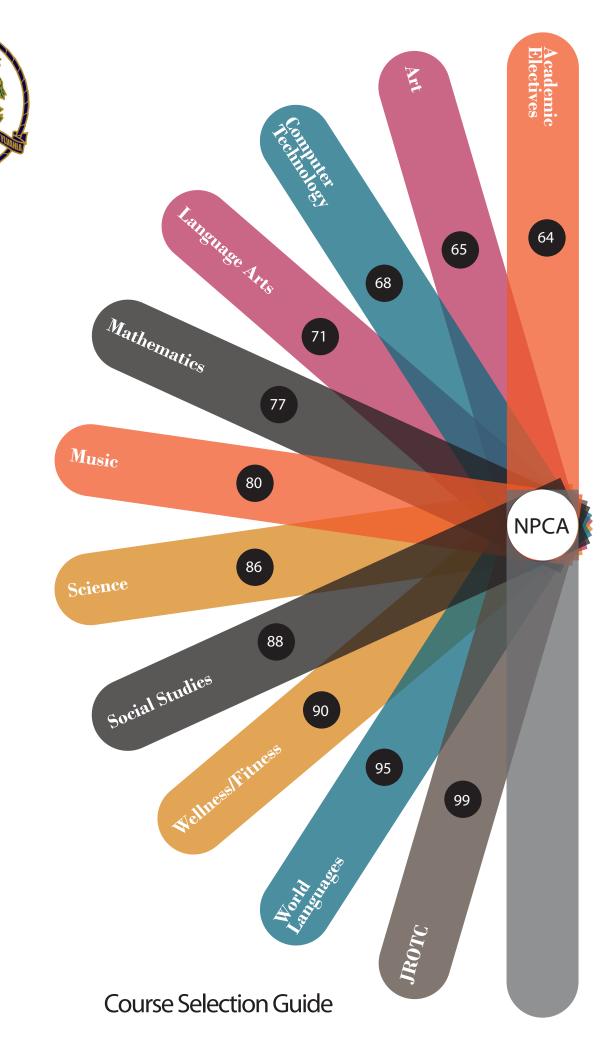
John C. Harkins

(814) 874-6300	Fax: (814) 874-6307
Name:	Homeroom	
Grade:		
Agency/Institution Where Service Performed:		
Type of Service Performed:		
Date(s) and Hour (s) of Service Performed:		
(Signature of Site Supervisor)	(Title)	(Date)
SCHOOL DISTRICT OF THE CITY OF ER Brian J. Polito	IE, PENNSYLVANIA	
Superintendent of Schools		
Bea Habursky		
Assistant Superintendent of Schools		
Board of School Directors		
Frank Petrungar, Jr.		
President Vice President		
Linda Aleksandrowicz		
Edward M. Brzezinski		
Robert S. Casillo		
Robbie Fabrizi		
Darlene Feeney		
Angela McNair		
Thomas A. Spagel		
Tyler Titus		
Robin Smith		
Board Secretary		



61

Magnet School for the Visual and Performing Arts



Visual and Performing Arts Academy

Subject	Required Credits	Required Classes
Language Arts	4.5	Research (9, or 10 if not taken in grade 9) Language Arts 9 (9) Language Arts 10* (10) Language Arts 11 (11) Language Arts 12 (12)
Math	4	Algebra I* or Geometry (9) Geometry or Algebra II (10) Algebra II or Trigonometry (11) Math Elective (12)
Science	4	Concepts in Physical Science (9) Biology (10) Chemistry or Science Elective (11) Science Elective (12)
Social Studies	4	Geography (9) World History Cultures (10) US History (11) US Government (12)
Health/Physical Education	1.5	Wellness I (can be taken as summer class) Wellness II H/PE Elective (11 and 12)
Foreign Language	2	Spanish I, German I, or Latin I (9) Spanish II, German II, or Latin II (10) *Students must take the same language both years
Visual and Performing Arts	6	Must include at least one AP course (11 or 12), or one dual enrollment course

^{*} All students must score proficient or advanced on the Algebra, Biology, and Literature Keystone Exams.

Board Approved Graduation Requirements for 2017-2018 and Beyond

All Collegiate Academy Music, Performing and Visual Arts Magnet School students are required to take

a minimum of one Advanced Placement or Dual Enrollment course prior to graduating.

When a student doubles up on classes in a core subject area, he or she is not permitted to take a year off.

For example, if a student doubles up in science after her sophomore year she must schedule a science class in both her junior and senior year.

All Collegiate Academy Music, Performing and Visual Arts Magnet School graduates may apply to a

four-year college or university of their choosing during their senior year.







#6096 .5 Credits Grade 9 Introduction to Academic Sports League Prerequisites

This course introduces students to the Academic Sports League (ASL). The course emphasizes skills that will prepare students for success in the full-year ASL class, which they can take the following year. These skills also prepare them for success at competitions. Subjects covered include: (1) general knowledge of music fundamentals (2) general knowledge of art fundamentals (3) general knowledge of language and literature fundamentals and (4) General knowledge of economics, both micro and macro fundamentals.

#6094 1 Credit Grades 10, 11, 12 Academic Sports League

Prerequisite: Introduction to ASL

This class is for students who have a love of reading and competition. It prepares students for competition at the local level through Academic Sports League and at the regional and state level through the United States Academic Decathlon (USAD). The course is a compilation of ten areas important to college-bound high school students: Language and Literature, Mathematics, Science, Social Studies, Economics, Art, Music, Speech — prepared and impromptu — Interview, and Essay. Students are divided into three levels: Honors, QPA 3.75 and above; Scholastic, 3.0 to 3.74; and Varsity, below 3.0. These divisions allow students to compete with other students of with similar ability. Although the same ten areas are studied every year, the specific material within the ten subjects will vary. The science may be biology, chemistry, or physics; the social studies may be a specific time period or a specific geographical area; the language and literature may include a novel, play, or poetry; and the fine arts areas may focus on a specific period or genre.

Art I

Prerequisites: None.

Art I is open to all students regardless of their previous art experience. Students will have the opportunity to develop skills by using a variety of drawing and painting media. They will be given instruction in shading, figure drawing, perspective and painting techniques. This class will present the elements and principles of design as well as color theory.

#6902 .5 Credits Grades 9, 10, 11, 12



Art II

Prerequisite: Art I.

Take the next step to elevate your art skills. Art II will afford the serious art student the opportunity to improve his or her artistic ability through a variety of two-dimensional experiences. The focus is on working with pencil, Conté crayon, charcoal, and pastels in a range of drawing assignments. Students create a self-portrait, still life, and landscape in acrylics, and they complete weekly assignments that will be critiqued by members of the class.

#6904 .5 Credits Grades 10, 11, 12

Art III

Prerequisites: Art I and Art II.

It's time to show off your creativity. Armed with the fundamentals of Art I and Art II, students will now produce artwork that reflects personal style and inner expression. Students complete assignments that offer a greater freedom to personalize artwork and showcase creativity. Students will work in drawing and painting media to produce art that is unique. Students are expected to complete a weekly assignment and sketchbook.

#909 .5 Credits Grades 10, 11, 12



#6912 .5 Credits Grades 9, 10, 11, 12 **Introduction to Ceramics** Prerequisites: None.

This course is an exciting adventure that will introduce students to ceramic clay and the ceramic process. Students discover the properties of clay, and they learn about its history and its uses as a functional and decorative art form. Students experience clay-preparation techniques, and explore slab, coil and pinch pot construction through assigned projects. Students design, decorate, and glaze their own pottery.

#6914 .5 Credits

Ceramics II

Prerequisite: Introduction to Ceramics.

Grades 10, 11, 12

This course continues the creative clay adventure and builds on students' prior experiences while broadening their knowledge and improving their skills in ceramics. Students construct a variety of projects that include clay modeling, three-dimensional slab construction and low-relief sculpture. Students use a variety of different glazes and surface treatments. They also assist in the preparation, loading, and unloading of the kiln.

#6946 .5 Credits Grades Cartooning Animation Prerequisites: None

10, 11, 12

This course introduces the student to the history and development of cartooning. Students create cartoon characters, set them into a sequence of time frames, and eventually animate them with computer software. They also work with clay animation using stopmotion animation.

Art & Design Prerequisites: None

This course allows students to experience the excitement of being a graphic artist and combine a love of fine art with the diversity of computer design. Students develop skills in layout, design, and illustration. Students use traditional fine arts media as well as computer and photo-editing software to create art work. Through a series of products, students create graphic compositions that test their ability to blend text with imagery that is visually pleasing, marketable, and balanced.

#6926 .5 Credits Grades 9, 10, 11, 12







#6840 .5 Credits Grade 9 Advanced Computer Applications
This class is required for all freshmen.

This course is designed to reinforce existing formatting skills and to acquaint students with the advanced features of Microsoft Word, PowerPoint, and Excel. The course also provides students with the formatting skills used in the educational and business world.

#6818 .5 Credits Grades 10, 11, 12 Computer Aided Design Prerequisite: None

Grades

Using the latest software for 3D engineering design, students explore unique design techniques. Students use Autodesk Inventor, a parametric solid modeling design software package. Hands-on experiences allow students to explore the exciting field of Computer Aided Engineering. Students use basic drawing principles as well as advanced computer-aided drawing techniques. Inventor is used extensively by the robotics team members to design our robot.

#6824 .5 Credits Grades 10, 11, 12

Webpage Design

Prerequisites: Advanced Computer Applications and some digital imaging experience.

Students learn about the tools and techniques used by web publishers. They become familiar with internet protocol used for HTML and web page editors/browsers. Students also have the opportunity to work with Adobe Dreamweaver, a popular web publishing program, and Adobe Flash.

Photo/Digital Imaging

Prerequisite: Advanced Computer Applications.

This is an in-depth study of digital photography and current technologies. Students study camera selection and manipulation of setting. Students explore the history of photography, learning about its scientific and technological developments, important innovators in the field, and relevance within diverse cultural contexts. Students write and speak about aesthetic, technical, and expressive aspects of design. They learn about qualities in a photograph, learning to critique their own and others work. Students work with a greater level of autonomy and are expected to pursue their own interests and develop an individual voice. Students explore the significance of photography and learn about the critical and varied application it has to the modern working world.

#6812 .5 Credits Grades 9, 10, 11, 12



Digital Media Editing

Prerequisites: Advanced Computer Applications.

Using advanced digital editing software, students use the power of Photoshop to create works of art. Students learn how to access the interface and utilize its expansive features and tools. Creative composition, image manipulation, and enhancement are studied. Students also have the opportunity to study and analyze the work of professional photographers.

#6822 .5 Credits Grades 9, 10, 11, 12

Video Editing Prerequisite: None

This course is an introductory class designed to provide students with practical, hands-on experience in video production, broadcasting, and video/audio editing. In addition, this course provides instruction and training in the pre-production and post-production phases of video project development. Students who successfully complete this course will be prepared to enter a broadcast journalism or advanced video production class; this course serves as a prerequisite for our broadcast journalism and King TV classes. During the course each student will be taught the basic skills of operating a video camera, the essential principles of how to capture high quality video and audio, how to edit video and audio, and how to tell a compelling story by combining video, audio and the editing process.

#6814 .5 Credits Grades 9, 10, 11, 12







#6816 .5 Credits Grades 9, 10, 11, 12

Desktop Publishing Prerequisite: None

This class is designed for students interested in publication design or those who want to be members of the yearbook or news magazine staff. Students are introduced to the concepts of design and the basic elements of desktop publishing using Adobe In-Design. Students construct an individual newsletter, create a title page spread for a magazine article, produce a magazine ad, generate a brochure, and design newspaper and yearbook pages.

This class is required for all freshmen and transfer students.

This course is designed to prepare the student for the requirements of research paper writing. This skill is necessary to complete the research paper that is required in all Language Arts classes and many of the other disciplines at Collegiate Academy. It is a vital skill in all college/university course work. Students are given intensive instruction in all phases of the research process, from selection of a topic to the publication of an actual paper. The course follows the Modern Language Association of America (MLA) format for textual citation. The course also teaches the retrieval of information from traditional sources to the latest electronic resources.

Successful completion of all steps in the research process is required in order to pass this course.

> #1407 1 Credit Grade

Language Arts 9

This course is aligned with the Common Core State Standards and introduces the development of college level writing skills with a focus on literary response and practice in argumentative and informative modes of writing. Students embark on an exciting and adventurous literary journey, including various short stories, poems, informative essays, Shakespearean and Greek tragedies, and novels. Language Arts 9 begins the development of the strong analytical skills necessary for success in later Language Arts and other AP classes. Students analyze fiction and non-fiction and will be exposed to AP style objective testing and essay writing. Concentration on PSAT, SAT, and Keystone Exam skills are also a major focus of the course, including but not limited to, the development of vocabulary and critical reading skills. Required summer reading: Of Mice and Men by John Steinbeck. Incoming freshmen must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

#1882 .5 Credits Grade 9 and all transfer students







#1408 Language Arts 9 Honors 1 Credit

This course is aligned with the Common Core State Standards and introduces the development of college-level writing skills, with a focus on literary response and practice in argumentative and informative modes of writing. Students embark on an exciting literary journey through various short stories, poems, informative essays, Shakespearean and Greek tragedies, and novels. Language Arts 9 begins the development of the strong analytical skills necessary for success in later Language Arts and other AP classes. Students analyze fiction and non-fiction and are exposed to AP-style objective testing and essay writing. PSAT, SAT, and Keystone Exam skills will also be a major focus of the course, including but not limited to, the development of vocabulary and critical reading skills. Required summer reading: Of Mice and Men by John Steinbeck. Incoming freshmen must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

#1508 1 Credit Grade 10

Grade

Language Arts 10

Beginning with an examination of two failed utopias, this course continues to engage students in an exploration of humans' desire for a perfect world. We consider what is important in an ideal society and discuss the issues that complicate our world. By reading and responding to novels, short stories, poetry, essays, and drama, students continue to develop their appreciation of literature, critical thinking, and writing skills. They also expand their ability to respond meaningfully to literature through interpretation and analysis. Students write in a variety of modes including narrative, expository, and argumentative. Students also study college-level vocabulary and develop PSAT, SAT, and Keystone Exam skills. Successful completion of every step of a research paper in MLA style is required to pass this class. Required summer reading: Fahrenheit 451 by Ray Bradbury. All sophomores must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

#1508 1 Credit Grade

Language Arts 10 Honors

Beginning with an examination of two failed utopias, this course continues to engage students in an exploration of humans' desire for a perfect world. We consider what is important in an ideal society and discuss the issues that complicate our world. By reading and responding to novels, short stories, poetry, essays, and drama, students continue to develop their appreciation of literature, critical thinking, and writing skills. They also expand their ability to respond meaningfully to literature through interpretation and analysis. Students write in a variety of modes including narrative, expository, and argumentative. Students also study college-level vocabulary and develop PSAT, SAT, and Keystone Exam skills. Successful completion of every step of a research paper in MLA style is required to pass this class. Required summer reading: Fahrenheit 451 by Ray Bradbury. All sophomores must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

#1608 1 Credit Grade 11



This is a survey of American literature, incorporating the literary periods from Native American through Postmodernism. Students study various short stories, poetry, essays, and plays. Language Arts 11 is intended to engage students in college-level thinking, discussions, writing, and research. Students develop analytical skills, evaluate literary criticism, and further their understanding of literary devices in order to respond critically to the literature they read. Additionally, students hone their vocabulary and other skills needed for PSAT, SAT, and Keystone Exam tests. Successful completion of every step of a research paper in MLA style is required to pass this class. Required summer reading: All students taking Language Arts 11 must complete the summer reading assignment before the first day of school. The assignment can be found on the Collegiate Academy website.

Journalism

What are your First Amendment rights, and why are they important to us? How does the media impact your life and people's perceptions of the world and others in it? Students explore these questions on a daily basis through class discussions, group and individual projects, and writing assignments. The newspaper is only the beginning as students read, watch, and evaluate various modes of the media and become acquainted with journalistic techniques including interviewing, research, and composition of various types of articles. This class is a foundation for News Magazine, Yearbook, and KING TV.

#1854 . 5 Credits Grades 9, 10, 11, 12

Media Studies

This class explores the history of media, including early advertisements, radio broadcasts, television, motion pictures, and the internet. Students analyze how these types of media have evolved over time to meet the needs of a modern society. This is a hands-on class in which students will have many opportunities to work in groups; there is very little lecture. The class is as interesting as students make it. Students create an advertising campaign for a unique product; perform radio skits; create videos, blogs, and websites in order to present information to their classmates; and utilize the most recent information on the internet to understand what the modern media is. This is a great class for students interested in marketing, television, motion pictures, the internet, and the future of all types of media.

#1862 .5 Credits Grades 9, 10, 11, 12



#1822 1 Credit Grades 10, 11, 12 Yearbook

Prerequisites: Journalism and Desktop Publishing.

The selective, highly self-motivated, and creative members of the yearbook staff are responsible for the successful production of our yearbook, The Collegian, using Jostens Yearbook Avenue. These students design all aspects of the yearbook and cooperate as a team with one goal in mind: the best yearbook ever! Students use Adobe InDesign to create the yearbook. A teacher recommendation is required to enroll in this class. Recommendation forms will be available second semester.

#1828 1 Credit Grades 10, 11, 12 **News Magazine**

Prerequisites: Journalism and Desktop Publishing.

This is a hands-on course in which students sell advertisements to pay for the issues and utilize the writing process to generate news, feature, and editorial pieces for publication in a professional quarterly news magazine, The Pride. Students also maintain and promote the online form of the magazine, and utilize InDesign and Photoshop to create original layout designs for the publication. Students are responsible for the entire process of creating a news magazine and maintaining the accompanying website. Prerequisites: Journalism and Desktop Publishing. A teacher recommendation is required to enroll in this class. Recommendation forms will be available second semester.

#1802 .5 Credits Grades 9, 10, 11, 12

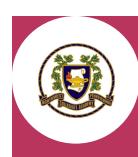
Broadcast Journalism

Behind the camera or in front of the camera, it's covered in Broadcast Journalism. This course introduces students to all aspects of broadcast news and video production, including shooting, editing, and adding special effects to video, as well as writing and reporting for the small screen. Students in this class gain experience in all three phases of production. They also work in teams to create a series of video projects, including public service announcements, music videos, and news packages.

Language Arts

This one-semester course introduces students to the fundamentals of acting and theatre, including the historical development of the stage. Students are introduced to many aspects of technical theatre. Basic acting techniques and terminology are covered through improvisation, scripted rehearsals, and performance.

#1834 .5 Credits Grades 9, 10, 11, 12



Theatre Arts II Prerequisite: Theatre Arts I.

This one-semester course allows students to continue to improve acting skills through improvisation, scripted rehearsal, and performances with a higher concentration on character development and script interpretation. A greater involvement in technical theatre and design are included in this class. Students learn about the many careers available in the world of theatre. Participants are required to view theatrical productions throughout the semester and compose reviews of the many aspects of the production.

#1836 .5 Credits Grades 10, 11, 12

Theatrical Production Prerequisites: Theatre Arts I and II.

The focus of this one-semester class is the production of the school theatrical productions. Using the skills learned in previous theatre classes, the students work on all aspects of the school's productions, including publicity, set design/construction, costume design/construction, lighting, sound, makeup, and props, as well as stage management and direction. Students also continue working on performance skills through acting exercises. Participants are required to view theatrical productions throughout the year and compose reviews of the many aspects of the production. This course may be taken more than once.

#1840 (first semester), #1842 (second semester) .5 Credits Grades 10, 11, 12



#1857 .5 Credits Grades 10, 11, 12 Women's and African American Literature Prerequisite: Language Arts 9

This course devotes the first quarter to women's literature and the second quarter to literature written by African Americans. The first quarter will focus primarily on works written by women in the late 19th and the entire 20th century. One main goal of the course is to attempt to answer these questions: Why study women's literature separately? How is women's literature different than work written by men? Our understanding of the works we read are enhanced by consideration of the historical contexts in which they were written. The second quarter focuses on literature written by African Americans. One main goal is to attempt to answer these questions: Why study African American literature separately from literature written by others? How is African American literature different than work written by others? Because understanding the historical context of this literature is especially important in order to fully appreciate it, this course is structured chronologically, beginning with the Colonial period, and moving through the Antebellum, Reconstruction, Harlem Renaissance, Protest, Black Aesthetics, and Neorealist periods.

#1800 1 Credit Grades 10, 11, 12 Television Practicum (KING-TV)

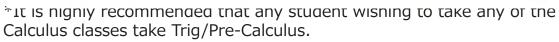
Prerequisites: Journalism I and Broadcast Journalism I, teacher recommendation, and audition.

"Three. Two. One. Take tape with audio full; ready camera one on a two shot in three, two, one. Cue anchors and open their mics." This pressure-filled atmosphere of live TV is intended to excite and motivate students. Students are required to arrive at the studio at 7:40 in the morning and work in their various positions until 8:20 every morning. This course allows students to put all the communication theories and production techniques to work as they produce daily, weekly, and specialized video packages to be broadcast to the rest of the school. The classroom is an actual television studio where students combine their on-air and behind the scene talents to broadcast live every morning. Students rotate positions throughout the year and find themselves in the role of a technical director, audio or tape engineer, a graphics or camera operator, an anchor, or possibly a producer.

#3401 1 Credit

Grade

9th Grade	10 th Grade	11th Grade	12th Grade
Algebra I	Geometry	Algebra II	Trig/Pre- calculus
			College Algebra
			AP Statistics
Geometry	Algebra	Trig/Pre- Calculus*	AP Calculus AB
		College Algebra/Trig	AP Calculus BC
			AP Statistics
			Statistics



Calculator Requirements

A graphing calculator (TI-83 or TI-84 series) is required for all classes beginning with Algebra II

Algebra I

This course is designed to improve skills for solving linear and quadratic equations, factoring, solving linear inequalities and absolute value problems, and apply skills needed to solve word problems. Graphing, exponents, and radicals will also be covered.





#3402 1 Credit Grade Algebra I Honors

This course is the building block of the high school mathematics curriculum. Students learn the applications and terminology of Algebra. This course is designed to help students succeed in future mathematics classes in the high school and college environment. This class focuses on reading and writing mathematically, communicating with mathematical terminology, and developing organizational skills.

#3915 1 Credit Grade **Linear Equations**

This course is a companion course to Algebra I. It focuses on operations with real numbers, solving equations, inequalities, and linear systems.

#3501 1 Credit Grades Geometry

Prerequisite: Algebra I.

9, 10

This course enhances students' thinking and reasoning skills as they apply to the study of plane and solid geometry. The material covered in this course prepares students for standardized assessments. Students study basic geometric concepts dealing with lines, angles, triangles, polygons, circles, and solid geometric figures. The vocabulary of geometry and its symbols are stressed. Algebraic and computational skills are used throughout the course.

Geometry Honors Prerequisite: Algebra I. 1 Credit

#3502 Grades 9, 10



This course focuses on learning concepts in plane and solid Euclidean Geometry, starting with the basics --- points, lines, planes and angles - and working into two-dimensional figures such as triangles, polygons and circles. Students concentrate on area of twodimensional figures, surface area, and volume of three-dimensional figures and coordinate geometry. The curriculum is aligned with the topics covered on the ACT and SAT standardized tests.

Problem-Solving Strategies

The basis of this class is the teaching and learning of strategies that people in the world of work use when solving problems. Specifically, students develop problem solving strategies, communication skills and attitudes, all in a team environment.

#3904 .5 Credits Grades 9, 10, 11, 12



#8614 1 Credit Grades 9, 10, 11, 12 Introduction to Band Prerequisite: Basic ability to read music is preferred, but not necessary.

This is an entry-level instrumental music class designed to teach students who have little to no previous musical training how to read music and play a traditional band instrument, such as flute, clarinet, saxophone, trumpet, French horn, trombone, baritone, tuba, or percussion. Students learn basic music theory, musical terms, proper playing technique, as well as develop a sense of belonging and performing with an ensemble. The students will perform in at least one concert in the spring. This course helps to prepare students for other instrumental ensembles such as Concert Band or Jazz Band I.

#8616 1 Credit Grades 9, 10, 11, 12 Wind Ensemble

Prerequisites: Experience playing a woodwind, brass, or percussion instrument. A placement audition is required.

This course is for the student who has previous experience playing a woodwind, brass, or percussion instrument and who can read music at an intermediate level or higher. Students learn about and perform contemporary styles of music, classical transcriptions, marches, and standard concert band repertoire. Students learn scales, articulations, and basic music theory, and they work together through ensemble playing as well as sectional rehearsals. Wind Ensemble will perform in two concerts throughout the year, one in the winter and one in the spring. The Wind Ensemble is also required to perform at graduation.

#8590 1 Credit Grades 9, 10, 11, 12

Introduction to Orchestra

This is an entry-level instrumental music class. This course is designed to teach students who have little to no previous musical training how to read music and play an orchestral string instrument, such as violin, viola, cello or double bass. Students learn basic music theory, musical terms and concepts, proper playing technique, and individual and ensemble performance skills. The students will perform in two required performances throughout the year, one in the winter and one in the spring. This course helps prepare students for joining Orchestra

Orchestra

Prerequisites: Experience playing an orchestral string instrument. A placement audition is required.

#8602 1 Credit Grades 9, 10, 11, 12



This course is for the student who can read music at an intermediate level or higher and who has experience playing an orchestral string instrument: violin, viola, cello, or double bass. Students perform a varied repertoire of music including orchestral transcriptions, multicultural works, classical pieces, and original pieces for string ensembles. The orchestra will perform in two concerts throughout the year, one in the winter and one in the spring, but they may be called upon for other occasions. Students experience a sense of cooperation and teamwork as they rehearse in both small sectionals and as a larger ensemble during Orchestra class.

Jazz Band I

Prerequisites: Experience playing a musical instrument. A placement audition is required.

This 18-20 piece ensemble is open to intermediate level saxophone, trumpet and trombone players, and rhythm section musicians. The jazz rhythm section consists of a drummer, a pianist, a bass player, and a guitar player. Since jazz bands have a specific and limited instrumentation, this group is highly selective and is by audition only. Jazz I will perform in two concerts a year, one in the winter and one in the spring. Students learn about contemporary styles of jazz music, jazz standards, and original compositions through performance and listening. Students also learn the skill of improvisation and experience a sense of cooperation and teamwork as they rehearse in both small sectionals and as a larger ensemble.

#8702 1 Credit Grades 9, 10, 11, 12

Jazz Band II

Prerequisites: Experience playing a standard jazz band instrument. A placement audition is required.

This 18-20 piece ensemble is open to advanced level saxophone, trumpet and trombone players, and rhythm section musicians. The jazz rhythm section consists of a drummer, a pianist, a bass player, and a guitar player. Since jazz bands have a specific and limited instrumentation, this group is highly selective and is by audition only. Jazz II will perform in at least two concerts a year, one in the winter and one in the spring, but they may be called upon to perform on other occasions. Students learn about contemporary styles of jazz music, jazz standards, and original compositions through performance and listening. Students also learn the skill of improvisation and will experience a sense of cooperation and teamwork as they rehearse in both small sectionals and as a larger ensemble.

#8704 1 Credit Grades 9, 10, 11, 12



#8626 1 Credit Grades 10, 11, 12 Instrumental Chamber Music
Prerequisites: Students can take this course only through audition or by instructor permission.

This course is designed for advanced student musicians who want to hone their skills as chamber music performers and soloists. Students will rehearse in small chamber ensembles consisting of woodwind, brass, string, and percussion. Students will become stronger musicians and independent thinkers as a result of this course.

#8956 1 Credit Grades 10, 11, 12 Women's Chorus

Prerequisites: Must be able to match pitch. Enrollment is by audition only. Pianists may audition to serve as accompanists.

This course is an intermediate-level choral group open to girls in grades 10–12. Students continue to address the development of correct vocal techniques and music-reading skills through the use of more advanced choral literature, performing both three- and four-part selections. A variety of musical styles, including classical, spirituals, Broadway, and pop/contemporary selections, are used throughout the year. Students sing in a variety of foreign languages and will be introduced to a cappella singing.

#8863 1 Credit Grade 9, girls only Grade 9 Girls Chorus

Prerequisites: Must be able to match pitch. Some choral experience is helpful. Pianists may audition to serve as accompanists.

This chorus is an excellent introduction to the Collegiate Academy Vocal Department. It does not require an audition and is open to all freshman girls. In addition to preparing choral selections for concert performances, portions of the class are conducted in the manner of a group voice lesson. Students focus on building a foundation of correct vocal and choral techniques. They receive instruction in breath control, the development of a clear and open vocal tone, and vocal range expansion. Music-reading skills – including sight-singing, rehearsal techniques, and singing group harmonies – are addressed. Students with previous choral experience also have the opportunity to develop leadership skills. In addition to improving individual vocal skills and preparing students for more advanced vocal ensembles at Collegiate, the group dynamics of this class provide a wonderful vehicle for the development of friendships and a sense of belonging.

Chamber Singers

Enrollment is by audition only. Qualified pianists may also serve as accompanists.

#8957 1 Credit Grades 9 (boys only) 10, 11, 12



This course is an advanced-level traditional mixed choral group. This prestigious 40-50 member ensemble regularly performs for both school and community events. They have also performed at Disney World and often travel to other such venues. Choral selections range from classical works like Handel's Messiah and Mozart's Requiem to spirituals, Broadway and contemporary works. While an emphasis is placed on a cappella singing, students also perform with live instrumentation. Students from this group consistently qualify for Region II, PMEA State Honors and All-Eastern Choruses. Prerequisites: Ninth-grade boys may also audition for this class. Girls in grades 10–12 are required to have taken at least one year of a Collegiate Academy vocal ensemble class.

Advanced Voice

Prerequisites: Must be able to sing on pitch. Some choral experience is helpful. Enrollment is by audition only.

#8978 1 Credit Grades 10, 11, 12

For the serious singer, this audition-only course provides group and private vocal instruction. Students displaying exceptional ability work to develop correct vocal techniques and music reading skills, and in the process develop confidence and poise in solo performance situations. Audition preparation will be also addressed. Students sing in a variety of musical styles including Broadway, classical, and art songs, and they are required to perform in foreign languages. Quarterly Master Classes will be conducted and two recitals will be presented each year.

Music Theory

Prerequisites: Must be able to read music and match pitch. Previous study of an instrument or voice. Recommendation of music teacher.

#8983 1 Credit Grades 10, 11, 12

For the student interested in music composition and/or considering music as a college major, this course provides the tools necessary to get started. This course prepares students to take the AP Music Theory exam, which is offered in alternating years. The fundamentals of music — such as notation, rhythm, intervals and chords — are addressed, as well as an introduction to melodic elements and beginning four-part chorale writing in the style of Bach (Common Practice). Ear-training (aural skills) is a major aspect of the course. In addition to classroom instruction, students work with online aural skills resources as well as the Auralia Ear-training computer program. Students are also required to learn basic solfegge (sight-singing). Students should be able to read both bass and treble clefs.



#8972 1 Credit Grades 10, 11, 12 Vocal Jazz

Prerequisites: Students are required to have taken at least one year of a Collegiate Academy vocal ensemble class. Enrollment is by audition only.

For the advanced singer, this select group of 14-15 singers performs vocal jazz music in the style of Manhattan Transfer and New York Voices. They have performed at Disney World and have been featured at key Jazz Erie events. Each year, Collegiate Academy Vocal Jazz presents Singing Valentines, which is a yearly fundraising event. In addition to preparing concert selections, this group focuses on the unique characteristics of vocal jazz, such as improvisation. Singers practice improvisation or "scatting" every class and listen to jazz greats like Ella Fitzgerald, Billie Holiday, Mel Torme and Nat King Cole. When performing, students sing with individual microphones and a sound system. Stage presence, vocal projection and blend, and microphone technique are also addressed. Students perform a cappella, as well as with CD accompaniment, piano accompaniment and live instrumentation, often combining with Jazz Band II. Students from this class have been selected to perform with the PMEA State Vocal Jazz Ensemble. This ensemble is considered an "Ambassador Ensemble" for Collegiate Academy, performing regularly for Erie's Public Schools and in the Erie community.

#8984 1 Credit Grades 10, 11, 12

Advanced Placement Music Theory
Prerequisites: Music Theory. Must be able to read music
and match pitch. Previous study of an instrument or voice.
Recommendation of music teacher. Student must take a
written pretest and an aural skills test.

This college level—course provides instruction in advanced music theory skills and prepares students to take the Advanced Placement Music Theory examination. The course begins with a review of the material covered in the Music Theory course and moves into more complex skills including advanced analysis, four-part writing, secondary dominants and modulations. Aural skills will continue to be developed by using more advanced levels of melodic and harmonic dictation in the classroom, and with the Auralia program. Also included will be sight-singing examples. Students who successfully pass the AP exam may be rewarded college credit and/or be equipped to test out of level 1 college music theory. Each student composes an original work at the end of the year for presentation to the class.

Guitar I

This entry-level guitar class is designed to teach students who have little to no previous musical training how to read music and play acoustic guitar. Students learn basic music theory, musical terms, and proper playing technique, as well as individual and ensemble performance skills. This course helps prepare students for Guitar II.

#8486 .5 Credits Grades 9, 10, 11, 12



Guitar II

Prerequisite: Guitar I.

This is an intermediate level guitar class designed to teach students who have some musical training on how to read music and play acoustic guitar. Students will continue instruction in music theory, musical terms, and proper playing technique, as well as individual and ensemble performance skills.

#8488 .5 Credits Grades 9, 10, 11, 12

Piano I

This course is designed to provide the beginner with a foundation in basic piano technique and music reading. Students develop a working knowledge of the rudiments of musical notation and music theory for the purpose of developing the ability to play and accompany simple songs. No experience in piano or music is necessary, just a desire to learn.

#8522 .5 Credits Grades 9, 10, 11, 12

Piano II

Prerequisite: Piano I or one year of prior piano experience.

This course is designed to provide students with intermediate and/ or advanced piano technique and music reading. Students will build upon foundational knowledge of the rudiments of musical notation and music theory for the purpose of developing the ability to play and accompany songs. #8526 .5 Credits Grades 9, 10, 11, 12





#4835 1 Credit Grade

Concepts in Physical Sciences

This course is designed to prepare students in the Performing Arts Magnet School for Honors Biology. Students will study scientific thinking, best practices for lab work, and a wide range of biological and physical sciences, including basic chemistry, biochemistry, cells, ecology, nature of science, conservation of matter and energy, and evolution.

#4501 1 Credit Grades

9, 10

Biology

This course is designed to help students understand the biological world they live in and the webbed connection of all life. The course focuses on historical investigation in biology, functions necessary for life, reproduction, heredity, and the interrelationship of structure and function as life forms increase in complexity from unicellular to multicellular organisms.

#4502 1 Credit Grade

Biology Honors

What are living things made of and what makes them work? How can a molecule hold instructions to make living things? Biology is learned through the process of investigating chemistry, cell structure and function, genetics, evolution, classification and taxonomy, and ecology. This required freshman course builds the use of logic, creativity, and analytical skills in an inquiry-based setting to teach the fundamentals of biology

Human Biology Prerequisite: Biology. #4512 1 Credit Grades 10, 11, 12

Have you ever wondered about the various aspects of life on Earth? Do you seek a deeper understanding of humanity's impact upon life on this planet? Are you looking for a course that will help you prepare for AP Biology, AP Chemistry, AP Environmental Science, Anatomy and Physiology or any science laboratory course? Then Human Biology is for you. The great strides made in biology have had a deep impact on our understanding of human health, disease, and environmental issues. In this class we explore best lab practices, environmental issues, human health and disease, and current biotech issues in order to help the students prepare for the latest careers in medicine and environmental studies. Students learn how to extract DNA using electrophoresis, and then compare the genomes of various organisms. Computer modeling, digital microscopy, bioethics and applying life processes in order to make a product or solve a problem will be part of the curriculum. This intensively hands-on course will increase your understanding of the interactions between humans and the environment we live in.





#2853 1 Credit Grade

Geography

This course examines different regions throughout the world, emphasizing location, landscape, climate, environment, people, and culture. Students develop an understanding of the interaction between humans and the environment, including global cultures, governments, economics, and population trends. Geography also teaches important geographic skills, such as map reading and chart/graph interpretation.

#2410 1 Credit Grade

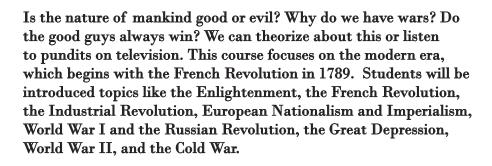
World Geography Honors

Students will experience the diversity of our world through the study of Geography and discover the challenges of our modern world through the examination of various cultures, climates, environments, governments, landforms, regions, and resources of the world.

#2402 1 Cred1t Grade 10

World History Cultures

This course focuses on great civilizations and cultures from the dawn of man to the present day. Students are introduced to ancient civilizations, Greece, Rome and Egypt. The study of early empires in Europe, Africa and Asia follows. Students study important time periods such as the Middle Ages, the Renaissance, the Age of Exploration, Conquest, Imperialism, Birth of Democracy, Nationalism, World Wars, and the Aftermath. Events in Europe, Asia, Africa and the Americas will be covered.







#9426 .5 Credits Grade Wellness/Fitness I
This class is required for all freshmen.

Begin the journey to vibrant health with this interactive wellness and physical education course. Can you locate your carotid and radial pulse? How intensely should you exercise? Determine your level of physical fitness using Fitnessgram testing. Discover selfesteem, proactive choices, and organizational techniques by Covey. In addition, students participate in a curriculum rich in cooperative activities to foster strong friendships. Upon successful completion, students will receive the American Red Cross certification in CPR and First Aid.

#9428 .5 Credits Grades Wellness/Fitness II

Prerequisite: Wellness/Fitness I.

10

Continue the journey into vibrant health by exploring the consequences of risky behavior. Any risky behavior that interferes with life can be devastating to self, family, peers, and society. Alcohol and drug use, misuse, and abuse, along with other risky behaviors can affect our lives. Wellness II students study chronic and infectious diseases, and more importantly, disease prevention. Students also participate in a variety of lifetime fitness activities including badminton, volleyball, shuffleboard, Frisbee, and strength training.

#9524 .5 Credits Grade 11, 12

Principles of Athletic Training

Prerequisites: Wellness/Fitness I and II. Concurrent enrollment in, or completion of, Human Anatomy & Physiology.

Experience the career discipline of Sports Medicine as this class journeys into an interactive athletic training course. Sports Medicine programs encompass the health-related professions which prevent and manage injuries related to individuals and organized sports. Students study the dynamic human body from a myriad of perspectives: anatomy, kinesiology, injuries, rehabilitation, and exercise conditioning. The expertise of local professionals from the community is utilized as guest speakers, and shadowing opportunities are available. Athletic Training provides a strong foundation for career choices in Sports Medicine.

Project B-Fit

Prerequisites: Wellness/Fitness I and II.

#9526 Grades 11, 12

.5 Credits



Explore your personal fitness and become a peer mentor for elementary students as you journey into the diversified class of Project B-Fit. Students will participate in a variety of aerobic activities such as brisk walking, step class, low impact aerobics, and paddleball. They are also trained to be B-Fit Leaders. Through the use of song, dance, exercise, and storytelling, this class impresses upon elementary students the importance of making positive healthy lifestyle choices.

Competitive Wellness

Prerequisites: Wellness/Fitness I and II.

Social interaction within a team setting is a vital aspect of vibrant health. Students develop these skills as they journey into the challenging course of competitive wellness. They must be willing to participate in a highly competitive environment and demonstrate responsible behavior. They will participate in the following team sport units: Basketball, Volleyball, Flag-Football, Soccer, and Softball. Each unit concludes with playoffs and a championship game. In addition, students are exposed to the psychological, sociological, and moral aspects of sport in our culture.

#9442 .5 Credits Grades 10, 11, 12

Sports Nutrition for Enhanced Performance Prerequisites: Wellness/Fitness I and II.

Journey into the nutritional domain to understand individual energy needs. This course brings the physiological effects of nutrition and physical activity in a powerful blend of theory and practice into the classroom. Content includes fueling the muscles, quick energy snacks, fluids, pre-exercise meals, recovery foods, supplementation, and eating disorders.

#9528 .5 Credits Grades 10, 11, 12



#9522 .5 Credits Grades 10, 11, 12 Performance Fitness

Prerequisites: Wellness I. Concurrent enrollment in, or completion of, Wellness/Fitness II.

This course is designed to identify and apply individual wellness principles introduced in Wellness Fitness I & II, through situational learning and diverse fitness settings. At the end of this course students will have learned the necessary tools to design a personal fitness model that can be utilized throughout their lifetime. In addition to the promotion of wellness, students are exposed to several modes of fitness, such as Pilates/yoga, aerobics and/or step aerobics, Zumba, elements of martial arts, kickboxing, core strength/stability, circuit training, enhancing cardiovascular fitness, and resistance training.

#9604 .5 Credits Grades 9, 10, 11, 12 Jazz Dance I

Prerequisites: Wellness I. Concurrent enrollment in, or completion of, Wellness/Fitness II.

This course is designed for the beginning dancer with no previous dance experience who is looking for an introductory course of dance. Class is structured like professional jazz dance class, with a warm-up, across-the-floor progressions, center combinations, and group choreography. Students learn and develop basic rhythmic skills and weight shifts characteristic of Jazz dance, such as jazz runs, triplettes, chasses, jazz square, pas de bourées, battements, and leaps. We also view dances on video to further enhance our process and to further expose students to dance on a more global perspective. Students may also participate in community and school performances. Scheduling preferences will be given to upperclassmen when necessary.

#9606 .5 Credits Grades 10, 11, 12

Jazz Dance II

Prerequisites: Jazz Dance I, or teacher permission based on previous dance experience and dance audition.

This course is designed for intermediate/advanced dancers with at least 3-5 years of previous dance experience who is interested in learning advanced skills and increasing their jazz dance vocabulary. Class is structured like a professional jazz dance class with a warmup, across-the-floor progressions, center combinations, and group choreography. Students will continue to learn and develop complex rhythmic skills and weight shifts characteristic of Jazz Dance I to include double and triple pirouettes, pas de bourées turns, layouts, and grandes jêtés. We also view dances on video to further enhance our process and to further expose students to dance on a more global perspective. Students may also participate in community and school performances.

m Wellness/Fitness

Modern Dance I Prerequisites: Concurrent enrollment in, or completion of, Wellness/Fitness I. #9612 .5 Credits Grades 9, 10, 11, 12



This course is designed for the beginning dancer with no previous dance experience who is looking for an introductory course of dance. This course consists of learning and performing basic levels of the Graham and Horton modern dance techniques. Class is structured like a professional contemporary dance class with a warm-up, across-the-floor progressions, center combinations, improvisation, and choreography. Students learn and develop movement skills and weight shifts characteristic of the Graham and Horton technique, such as fall recovery, contract release, swings, "flat back," and coccyx balance. We also view dances on video to further expose students to Modern Dance from a global perspective. Students may also participate in community and school performances.

Modern Dance II

Prerequisites: Modern Dance I, or teacher permission based on previous dance experience and dance audition.

#9614 .5 Credits Grades 10, 11, 12

This course consists of learning and performing intermediate to advanced levels of the Graham and Horton Modern dance techniques. Class is structured like a professional contemporary dance class, with a warm-up, across-the-floor progressions, center combinations, improvisation, and choreography. Students continue to learn and develop advanced movement skills and weight shifts characteristic of the Graham and Horton techniques, which include fortifications, stags, forced arch, tilts, and bison jumps. We also view dances on video to further expose students to Modern Dance from a global perspective. Students may also participate in community and school performances. Scheduling preferences will be given to upperclassmen when necessary.

Performing Arts Dance (CADENCE)
Prerequisites: Audition or teacher permission.

This course is the pinnacle of the dance program at Collegiate Academy. These students perform in a variety of performances and must demonstrate mastery of the fundamentals of dance. Students earn placement in this class based upon their performance audition. This class is the most advanced dance class offered at Collegiate Academy.

#9618 1 Credit Grades 9, 10, 11, 12



#9616 .5 Credits Grades 9, 10, 11, 12

Hip Hop Dance

The course is designed for the novice dancer with no previous dance experience, or an experienced dancer looking for a fun, new experience in dance. Class is structured like a traditional Hip Hop dance class with a warm-up, center combinations, group choreography, and improvisation/freestyle. Students learn and develop basic rhythmic skills and weight shifts to enhance learning and the performance of Hip Hop, such as body isolations, drops, body bounce, up-rocking, house dancing and popular street dances, and elements of breakdancing. We view dance on video to further enhance our process, to expose students to dance on a global perspective and to increase our knowledge of this unique, rich and vibrant culture. Students also participate in school performances. Scheduling preferences will be given to upperclassmen when necessary.

world Languages

Most children are experts in their own language by the time they go to Kindergarten. The World Language Department at Collegiate Academy believes that it takes at least three years for a student acquiring a second language to achieve basic proficiency. Therefore, we require a minimum three-year commitment for the study of a World Language and offer the ability to take a fourth year. When students sign up for a language in their freshmen year, they are also choosing to explore the culture and mindset tied to that language. All World Language programs guide the student from novice toward an intermediate level. Students leave the program able to navigate outside the classroom in the language and culture of their choice. Students are also able to study two World Languages simultaneously, beginning in their sophomore year — and many do! Welcome to the Global Village!

Advanced Placement World Language

Students who want to continue their study of languages beyond the third year have the option of taking Advanced Placement classes in each language. These courses focus on preparing students for success on the AP test by training them to read, write, comprehend, and speak their target language with intermediate proficiency. Specifically, students work to develop the ability to understand the spoken target language in various contexts; they develop the vocabulary sufficient for reading newspaper and magazine articles, literary texts, and other non-technical writing without dependence on a dictionary. Finally, students develop the ability to competently speak and comprehend the target language. Advanced Placement language study is not for the weak of heart; it is an extremely demanding course of study, but equally rewarding. Students acquire skills that they will use throughout their lives in our global society. Keep in mind that some universities offer up to 12 credits for a high passing score on the AP exam!

Spanish

With more than 400 million speakers worldwide, Spanish is the fourth most spoken language in our world. It is an official language of the United Nations, the European Union, NAFTA and OPEC. Being able to communicate in the Spanish language and culture gives one a competitive edge anywhere in the Western Hemisphere as well as in Europe.

Not only is Spanish spoken in four of the seven continents, but one can also hear the language and experience the culture right here in Erie, Pennsylvania. With more than fifty million Spanish speakers in the US, it is the first language of one out of ten people in our country. It is crucial for our students to study this language to reach global and local opportunities that are right here, right now.



Latin

Isn't Latin old and dead? Not at Collegiate Academy! We are one of very few programs at any level (middle school, high school, college, and graduate schools) which treats Latin as an actual language—we learn to speak in Latin! We treat Latin for what it is—a vibrant, beautiful, and fun language. Students learn to communicate in Latin on the first day of class, and, before you know it, you are expressing thoughts and emotions and asking questions in a language that has been spoken for over 2,000 years. In addition to language studies, we also look at the culture and history of both the Roman people and also their neighbors, such as the Greeks and Egyptians. We look at the art that everyday people created, as well as the archaeological remains that tell us how these people, who were just like you and I, lived. If you ever want to study the Romance languages (such as Spanish, French, and Italian) or German, you will have a head start since Latin is the foundation for all of these languages! In addition, we have borrowed many words and grammatical constructions into our own English language, so studying Latin builds a strong foundation in both vocabulary and grammar—crucial elements for success on the SAT, AP exams, college courses, and even job applications. Latin has been spoken/studied for thousands of years by people such as Julius Caesar, St. Augustine, Dante, Chaucer, Shakespeare, Thomas Jefferson, Winston Churchill, J.K. Rowling, and Mindy Kaling. Now you have the chance to join this amazing club!

German

If a student wants to learn a language that is spoken almost everywhere, study a people who are true leaders in the 21st century, and become familiar with a rich culture that is very closely tied to our own, then they should consider the study of German. German is the most common mother tongue in Europe. That makes sense, since Germany is the largest economy in the European Union and the third largest in the world! For those interested in business, the European Central Bank is headquartered in Frankfurt. More than 1,100 companies from German-speaking countries have subsidiaries in the United States and more than 750 US companies are at work in Germany!! Studying German expands career options: German is used in the fields of science, engineering, the arts, math, software production, publishing, and travel! The Internet extension .de is the second most common after .com, which means that Germans are the world's second largest presence on the Web. We can thank German inventors for the printing press, the automobile, the Fahrenheit thermometer, the X-ray, and even the MP3 digital music format. German is also surprisingly easy to learn. English is a Western Germanic language and the two languages have numerous similarities.

German Americans make up one of the largest heritage groups in the United States. The traditions which German immigrants brought with them have become an integral part of our American heritage, including the names of many cities and towns. Studying German culture helps our understanding of American culture, too!

1950 – Latin I	1940 – German I	1924 – Spanish I
1 Credit	1 Credit	1 Credit
Grades 9, 10, 11, 12	Grades 9, 10, 11, 12	Grades 9, 10, 11, 12
1952 – Latin II		1926 – Spanish II
1 Credit	1942 - German II	$1~{\bf Credit}^{\top}$
Grades 10,11,12	1 Credit	Grades 9, 10, 11, 12
	Grades 9, 10, 11, 12	
1954 – Latin III		1928 – Spanish III
1 Credit		1 Credit
$\mathbf{Grades}\ 10, 11, 12$	1944 - German III	Grades 10, 11, 12
	1 Credit	
1956 - Latin IV	Grades 10, 11, 12	$1930-{ m Spanish}\;{ m IV}$
1 Credit		1 Credit
$\mathbf{Grades}\ 10, 11, 12$	1948 - Advanced	Grades 10, 11, 12
	Placement German	
1958 - Advanced	Language	$1932 - \mathbf{Advanced}$
Placement Latin	1 Credit	Placement Spanish
Language	Grades 11, 12	Language
1 Credit		1 Credit
~		0 1 11 10

Grades: 11, 12

Grades 11, 12





Collegiate Academy offers half-credit elective credits for courses taken using the Rosetta stone program. (These classes do not count as World Languages credits.) These courses are taken online using the Rosetta Stone software with a classroom teacher as a guide. Students work at their own pace but may accelerate to take additional credits and languages as they are able.

These courses may not take place of any portion of the three required credits of World Language needed for graduation (Latin, Spanish, Mandarin or German), but are meant to add additional experience and electives for those students who are interested in other languages. The available courses and their numbers are listed below.

All classes are half-credit, honors-level classes.

1988a	ARABIC I H (R)	\mathbf{H}	Language	.5
1988b	ARABIC II H (R)	\mathbf{H}	Language	.5
1988c	ARABIC III H (R)	\mathbf{H}	Language	.5
	ARABIC IV H (R)	${f H}$	Language	.5
1988e	ARABIC V H (R)	${f H}$	Language	.5
	,		0 0	
1989a	JAPANESE I H (R)	\mathbf{H}	Language	.5
1989b	JAPANESE II H (R)	\mathbf{H}	Language	.5
1989c	JAPANESE III H (F	()	H Langu	age .5
1989d	JAPANESE IV H (R	1)	H Langu	
1989e	JAPANESE V H (R)	H	Language	.5
	` '			
1990a	FRENCH I H (R)	\mathbf{H}	Language	.5
	FRENCH II H (R)	\mathbf{H}	Language	.5
1990c	FRENCH III H (R)	\mathbf{H}	Language	.5
	FRENCH IV H (R)	\mathbf{H}	Language	.5
1990e	FRENCH V H (R)	\mathbf{H}	Language	.5
	,			
1991a	RUSSIAN I H (R)	\mathbf{H}	Language	.5
1991b	RUSSIAN II H (R)	\mathbf{H}	Language	.5
1991c	RUSSIAN III H (R)	\mathbf{H}	Language	.5
1991d	RUSSIAN IV H (R)	\mathbf{H}	Language	.5
	RUSSIAN V H (R)	\mathbf{H}	Language	.5
	, ,			
1992a	ITALIAN I H (R)	\mathbf{H}	Language	.5
1992b	ITALIAN II H (R)	${f H}$	Language	.5
1992c	ITALIAN III H (R)	\mathbf{H}	Language	.5
1992d	ITALIAN IV H (R)	\mathbf{H}	Language	.5
1992e	ITALIAN V H (R)	\mathbf{H}	Language	.5

JUNIOR RESERVE OFFICER TRAINING CORPS (JROTC)

JROTC focuses on the development of better citizens by building skills in leadership, citizenship, life success, geography and wellness in a structured, interactive environment. It places an emphasis on service learning, community service, life skills and teen anti-drug efforts through both classroom and hands-on instruction through placement of cadets in leadership positions and participation in Integrated Teams.

All JROTC students will be required to properly wear the military uniform once a week and participate in a service learning project.



Level I JROTC

This course provides an opportunity for leadership, education and training. First-year cadets study leadership theory and application, foundations for success, communication / study skills, citizenship, military customs and courtesies, and history. They will also learn self-discipline, map reading and basic first aid. Emphasis is placed on positive conduct and attitude.

Requirements: Proper courtesy will be learned and displayed. Uniforms will be worn once a week. All cadets must maintain satisfactory grade or above to continue in JROTC.

#9962 1 Credit Grades 9, 10, 11, 12

Level II JROTC Prerequisite: Level I JROTC.

This course provides an opportunity for leadership, education and training. Second-year cadets expand their knowledge of first year subjects and assume leadership positions in the cadet CORPS. They study ethical values and principals of good citizenship along with American history and Government. Emphasis is placed on communication, both oral and written. Cadets are introduced to problem solving techniques and counseling. Requirements: Proper courtesy will be learned and displayed.

Requirements: Proper courtesy will be learned and displayed. Uniforms will be worn once a week. Haircuts and proper grooming are required when in uniform. All cadets must maintain satisfactory grade or above to continue in JROTC.

#9964 1 Credit Grades 10, 11, 12





#9966 L 1 Credit P

Grades 11, 12

Level III JROTC

Prerequisites: Level I and II JROTC.

This course provides an opportunity for leadership, education and training. Students study leadership strategies, foundations for success, managing conflict, career planning, financial planning, citizenship in American history and government with continued practical work in leadership, drill, technology awareness, and methods of instruction. Map reading and physical training are also included.

Requirements: Proper courtesy will be displayed. Uniforms will be worn once a week. Haircuts and proper grooming are required when in uniform. All cadets must maintain satisfactory grade or above to continue in JROTC.

#9968

Level IV JROTC

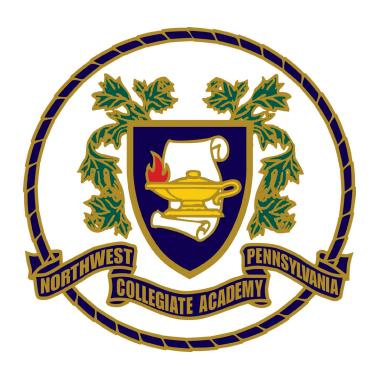
1 Credit Grades Prerequisites: Level I, II, and III ROTC.

11, 12

This course provides an opportunity for leadership, education and training. The fourth year is a self-study year with emphasis on leadership and communication along with preparations for college bound students. Demonstrate leadership potential as a role model, coach, and assistant instructor. Study service to the Nation and financial planning while practicing management skills, command and staff principals.

Requirements: Proper courtesy will be displayed. Uniforms will be worn once a week. Haircuts and proper grooming are required when in uniform. All cadets must maintain satisfactory grade or above to continue in JROTC.





Always Reaching Higher

