

# PCHS



# PIONEERS

2024-2025

Course Descriptions



*Strasburg School District has the  
option to modify  
any and all courses  
offered in this booklet.*

*Courses may be changed due to, but  
not limited to, student requests,  
teacher availability, room  
availability, and financial resources.*

# PCHS SCHOOL - 4 YEAR ACADEMIC PLAN

<i>Credits Needed</i>	<b>Subject</b>	<b>9<sup>th</sup> Grade</b>  <b>7 classes</b>	<b>10<sup>th</sup> Grade</b>  <b>7 classes</b>	<b>11<sup>th</sup> Grade</b>  <b>7 classes</b>	<b>12<sup>th</sup> Grade</b>  <b>5 classes</b>
4	<b>English</b>	English 9 <i>(required)</i>	English 10 <i>(required)</i>	English 11 <i>(required)</i>	<i>English Elective (required)</i>
4	<b>Math</b>	Algebra <i>(required)</i>	Geometry <i>(required)</i>	Algebra 2 <i>(required)</i>	<i>Math Elective (required)</i>
4	<b>Social Studies</b>	Freshmen Seminar/Civics/ Geography <i>(required)</i>	World History <i>(required)</i>	American History <i>(required)</i>	Social Studies Elective (Required)
4	<b>Science</b>	Earth Science <i>(required)</i>	Biology <i>(required)</i>	Science Elective <i>(required)</i>	Science Elective (Required)
8	<b>Electives</b>	1 -  2 -	1 -  2 -	1 -  2 -	1-  2-

## LANGUAGE ARTS

***English 9 - Composition & Literature***  
**English Credit**

**Grades 9 - 12**

The purpose of the course is to examine the foundation of writing and literature. The course will consist of several novel units, several essay units, a short story unit, and a poetry unit. This course will provide students with a solid grasp of grammar and conventions. It examines the process of writing, teaches critical reading, as well as building vocabulary and recording skills.

***English 10 - World Literature***  
**English Credit**

**Grades 9 - 12**

The purpose of the class is to provide an understanding of the role of literature in many different world cultures as well as to continue building mastery of literary terms and conventions. The course will include several novel units, several essay units, a short story unit, and a poetry unit. Each unit will further develop both reading and writing skills and will be complemented with vocabulary and grammar lessons.

***English 11 - American Literature***  
**English Credit**

**Grades 9 - 12**

This course has four distinct categories of English which will be interwoven together in approximately 8 units of study, including novels, research, and poetry. We will be studying literature, writing, grammar, and vocabulary throughout these units. Study in this course focuses on the development of American literature. This course includes units on SAT test preparation and writing literary analysis papers.

# **MATH**

<b><i>Algebra 1</i></b> <b>Math Credit</b>	<b>Grade 9 - 12</b>
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This course focuses on the use of algebra to simplify expressions and solve equations of polynomials. Students will use differing techniques to solve real-world problems in the areas of probability and statistics, and number theory. The following units will be studied: expressions, equations, functions; solving and graphing linear equations; exponents and exponential functions; polynomials and factoring; quadratic equations; and probability and data analysis.

<b><i>Geometry</i></b> <b>Math Credit</b>	<b>Grades 9 - 12</b>
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This is a course that emphasizes inductive and deductive methods to solve problems involving algebraic and geometric properties. Geometric vocabulary will be emphasized. Students will apply knowledge to solve real-world problems. The following units will be studied: tools of geometry; discovering and proving triangle, polygon, and circle properties; transformations and tessellations; area and volume; and, the Pythagorean Theorem.

<b><i>Algebra 2</i></b> <b>Math Credit</b>	<b>Grades 9 - 12</b>
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Algebra 2 is a continuation of Algebra I where topics are extended into more advanced uses of algebra to solve problems. A focus of this course is on the utilization of graphing of linear/nonlinear equations and their relationship to their functions/equations. These advanced ideas are used to explore better problem-solving techniques. An introduction of trigonometry will also occur.

<b><i>Business Math</i></b> <b>Math Credit</b>	<b>Grades 9 - 12</b>
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Business math is a course which focuses on real world mathematical and business applications and situations. Students begin the course with a refresher on basic math computation skills. The second part of the course deals with personal finance. Students will learn about money accounts, loans, credit, and a variety of other topics. Students will also participate in a mandatory student based enterprise where students will be running all aspects of the business including inventory, purchasing, marketing, and finances.

# **SOCIAL SCIENCES**

<b><i>Civics / Geography</i></b> <b>Social Science Credit</b>	<b>Grades 9 - 12</b>
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The emphasis of civics will be on the responsibilities and duties of American citizens and how our government operates. Students will develop a deep understanding and commitment to the principles of our founding documents. Students will also learn about the different types of governments that are in place throughout our world.

The focus of geography will be on the use of geographic concepts and skills to study the physical characteristics of our globe. Students will also develop an understanding of the many cultures of our world and how people interact with each other and their environment.

<b><i>World History</i></b> <b>Social Science Credit</b>	<b>Grades 9 - 12</b>
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This course is a broad look at the history of western civilization. It will provide the student with an overview of interactions of cultures and peoples of the world. It will focus on the development of ideas, religion, governments and societies in the western world.

***US History***  
**Social Science Credit**

**Grades 9 - 12**

U.S. History is a year-long course that examines the major events and turning points of U.S. history from the Turn of the Century (1900) through the modern age. The course leads students toward a clearer understanding of the patterns, processes, and people that have shaped U.S. history. Various projects to support the units will be assigned.

***Colorado History - Semester Class***  
**Social Science**

**Grades 9 - 12**

This course provides an enriching journey through the captivating history of Colorado. Delving into the state's past, students will explore the dynamic interactions between Native American tribes, Hispanic settlers, and Euro-American explorers, tracing the development of Colorado's diverse cultural landscape. From the Spanish influx to the era of fur traders and mountain men, the course navigates through pivotal events such as the gold rush, railroad expansion, and the silver boom, shedding light on the economic and social transformations that shaped the region. As students delve deeper, they'll analyze the impact of miner and pioneer life, twentieth-century developments, and the state's role within the broader context of national history. By unraveling the layers of Colorado's past, students will gain a comprehensive understanding of its rich heritage, from its earliest inhabitants to the vibrant modern state it is today.

## **SCIENCES**

***Earth Science***  
**Science Credit**

**Grades 9 - 12**

This class is an introductory course to the concepts of earth and physical science. Students will first learn the methods and practices of science including identifying variables, analyzing data, and utilizing the claim-evidence-reasoning framework. Units include Properties of Matter, Earth's Interior and Tectonic Processes, Earth's Landscapes and Processes, The Earth-Sun-Moon System, Our Changing Planet, and Forces and Changes in Motion.

***Biology***  
**Science Credit**

**Grades 9 - 12**

Biology is the study of life. The concepts, principles, and theories that allow people to understand the natural environment that forms the core of biology. This class discusses Genetics, Cytology, Photosynthesis, Cellular Respiration, Populations, and Ecology. Issues, concerns, and problems with life are also included with the basic principles and processes in the study of biology. Biology core concepts will be an emphasis as well as an extension of other basic science skills.

***Human Anatomy and Physiology***  
**Science Credit**

**Grades 9 - 12**

Human Anatomy and Physiology is a thorough study of the human body. This class includes a complete view of the structure and function of the various systems of the body. A&P is designed to give the student an understanding of the anatomy, organization, and functions of the human body. This is an upper level course designed to provide a comprehensive background for someone entering a health or medical related field, secondary education or training requiring knowledge of the human body.

***Environmental Science***  
**Science Credit**

**Grades 9 - 12**

Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. Environmental science includes components of geology, biology, environmental studies, ecology, and geography. Students will identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them.

# **GENERAL ELECTIVES**

***Work Study Program***  
**Elective Credit**

**Grade 9 - 12**

The internship program is designed to provide students with practical, hands-on experience. Throughout the program, interns will have the opportunity to collaborate with experienced professionals, explore their interests, and develop essential skills for future career success.

Program Objectives:

1. Gain practical experience in industry
2. Develop professional skills such as communication, teamwork, problem-solving, and time management.
3. Receive mentorship and guidance from experienced professionals in the field.
4. Build a professional network and establish connections for future career opportunities.

Students will meet with the teacher at least one day a week and complete at least 40 hours of work a month.

Managers of employees will be surveyed to discuss the students work and attendance, and grades will be based on that survey.