



Program of Academic Studies

2014–2015

**A Course Selection Guide for
Grade 9 • Grade 10 • Grade 11 • Grade 12**

**North Penn High School
Pennbrook Middle School
Penndale Middle School
Pennfield Middle School**

Please note: June 13, 2014 is the final deadline for student and/or parent initiated requests for course changes.

including Musition, *Auralia*, Finale, Home Studio, Piano Suite, Band in a Box and Smart Music as well as music on the internet. Some basic piano keyboard skills are helpful but not required.

Prerequisite: Students must also schedule 4 periods of band, chorus or orchestra in ninth grade.

JROTC at NPHS

THE SCIENCE OF FLIGHT & INTERCOMMUNICATION SKILLS

(6 periods – 1 credit)

Level 5.0 **3915**

The **Science of Flight** course introduces the student to the exciting world of aerospace science. The course spans diverse subject areas within the Principles of Flight discipline to include: Basic Aeronautics, Aircraft Motion & Control, Meteorology, Human Flight Physiology & Engineering and Aircraft Design. Flight simulators and aircraft model construction are an integral part of the interactive course curriculum.

The Leadership and Intercommunication Skills course is taught in a teamed approach within the Science of Flight curriculum. Emphasis is placed on the importance of the communication and management process including citizenship/patriotism, community service, time management, organizational structures and framework, effective oral and writing skills and team building all designed to develop and hone the student's leadership skills. Students have a hands-on opportunity to apply their leadership and interpersonal skills through assigned leadership positions responsible for the management of the JROTC corps of cadets. This course will count for an elective science credit.

Middle School students who opt to participate in JROTC will begin the school day at NPHS. Students will take two courses at NPHS; Science of Flight and either a math course or World Language course. Transportation to the appropriate middle school will take place after second period.

Note: Students in their first year of JROTC instruction are exempted from the requirement to wear the provided Air Force uniform and comply with grooming requirements. Students in their second and third year are expected to wear the provided Air Force uniform once per week on Wednesdays and comply with established grooming standards.

Reading

9TH GRADE – READING SUPPORT

[Grade 9] (6 periods – 1 credit)

Select one 9th Grade Reading Support course offering from the options below:

9TH GRADE – READING SUPPORT Level 4.0 (IEP required) **0193**

9TH GRADE – READING SUPPORT Level 4.0 **0194**

Ninth grade students who meet eligibility criteria for this course are required to take Reading Support as a major subject. The Reading Support program includes a broad range of reading experiences designed to establish reading as a lifetime skill and to link reading strategies with content areas.

Science

Required Course Offerings

PHYSICAL SCIENCE (IFE)

[Grade 9] (6 periods – 1 credit)

Select one Physical Science course offering from the options below:

PHYSICAL SCIENCE (IFE) Level 5.0 (IEP required) **3095C**

PHYSICAL SCIENCE (IFE) Level 5.0 **3095**

PHYSICAL SCIENCE (IFE) Level 6.0 (Honors) **3096**

PHYSICAL SCIENCE (IFE) Level 6.0 (High Potential) **3096P**

This course combines a standards-aligned study of physics and chemistry concepts with an exploration of laboratory and problem-solving skills. Utilizing an inquiry-based approach, students develop an understanding of topics such as force, motion, energy, atoms, and chemical bonding. Students learn to apply process skills to reach scientific conclusions based on data and evidence. These skills form the foundation for success in future laboratory science courses.

Social Studies

Required Course Offerings

AMERICA IN HISTORY 2 (IFE)

[Grade 9] (6 periods – 1 credit)

Select one America In History 2 course offering from the options below:

AMERICA IN HISTORY 2 (IFE) Level 5.0 (IEP required) **1095C**

AMERICA IN HISTORY 2 (IFE) Level 5.0 **1095**

AMERICA IN HISTORY 2 (IFE) Level 6.0 (Honors) **1096**

AMERICA IN HISTORY 2 (IFE) Level 6.0 (High Potential) **1096P**

Course Description: The ninth grade Social Studies curriculum reflects the PA standards in civics and government, economics, history, and geography. These standards are integrated into the study of America's history and culture. This American History course will include the following time frame: Reconstruction through World War II. Students will have the opportunity to continue to develop their geography skills, to study primary and secondary source documents, as well as to investigate how culture and events in history have shaped the country and world in which we live. The research process, integral to the Social Studies class, is included in this curriculum.

Special Education

See page 61 for more information.

Technology and Engineering Education

Courses in technology and engineering education reflect innovations, technological systems, resources, and products related to technology. Technology education explores the social, cultural, and environmental impacts of technological developments in the world. Opportunity is provided in classroom and laboratory settings for students to develop knowledge, skills, and attitudes regarding technology. The technology education program is designed to ensure that citizens are prepared to contribute to a competitive and complex technological society.

Major Elective

APPLYING TECHNOLOGY MAJOR 5094
Level 4.0 [Grade 9] (6 periods – 1 credit)

This is a project-based course that focuses on the applications of the tools, materials, and processes in technology and engineering related disciplines, including bio-related, communications, construction, manufacturing and transportation systems. Students experiment the way materials, energy, and information are processed to solve technological problems. Topics include aerodynamics, automation, plastics/synthetics, energy production, robotics structural design/analysis, environmental and medical technology.

Minor Electives

APPLYING TECHNOLOGY MINOR 8509
 [Grade 9] (2 periods – 0.3 credit)

This is a project-based course that focuses on the applications of the tools, materials and processes in bio-related, communications, construction, manufacturing and transportation systems. Students are guided through activities which reflect developments in technology. Through problem solving activities, students design, fabricate, test, and present a variety of solutions to technical problems.

TECHNICAL DRAWING AND DESIGN MINOR 8539
 [Grade 9] (2 periods – 0.3 credit)

This introductory course in technical drawing and design includes freehand sketching, use of mechanical drawing instruments, computers to generate CAD (Computer Aided Drafting), and explore related careers. This course should be of interest to those students who may be considering the Engineering Academy at the high school or technical profession.

Technical Career Center Cluster Experience

For information on the program at the TCC, please turn to page 64.

World Languages

All students are encouraged to pursue the study of a world language, modern or classical. They are urged to complete a three to five year sequence of one language and in the high school may begin a second language for an additional sequence. Research has proven that world language students generally show improvement in their English skills and attain noticeably higher scores on the verbal portion of their SAT's as well as college entrance exams. In practically every job situation in today's shrinking world, the graduate with a world language background has a major advantage.

A student may begin the study of a world language in grade 8 by enrolling in one of four choices: French, German, Latin or Spanish. World language courses successfully completed are recorded on the official high school transcript. Credit toward high school graduation is earned beginning in 9th grade. Students will not be permitted to enroll in the same level of a language for a third time. It is recommended that students requesting the first year of a language have at least a "C" average in mainstreamed English for the preceding year in order to meet with success.

MODERN LANGUAGE 1  **Level 5.0** (6 periods – 1 credit)

In the first level of each of these languages, students are introduced to the four basic skills of language learning: listening, speaking, reading, and writing. Students spend much class time in listening/speaking activities. Teachers emphasize the ability to produce the basic sounds of each language. Audio-visual aids such as tapes, recorded by native speakers, cue cards, and posters are used. Students are exposed to the culture and customs of each country through the use of films, internet access, stories, and songs. Grammar is introduced as well as elementary vocabulary.

MODERN LANGUAGE 1 – SPANISH 1 4215
MODERN LANGUAGE 1 – FRENCH 1 4315
MODERN LANGUAGE 1 – GERMAN 1 4415
MODERN LANGUAGE 1 – JAPANESE 1* 4515

***JAPANESE 1** can only be taken at North Penn High School in combination with a 6 period per cycle math course, or physical science, or JROTC course. Ninth grade students selecting this course begin their day at North Penn High School at 7:21 AM. Bus transportation to the high school is via the AM high school bus run. Bus transportation to the middle schools will follow at the end of the high school's second period.

MODERN LANGUAGE 2  **Level 5.0** (6 periods – 1 credit)


Select one Modern Language 2 course offering from the options below:

MODERN LANGUAGE 2 – SPANISH 2 4225
MODERN LANGUAGE 2 – FRENCH 2 4325
MODERN LANGUAGE 2 – GERMAN 2 4425


The second year of world language study builds upon the first year's program. Vocabulary development is much greater, including idiomatic expressions, more complicated sentence structure and additional verb tenses. Language patterns become more sophisticated. The study of culture and customs continues to be emphasized in both the target language and in English.

Students begin to read short stories and essays. They will write original paragraphs and short compositions in the target language while grammar and syntax continue to be taught as an inherent and important skill.

Prerequisite: "C" or higher in year 1

LATIN 1  **Level 5.0** 4115
 (6 periods – 1 credit)

Latin 1 is a beginning course in Latin grammar through which the student learns to read and write the language on an elementary level. It also introduces the student to the study of Roman civilization, and Greek and Roman mythology. Emphasis is placed on the contribution of Latin to the English language, thus helping to develop the student's English verbal skills.

LATIN 2  **Level 5.0** 4125
 (6 periods – 1 credit)

Latin 2 continues the study of Latin grammar and vocabulary. Readings are selected to introduce more advanced grammatical construction. Roman civilization, Greek and Roman mythology, and English word derivation also continue to be emphasized.

Prerequisite: "C" or higher in Latin 1

