Northville Public Schools

Middle School Course Descriptions

Hillside Middle School
Meads Mill Middle
School Grade 6

2018-2019

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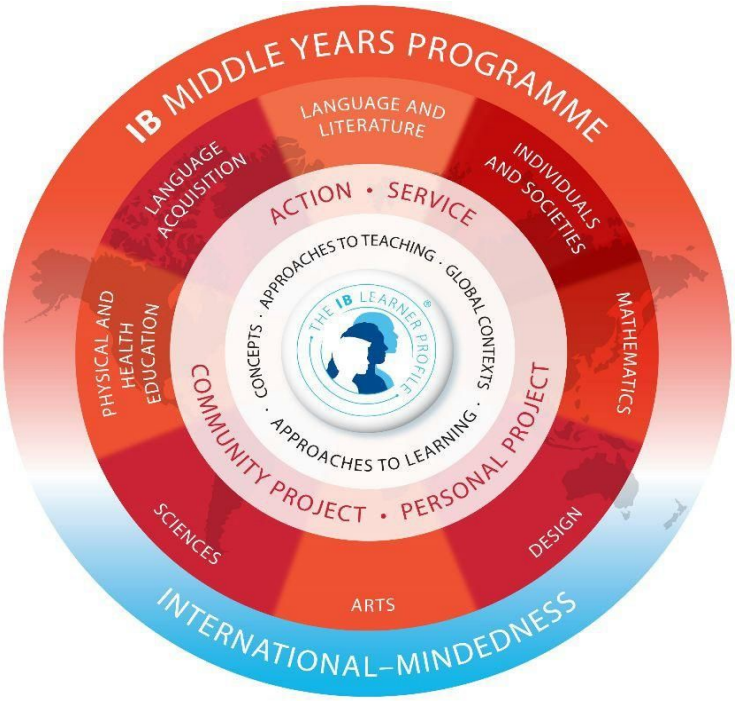
International Baccalaureate Middle Years Program



Northville Public Schools is an accredited institution of the International Baccalaureate Middle Years Program (IB MYP). The IB program places a heavy emphasis on the education of the whole child. As a result course offerings for middle school students are designed to provide a rich and rigorous experience for students in all eight of the IB MYP categories. Below is an overview of specific course descriptions by department and grade.

Courses in Language and Literature (English), Math, Individuals and Societies (Social Studies), Science, and Band will meet every day all year.

Courses in Arts (excluding Band), Design, Language Acquisition (French, German, Spanish, and Mandarin) and Physical and Health Education will meet every other day all year.

IB Requirements	
A DAY	**B DAY**
Language and Literature	
Math	
Science	
Individuals and Societies	
Enrichment	
Language Acquisition	Physical and Health Education
Band/Design/PLTW differ per student	

ACADEMIC RESOURCE

Students are placed in Academic Resource by committee approval only and must maintain a minimum of 80% to remain eligible for this course.

Academic Resource is the middle school enrichment program for academically talented students. This full year course offers a humanities based, problem-solving approach to learning. The purpose of the course is to allow academically talented students to experience an innovative and challenging curriculum. Each grade level is exposed to a variety of grade appropriate topics promoting inquiry and a deeper understanding of global themes. Emphasis is also placed on the unique social needs of academically talented students.

THE ARTS

The arts are a universal form of human expression and a unique way of knowing that engage us in effective, imaginative and productive activities. Learning through the arts helps us to explore, shape and communicate our sense of identity and individuality. A focus on the individual enhances our self-confidence, resilience and adaptability. It encourages our sense of belonging and community through the recognition of identities. During adolescence, the arts provide an opportunity for age-appropriate and holistic development of the social, emotional, intellectual and personal intelligences of the student.

In MYP arts students have opportunities to function as artists, as well as learners of the arts. Artists have to be curious. By developing curiosity about themselves, others and the world, students become effective learners, inquirers and creative problem-solvers. Students develop through creating, performing and presenting arts in ways that engage and convey feelings, experiences and ideas. It is through this practice that students acquire new skills and master those skills developed in prior learning. [p4 - IB Arts guide]

BAND

Sixth Grade Band meets daily.

Band 6

This is a yearlong performance based class for students with no prior band experience. Students may start on flute, clarinet, trumpet, trombone, baritone, or percussion. *Previous piano experience is expected for percussion students.* A good quality instrument is essential for student success. Students need to obtain their own instrument for class. The school will host a rental night in the fall at which time families may rent or purchase an instrument for their student. In order to maintain a balanced ensemble, final instrumentation may be at the discretion of the teacher.
The band program is a sequential program that teaches students to play a band instrument through the intermediate level. Students are given instruction in the areas of performance, music literacy, listening, analysis, music technology, and music history. During this process, students learn to make connections between music of different cultures. Students will also learn the care of the instrument, and the fundamentals of playing the instrument. Instruction is given in rhythmic reading with attention given to understanding of time signatures. Students learn musical terminology, key signatures, scales, and ensemble skills. They perform as soloists, and as an ensemble, and in both settings experience the necessary steps to achieve excellence. Students will incorporate a variety of technology that enhances their learning experience. They will also develop skills to enable them to be lifelong learners and lovers of music.

Students are required to practice roughly 1 ½ hours a week on their band instrument.

Chorus 6
Express yourself through music! In this class, students explore music through a variety of musical activities. These hands on activities may include music games, class projects, fundamentals of proper singing, and music reading. Students will explore the overarching question, “How do we communicate?” through singing and performing for an audience. It is the goal of each choir to perform in one or more required concerts and may include a field trip. Students will wear appropriate concert attire.

Art 6
Students will create two and three dimensional pieces of art in order to answer the question, “What is Art?” The Elements of Art and Principles of Design will be investigated as well as art history, aesthetics, and criticism. Students will improve their communication skills as well as learn to take risks. Students will have hands on experience with drawing from their imaginations, seeing and drawing realistically, painting, ceramics, and other types of sculpture. Individual expression and creativity is expected.

INDIVIDUALS AND SOCIETIES (Social Studies)

MYP individuals and societies encourages learners to respect and understand the world around them and equips them with the necessary skills to inquire into historical, contemporary, geographical, political, social, economic, religious, technological and cultural factors that have an impact on individuals, societies and environments. It encourages learners, both students and teachers, to consider local and global contexts.

MYP individuals and societies incorporates disciplines traditionally studied under the general term “the humanities” (such as history and philosophy), as well as disciplines in the social sciences (such as economics, business management, geography, sociology and political science). [p4 - IB Individuals and societies guide]

Individuals and Societies 6
Sixth grade Individuals and Societies focuses on the economy, geography, history and civics of the Western Hemisphere. The curriculum fosters a global perspective and student awareness of their role in a global community. Using a variety of media, students explore the topics of conflict, human environment interaction, and the importance of the individual in history. Learning is inquiry driven, as students strive to approach and respond in multiple ways to unit questions.

LANGUAGE AND LITERATURE (English Language Arts)

All IB programmes value language as central to developing critical thinking, which is essential for the cultivation of intercultural understanding, as well as for becoming internationally minded and responsible members of local, national and global communities. Language is integral to exploring and sustaining personal development and cultural identity, and provides an intellectual framework to support conceptual development. The six skill areas in the MYP language and literature subject group—listening, speaking, reading, writing, viewing and presenting—develop as both independent and interdependent skills. They are centred within an inquiry-based learning environment. Inquiry is at the heart of MYP language learning, and aims to support students' understanding by providing them with opportunities to independently and collaboratively investigate, take action and reflect. [p4 - IB Language and literature guide]

Language and Literature 6

Language and Literature 6 is a comprehensive reading, writing, speaking and listening program. A variety of activities are used to help students build an appreciation of global literature. Students will read and comprehend short stories, novels, and informational texts. Using strategies and problem solving skills, they will also examine how these texts connect to the world around them and evaluate literature through a variety of lenses. Students will develop their understanding of correct grammar usage and spelling. Utilizing the writing process, they will write multiple pieces including a narrative story and a persuasive letter. In addition, students will conduct a research project. Students will learn how to analyze language for meaning. Through reflection and inquiry, students will understand that language is a vehicle for effective communication as well as a process that evokes ideas and guides learning.

LANGUAGE ACQUISITION [French, German, Spanish, Mandarin]

The ability to communicate in a variety of modes in more than one language is essential to the concept of an international education that promotes multilingualism and intercultural understanding, both of which are central to the IB's mission. The study of additional languages in the MYP provides students with the opportunity to develop insights into the features, processes and craft of language and the concept of culture, and to realize that there are diverse ways of living, behaving and viewing the world. [p4 - IB Language acquisition guide]

Students must be able to study at least:

• one additional language (or a second language from the language and literature subject group) sustained across the entire year in each year of the MYP
• the same additional language in each year of the MYP, *or* achieve a satisfactory

proficiency in phase 4 in order to transfer to another language. (It is up to each individual school to determine the grade deemed as satisfactory for the transfer to be approved.)

Grade 6 [**French, German, Spanish, and Mandarin**]

- full year required course
- meets every other day

This course lays the foundation for further study of the target language. Students will be exposed to the French, German, Hispanic or Mandarin culture and language making connections and comparisons with the English-speaking world. Basic vocabulary and grammar will be introduced through a variety of activities in the four skill areas of reading, writing, listening, and speaking. This course continues in 7th grade. **(Student must take the same language grades 6-10 per MYP Policy).**

MATH

An MYP mathematics programme should be tailored to the needs of students, seeking to intrigue and motivate them to want to learn its principles. Students should see authentic examples of how mathematics is useful and relevant to their lives and be encouraged to apply it to new situations. Mathematics provides the foundation for the study of sciences, engineering and technology. However, it is also evident in the arts and is increasingly important in economics, the social sciences and the structure of language. Students in the MYP are encouraged to use ICT tools to represent information, to explore and model situations, and to find solutions to various problems. These are skills that are useful in a wide range of arenas. MYP mathematics aims to equip all students with the knowledge, understanding and intellectual capabilities to address further courses in mathematics, as well as to prepare those students who will use mathematics in their studies, workplaces and lives in general. [p4 - IB Mathematics guide]

Math 6

The foundation of this course is the Sixth Grade Common Core State Standards for Mathematical Content and Standards for Mathematical Practice. This course opens doors to abstract thought, reasoning, and inquiry as students persevere to master the content. Students will be exposed to highly motivating and relevant problems to challenge their mathematical understanding. This course will focus on five critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers; (3) writing, interpreting, and using expressions and equations; (4) developing understanding of statistical thinking; and (5) reasoning about relationships among shapes to determine area, surface area, and volume. This course builds mathematical understanding and supports student application of key mathematical concepts.

Advanced Math 6
The foundation of this course is the Sixth Grade Common Core State Standards for Mathematical Content and Standards for Mathematical Practice. This course curriculum incorporates grade level standards and pushes students to evidence their learning by applying their knowledge of key math concepts. When appropriate, standards are accelerated to further challenge students and their analytical skills. This course is for math precocious students who relish the rigor and pace of an honors level class. Students will be asked to understand mathematical practices and demonstrate knowledge of these practices by completing higher-level conceptual problems and performance tasks.

- Please see website for information on placement into higher level math courses: www.northvilleschools.org

PHYSICAL AND HEALTH EDUCATION

MYP physical and health education aims to empower students to understand and appreciate the value of being physically active and develop the motivation for making healthy life choices. To this end, physical and health education courses foster the development of knowledge, skills and attitudes that will contribute to a student's balanced and healthy lifestyle. Through opportunities for active learning, courses in this subject group embody and promote the holistic nature of well-being. Students engaged in physical and health education will explore a variety of concepts that help foster an awareness of physical development and health perspectives, empowering them to make informed decisions and promoting positive social interaction. [p4 - IB Physical and health education guide]

Physical Education 6
Students will develop skills that will assist in a lifelong interest in and enjoyment of physical activities as a participant. Students will perform a daily routine of stretching, aerobic/anaerobic exercises and sport unit lessons. Units will include team and individual sports, health related fitness activities as well as a standardized fitness test. Lessons within these units will teach the appropriate motor skills and basic strategies for the various sports. The fitness test unit will be effort based and focus on performing the tests in accordance with the standards. Results will be compared to the criterion based standards at the end of the year. Students will be assessed on the following areas: motor skills performance, cognitive knowledge of sport and using physical education terminology in context. The student will also be assessed on behavior, effort, attitude, sportsmanship and responsibility. Students will be introduced to the various aspects of a sports unit such as video lesson, skill work, game play with team and cognitive and skill testing. Units include Fitness testing, Health related fitness activities: Frisbee, Flag Football, Lacrosse, Volleyball, Soccer,

Team Handball, Bowling, Badminton, Basketball, Floor Hockey, Track and Field, Softball, Kickball, Frisbee Golf. Students will be open-minded to explore new activities. Students will also learn how to analyze and explain game related strategies.

SCIENCE

With inquiry at the core, the MYP sciences framework aims to guide students to independently and collaboratively investigate issues through research, observation and experimentation. The MYP sciences curriculum must explore the connections between science and everyday life. As they investigate real examples of science applications, students will discover the tensions and dependencies between science and morality, ethics, culture, economics, politics, and the environment. [p4 - IB Science guide]

Science 6
The curriculum is one that will allow students to think critically as inquirers, while working in a hands-on, minds-on fashion to connect science to their daily lives through activity oriented instruction. Students will become interested and engaged in the role of science in their world. Each student will become knowledgeable, reflective thinkers as they explore physical, earth, and life science. Physical Science will include the study of matter and energy. Earth Science will focus on the Earth's surface and how its changes affect the environment we observe. Life Science will involve the study of ecosystems and biodiversity. Students will take part in a project that reflects on the negative human impact on local ecosystems and the way we can positively influence our surroundings.

DESIGN CYCLE

Digital Journey 6 – Full Year Every Other Day
Students will use productivity applications to cover the Michigan Department of Education's educational technology standards and expectations for middle school students. No prior experience is required. Students in this course will survey word processing, spreadsheets, databases, and presentations through projects like Entrepreneur where students gain respect for others and an appreciation of similarities and differences through planning a restaurant and incorporating the IB Design Cycle: investigate, plan, design, create and evaluate. Students will also address digital citizenship and responsible use practices to create an awareness of global issues and a willingness to act responsibly. Students will also develop and review fundamental keyboarding skills.

Project Lead the Way Design and Modeling and Science of Technology: In 6th grade PLTW is embedded into Academic Resource and Enrichment.

PLTW Gateway provides engineering and biomedical science curriculum for middle school students that challenges, inspires, and offers school's variety and flexibility. Students get rigorous and relevant experiences through activity-, project-, and problem based learning. They use industry leading technology to solve problems while gaining skills in communication, collaboration, critical thinking, and creativity.

Design and Modeling
In Design and Modeling Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

Science of Technology
In Science of Technology students apply the concepts of physics, chemistry, and nanotechnology to STEAM activities and projects, including making ice cream, cleaning up an oil spill, and building roller coasters.