

**Young Scholars of Central Pennsylvania Charter School**  
**Middle School IB Middle Years Program**  
**Scope and Sequence of Curriculum**

Guided by the International Baccalaureate middle years programme(MYP) curriculum framework, our instructional staff of highly qualified teachers provides a rigorous and thorough program of instruction based upon the Pennsylvania Core and Academic Standards for students in grades six through eight. Classrooms are organized to meet the instructional needs of students and various methods and materials are used to achieve high educational standards.

Middle school children are involved in a period of more extensive change than at any other time of life. Their physical, social, emotional, and intellectual growth and development are rapid. To assist our students in the formulation of new pictures of themselves, YSCPCS provides exposure to a variety of experiences and ideas. Like all human beings, children need opportunities for power, belonging, freedom, and fun in order to build self-worth and achieve personal success. In our school, content and methods are designed to provide appropriate ways for our students to fulfill these needs. Small groups of teachers and students working together allow students to feel accepted, secure, and nurtured so that learning can take place. Our school also encourages students to develop conviction in their own values, to create plans for achieving realistic goals, and to see themselves as responsible for their actions and the consequences.

The MYP is designed for students aged 11 to 16. It provides a framework of learning that encourages students to become creative, critical, and objective thinkers. The MYP emphasizes intellectual challenge, encouraging students to make connections between their studies in traditional subjects and the real world. It fosters the development of skills for communication, intercultural understanding, and global engagement—essential qualities for young people who are becoming global leaders.

The MYP is flexible enough to accommodate most national or local curriculum requirements. It builds upon the knowledge, skills, and attitudes developed in the IB Primary Years Programme

(PYP) and prepares students to meet the academic challenges of the IB Diploma Programme (DP) and the IB Career-related Programme (CP).

The IB Middle Years Programme:

- addresses holistically students' intellectual, social, emotional and physical well-being
- provides students opportunities to develop the knowledge, attitudes, and skills they need in order to manage complexity and take responsible action for the future
- ensures breadth and depth of understanding through study in eight subject groups
- requires the study of at least two languages (the language of instruction and additional language of choice) to support students in understanding their own cultures and those of others
- empowers students to participate in service within the community
- helps to prepare students for further education, the workplace, and a lifetime of learning.

**The International Baccalaureate® (IB) Middle Years Programme (MYP) comprises eight subject groups:**

Language acquisition.

Language and literature.

Individuals and societies.

Sciences.

Mathematics.

Arts.

Physical and health education.

Design.

The MYP requires at least 50 hours of teaching time for each subject group in each year of the programme. Each year, students in the MYP also engage in at least one collaboratively planned interdisciplinary unit that involves at least two subject groups.

MYP students also complete a long-term project, where they decide what they want to learn about, identify what they already know, discovering what they will need to know to complete the project, and create a proposal or criteria for completing it

### **Our approach to teaching and learning**

The MYP aims to help students develop their personal understanding, their emerging sense of self, and responsibility in their community.

Teaching and learning in the MYP are underpinned by the following concepts:

Teaching and learning in the context

Students learn best when their learning experiences have context and are connected to their lives and their experience of the world that they have experienced.

Using global contexts, MYP students develop an understanding of their common humanity and shared guardianship of the planet through developmentally appropriate explorations of:

identities and relationships

personal and cultural expression

orientations in space and time

scientific and technical innovation

fairness and development

globalization and sustainability.

## Conceptual understanding

Concepts are big ideas that have relevance within specific disciplines and across subject areas. MYP students use concepts as a vehicle to inquire into issues and ideas of personal, local and global significance and examine knowledge holistically. The MYP prescribes sixteen key interdisciplinary concepts along with related concepts for each discipline.

## **Approaches to learning**

A unifying thread throughout all MYP subject groups, approaches to learning (ATL) provide the foundation for independent learning and encourage the application of their knowledge and skills in unfamiliar contexts. Developing and applying these social, thinking, research, communication, and self-management skills helps students learn how to learn.

## **Service as action, through community service**

Action and service have always been shared values of the IB community.

Students take action when they apply what they are learning in the classroom and beyond. IB learners strive to be caring members of the community who demonstrate a commitment to service—making a positive difference to the lives of others and to the environment.

Service as action is an integral part of the programme, especially in the MYP community project.

## **Inclusion and learning diversity in MYP**

As part of the MYP curriculum, schools address differentiation within the written, taught, and assessed curriculum.

This is demonstrated in the unit planner and in the teaching environment, both of which are reviewed during programme authorization and evaluation.

The MYP allows schools to continue to meet state, provincial, or national legal requirements for students with access needs. Schools must develop an inclusion/special educational needs (SEN) policy that explains assessment access arrangements, classroom accommodations, and curriculum modification that meet individual student learning needs.

### **STEM education in the MYP**

The MYP curriculum focuses on STEM as an important perspective from which to consider integrated teaching and learning in concepts and skills related to science, technology, engineering, and mathematics.

### **Language and Literature**

In the middle school Language and literature program, students are expected to further develop English language arts skills taught in lower grades and are introduced to new skills and practices which they will continue to cultivate in grades six through eight. Language and literature curriculum includes non-fiction, literature, reading strategies, vocabulary, formal writing, creative writing, grammar, and oral communication components.

Language and literature curriculum encourages students to read and analyze the important elements of fiction and nonfiction works of increasing sophistication, and to respond to those works orally and in writing. Students engage frequently in close readings and text-dependent analysis and are asked to make connections between the text, themselves, and their world.

New words acquired from non-fiction, poetry, and literature serve as the basis for sixth through eighth-grade students' vocabulary development. Morphology, synonyms, antonyms, pronunciations, prefixes, suffixes, definitions, related forms, and analogies are studied at all grade levels, and students are given the skills necessary to develop their personal vocabulary.

The middle school curriculum is based on the premise that grammar can best be taught through writing practice. Emphasis is placed on proper usage in context rather than on the study of grammar concepts in isolation. The ultimate goal of this aspect of the Language and literature

curriculum is to encourage students to use more sophisticated grammar in their writing and speech.

Students continue to improve their writing skills developed in elementary school, and use the writing process to complete narrative, persuasive, and informative essays. They also maintain a self-evaluation portfolio in which they continually evaluate and reflect upon their work in order to establish personal academic goals.

Language and Literature skills covered by course:

#### 6th grade

- Text-dependent analysis
- Summarization
- Close reading
- Identifying context clues
- Identifying theme, audience, purpose, and form/structure
- Essay composition
- Completing the writing process
- Creative composition
- Analogical composition
- Morphology
- Vocabulary
- Speaking, listening

#### 7th grade

- Text-dependent analysis
- Summarization
- Close reading
- Identifying context clues

- Identifying theme, audience, purpose, and form/structure
- Essay composition
- Completing the writing process
- Creative composition
- Analogical composition
- Morphology
- Vocabulary
- Speaking, listening

### 8th grade

- Text-dependent analysis
- Summarization
- Close reading
- Identifying context clues
- Identifying theme, audience, purpose, and form/structure
- Essay composition
- Completing the writing process
- Creative composition
- Analogical composition
- Morphology
- Vocabulary
- Speaking, listening

### **Mathematics**

The middle school program continues to build upon the skills developed in the elementary program through leveled courses guided by Illustrative Math, Glencoe and Pearson's curricula. In addition to working with whole numbers, fractions, and decimals, work is also done with

percents, integers, measurement, and geometry. Emphasis is placed on students understanding the process of solving problems as well as the practical application of these skills.

Mathematics skills covered by course:

6th grade

- Ratios and proportional relationships
- The number system
- Expressions and equations
- Geometry
- Statistics and probability

7th grade

- Ratios and proportional relationships
- The number system
- Expressions and equations
- Geometry
- Statistics and probability

8th grade

- The number system
- Expressions and equations
- Functions
- Geometry
- Statistics and probability

Pre-algebra

- Operations with integers and rational numbers
- Powers and roots
- Ratio, proportion, and similar figures
- Percents
- Algebraic expressions
- Equations and inequalities
- Linear functions
- Statistics and probability
- Congruence, similarity, and transformations
- Volume and surface area

### Algebra 1

- Foundations of Algebra
- Solving and systems of equations and inequalities
- Introduction to functions and linear functions
- Polynomials and factoring
- Quadratic functions and equations
- Radical expressions and equations
- Rational expressions and functions
- Data analysis and probability

### Geometry

- Points, Lines, Planes and Angles
- Proof
- Perpendicular and parallel
- Triangles
- Similarity
- Right triangles and trigonometry
- Quadrilaterals

- Transformations

### **Individuals and Societies - Geography, History, Civics and Government, Economics**

The middle school Individuals and Societies curriculum focuses on Pennsylvania state history, American history of the 19<sup>th</sup> century through the present day, and early civilizations around the world. The middle school curriculum is guided by Pearson's My World social studies curricula.

While these courses focus on history, social studies encompass many other fields. Students will be called upon to exercise and improve their skills in geography, economics, and political science. Class readings will help students increase their comfort with subject-specific and general vocabulary. Research skills will be an important part of the long-term projects that are completed. Properly formatted bibliographies will be required with any research assignment.

Individuals and Societies skills covered by grade:

Sixth grade

- Civil War
- Reconstruction
- Westward expansion
- Industrialization
- Progressive movements
- Spanish-American War
- World War I
- Pennsylvania history

Seventh grade:

- Roaring twenties
- Great Depression
- World War II

- Cold War
- Modern history

Eighth grade:

- Mesopotamia
- Southwest Asia
- Greece
- Rome
- Byzantine civilization
- Islamic civilization
- Africa
- The America's
- European Middle Ages
- Renaissance
- Current events

## **Science**

The middle school science program is a general science program that encompasses life science, physical science, and earth science guided by Pearson's Interactive Science curricula. The program emphasizes hands-on activities as a means to master the scientific method with emphasis placed on inquiry, observations, and interpretations.

Science topics covered by grade:

Sixth grade:

- Sound and Light
- Astronomy

- Geology

Seventh grade:

- Metric System/Measuring
- Cells and Heredity
- Ecology
- Water

Eighth grade:

- Physics
- Energy
- Electricity
- Chemistry

## **Design**

Design is the unique component of MYP Program. We believe that learning with Design will help our students to achieve 21<sup>st</sup> century skills. For example, Design class engages our students with the real-world data, tools, and experts they will encounter in college, on the job, and in life.

As part of the Middle Years Programme (MYP), design challenges all students to:

apply practical and creative thinking skills to solve design problems

explore the role of design in both historical and contemporary contexts

consider their responsibilities when making design decisions and taking action.

MYP design focuses on a holistic design process rather than final products and solutions. MYP uses the design cycle as a way to structure: inquiry and analysis of design problems,

development and creation of feasible solutions, and testing and evaluation of students' models, prototypes, products or systems.

## **Visual Arts**

In the middle school art program, students will problem-solve through the production of art. Artwork assignments are approached through problem-solving. The problem is posed and is materials supplied, students are then expected to give their best attempt at a solution while meeting all the criteria of the problem. Artistic talent is not necessary. Students will study a variety of modern art as well as contemporary art, examining how works of art are created, techniques used, variety of media, and the purpose(s) for which they are made.

Art skills covered in middle school:

- Proper handling of materials and equipment management
- Analyze works of art through a variety of lenses
- Use self-interests to inform works of art
- Conceptualize works of art
- Use technology to gather information about a work of art, artist, or culture
- Examine and criticize works of art in written and verbal form
- Understand the language of visual communication

## **Performing Arts**

A middle school music teacher works with children to develop an appreciation of and interest in music. The program focuses on learning and applying music theory and history.

All middle school students may choose to learn how to play a woodwind, brass, or percussion instrument and participate in the school band. Students also have the opportunity to join the choir.

The choir and band perform at the school throughout the school year in concert as well as for special school functions.

Music skills covered in middle school:

- More in-depth music history and theory through singing, playing, moving to, reading, and writing music

### **Physical and Health Education**

The middle school physical and Health education program includes activities that assists each student to attain and maintain a desirable level of physical fitness, develop desirable competencies for participation in lifetime sports, promote an understanding of the relationship between regular physical activity and health, provide sports, games, and other physical activities that promote self-confidence and the ability to work in a group, and provide co-educational instruction at the middle school level.

Good personal health habits and safety are fostered throughout all levels of the middle school health education program. Each student in grades six through eight receives one period of health per week. The focus of the middle school health program is personal health and safety and community health concerns. Course material will be geared towards opening students' eyes to health issues and how they would be affected by them.

Physical Education skills covered in middle school:

- Lifelong Fitness and Fitness Testing
- Lifelong Sports and Activities
- Recreational Game Play
- Team Sport Play

Health topics covered in middle school:

- Mental and social health
- Human growth and development
- Personal health
- Safety and first aid
- Physical fitness
- Infectious and noninfectious diseases
- Drugs and alcohol
- Hygiene
- Environmental and community health

### **Language acquisition Chinese and Spanish**

Students in middle school receive instruction in two world languages, Spanish and Chinese, daily with the option of taking Turkish as their third world language. Classes are offered based on students' oral proficiency level (OPI). Students who have not received any world language instruction or their OPI is Novice Low will be placed in Level I language class. Students who have taken Spanish or Chinese and their OPI is Novice Mid will be placed in Level II language class. Students who have an OPI at least Novice High will be placed in Level III language class.

World language skills covered in middle school:

### **Chinese**

- Self introduction
- Family
- Animals
- Adjectives and action words
- Like/dislike
- Nationality

- Daily routine
- Sports
- Food
- Clothes
- Dream house
- Giving directions
- Making a reservation
- Doctor's office (conversation with the nurse and the doctor)
- Shopping
- Comparison
- Describing what they did
- Future planning
- Reading and writing

## **Spanish**

- Advanced introductions with greetings and saying their name
- Asking and responding to questions concerning their birthday
- Asking and responding to questions concerning the date and the time
- Describing themselves and others
- Where they go to school
- What grade they are in
- Where they live
- Their phone number
- Likes and dislikes
- Their personality
- Their nationality
- Describe their daily routine
- Learn and/or increase vocabulary concerning animals, fruits and foods, body parts, family members, countries, activities and sports, rooms and furniture in a house, giving

directions, telling their favorite season and the rationale, occupations, modes of transportation, what they wear, questions and responses dealing with time, and emotions/feelings.

- Grammatical concepts such as the present continuous, present perfect, gerund and participle building, reflexive verbs, direct and indirect object pronouns, the future and conditional tense.

## **Electives**

All students in sixth through eighth grade get to choose an elective that they would like to participate in for one period every day. The electives offered are supportive of different student interests. Each school year, Electives to be given will be chosen based on student's interest and teachers' availability. Below are classes offered past years.

### **Film Studies( semesterly)**

This class provides an introduction to the basic tools of film analysis. We will examine how elements like mise-en-scène, cinematography, editing and sound work together to create meaning in a range of films. Students will learn how to properly critique and review films, based on more than basic enjoyment. Film Studies will help to provide you with the skills to analyze film aesthetics, as well as the tremendously important role movies play in our culture.

### **Home Economics( Semesterly)**

This class is an elective choice in which students will learn life skills, skills vital to life outside of school. Such topics include: resume writing, letter writing, interview skills, filling out an envelope, cooking, hand sewing, pet care, cleaning, and more. This class is very hands on and interactive.

### **Science Olympiad/ Environmental Club ( Yearly)**

The Science Olympiad is a science competition held at invitational, regional, and national levels. Students spend their elective time preparing for the competitions by choosing competition events that they would like to compete in. Students pair up and work together on their individual projects which include building hovercrafts, bottle rockets, designing experiments, and more. After the competition is held, Students will be working on projects of landscaping, cleaning wetland etc.

### **Turkish (yearly)**

This fun, interactive elective course is filled with diverse multimedia activities by focusing on introducing Turkish language and culture. Turkish language, history, and culture are taught through reading, writing, conversation and listening.

### **HOPS (Homework, Organization, Planning Strategies)(Semesterly)**

This course provides students with organization, time management, and planning skills. It helps students achieve their full academic potential. This method is highly effective at improving organization skills, decreasing homework problems, raising grade point averages, and creating long-term successes. It is rewards-based and it is a course that is valuable for life.

## **Public Speaking( semesterly)**

Would you like to improve your IB project presentation skills? Are you passionate about a topic or idea and would like to share it with your classmates and school community? In this class, we will become experts in:

. Identifying the elements of public speaking and what makes a great idea worth sharing

- Researching, developing and presenting an idea
- Creating visuals to tell a compelling story
- Using best practices for camera, lighting, and sound

## **Strength and Conditioning( semesterly)**

In strength and conditioning, students will participate in vigorous physical activity designed to improve fitness and athletic performance (when weather allows). In the classroom, students will learn about anatomy (how the human body is structured) and kinesiology (study of movement).

## **Personal Finance and Typing( semesterly)**

Students will learn about skills they will need as they get older. Personal finance will include researching banks, loans, and creating a budget based on a possible future career for the student. Students will also learn how to use Google Sheets to help keep this organized. After personal finance, students will spend time learning how to type using home row keys, sending formal emails.

## **Coding(semesterly)**

An introductory class on how to code with the Python Language. Students will be learning about the basics of coding and then start learning the Python coding language.

### **Stock Market(semesterly)**

In this elective, we will learn the basics of finance, saving and investment. Students will be able to learn the basics of investing in the stock market, when to buy and when to sell a stock.

Therefore, students will learn to manage a portfolio of stocks and learn the importance of saving for their long-term future