

# **Noor International Academy**

**37412 Dequindre Road, Sterling Heights, MI 48310  
Ph. (586) 365-5000 Fax (586) 365-5001**



**ELEMENTARY &  
MIDDLE SCHOOL  
COURSE OFFERINGS**

**GRADES  
Pre-K – 7  
2019-2020**

# **TABLE OF CONTENTS**

## **Contents**

<b>Mission .....</b>	<b>3</b>
<b>PHILOSOPHY .....</b>	<b>3</b>
<b>The Four Pillars of HES and the Academy .....</b>	<b>4</b>
<b>Educational program .....</b>	<b>5</b>
<b>High Scope Curriculum .....</b>	<b>6</b>
<b>Foreign Language in Pre-School .....</b>	<b>8</b>
<b>COMPUTER AND INFORMATION SCIENCES DEPARTMENTS.....</b>	<b>9</b>
<b>PHYSICAL HEALTH AND SAFETY EDUCATION DEPARTMENT.....</b>	<b>14</b>
<b>FINE AND PERFORMING ARTS DEPARTMENT .....</b>	<b>16</b>
<b>SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS (STEM).....</b>	<b>19</b>
<b>LIFE AND PHYSICAL SCIENCES DEPARTMENT .....</b>	<b>19</b>
<b>MATHEMATICS DEPARTMENT .....</b>	<b>24</b>
<b>ACADEMIC ENRICHMENT, TUTORIAL &amp; MISCELLANEOUS COURSES .....</b>	<b>26</b>
<b>LITERACY ACROSS THE CURRICULUM (LAC) .....</b>	<b>27</b>
<b>ENGLISH LANGUAGE AND LITERATURE DEPARTMENT .....</b>	<b>28</b>
<b>SOCIAL SCIENCES AND HISTORY DEPARTMENT.....</b>	<b>30</b>
<b>FOREIGN LANGUAGE AND LITERATURE DEPARTMENT .....</b>	<b>33</b>

Dear Student,

Welcome to Noor International Academy, where learning is exciting! We have put together this course description handbook to help you decide and choose the right classes for the 2019-20 school year.

The course abstracts will help you understand what each class has to offer. Some courses have prerequisites, be sure to pay attention to these requirements prior to your selection, your counselor or counselor advocate and or your principal can assist you if you have any questions.

Remember, the best choices are made by students who carefully study this information, explore their career goals, and share their high school plans with their parents. ***"We Soar High"***.

### **Mission**

The mission of Noor International Academy is to provide its students with quality education that focuses on the Michigan core curriculum and international cultures, including the study of a language, culture, and history different from one's own.

The Academy shall provide an education that will enable the various ethnic traditions, values, and experiences of students to enrich and nurture one another. Moreover, the Academy shall provide an education of the whole child by integrating the different aspects of children's learning and lives so as to make them more meaningful.

The Academy will prepare its students to be independent lifelong learners and productive working members of a global society through acquired diverse knowledge, experiences and skills. The Academy shall provide an environment that encourages students to become upright responsible decision-makers, reflective of equity, respect and understanding, maximizing each individual's intellectual, physical, psychological and moral self by utilizing a unique safe and orderly environment that is conducive to learning to meet the challenges of this ever-changing world.

### **PHILOSOPHY**

Noor International Academy believes that...

- ☞ Quality education enhances the student's mental, physical, and emotional abilities and promotes altruistic thinking in this diverse and divided world.
- ☞ Quality education integrates teaching the ethnic and cultural traditions and values into the academic program and develops an awareness of their self, identity, and obligations towards self, family, community, society and the world.
- ☞ A successful school inspires the joy of learning.
- ☞ All students are capable of learning and can reach their potential if given the opportunity.
- ☞ Learning is an on-going life-long process.
- ☞ Successful learning requires active participation and involvement in the school by parents and the community.

Effective schools promote teaming, collaboration and shared decision-making among staff, students, and community.



## The Four Pillars of HES and the Academy

Education at Hamadeh Educational Services and its academies is centered around FOUR PILLARS and instilling these values, ideals, and principles in ourselves and in our students. We - all students *and* staff of HES – believe in and strive to embody the following characteristics, habits, traits, and values...

### **I. Scholarship** (based on a commitment to life-long learning)

- ✚ We are educated – familiar and informed regarding well-known concepts and ideas.
- ✚ We are inquisitive – questioning, examining, and exploring what we see/are presented with.
- ✚ We are intellectual – able to think things through, reason, and problem-solve.
- ✚ We are reflective – taking stock of how we're progressing academically and making plans for ongoing improvement.

### **II. Character** (based on learning/acquiring habits and traits that will make one successful in *all* aspects of life, including being a leader/an example for others to follow, instilled with a sense of contribution and fulfillment)

- ✚ We have true grit.
  - We are self-motivated, driven, ambitious, and determined; we possess strong will power.
  - We are self-disciplined/self-controlled.
  - We are optimistic and confident.
  - We are tenacious, resilient, and able to persevere in the face of obstacles.
  - We understand that failure is an important and integral part of the road to success.
  - We possess a strong work ethic.
- ✚ We are honest, trustworthy, and principled.
- ✚ We are fair, moral, and ethical.
- ✚ We are respectful to ourselves, family, and all others.
- ✚ We have integrity and the strength/fortitude to stand up for our rights and what we believe in.
- ✚ We are reflective and accountable--able to admit when we are wrong, accept responsibility for our wrongdoings, and willing to learn from our mistakes.
  - We are forgiving and apologetic whenever necessary.
- ✚ We are appreciative and humble, instilled with a sense of modesty.
- ✚ We are willing, effective, and respectful communicators—even when we disagree with others or have others disagree with us.
- ✚ We are empathetic, caring, kind, understanding, and open-minded.
- ✚ We are balanced and successfully able to “juggle” the different roles of life.
- ✚ We are courageous, brave, and smart risk-takers.
- ✚ We are passionate and enthusiastic with a zest for life.
- ✚ And because we have strong character, we undoubtedly have a strong sense of contribution.
  - We are actively engaged and have a strong willingness to make a difference in the lives of others.
  - We desire to help others (based on our own intrinsic motivation to do so and a sense of responsibility to others).
  - We possess a sense of benevolence.
  - We have an innate sense of giving and generosity.

### **III. Culture** (based on a sense of respecting, honoring, understanding, and valuing the practices, ideas, and experiences shared by a common group—integral when building community)

- ✚ We realize just how crucial it is to know, understand, and appreciate our own culture.
- ✚ We know how vital culture is to all peoples and that we must seek to understand not only our own culture, but the culture of other peoples as well.
- ✚ We value, respect, and understand how the common experiences of a group/community help shape the way its members understand the world—that culture is a collective, agreed-upon set of familiar

values, beliefs, perspectives, practices, products (e.g. books, foods, laws, dress, music, arts and crafts, games, etc.), and ideas that bind a group together in harmony.

- ✚ We appreciate and value how one's culture influences one's views, ideas, loyalties, perspectives, fears, hopes, and other characteristics.
- ✚ We understand and empathize with the concept that while all groups/cultures certainly have diverse and distinctive characteristics, all cultures are composed of human beings who ultimately share the same basic needs and want the same things in life: physical needs (food, water, etc...), safety and security, supporting relationships--specially family, a sense of accomplishment and realization of hopes and dreams, etc.
- ✚ We realize that each cultural group has unique strengths and perspectives that the larger community – the world – can benefit from.
- ✚ We are aware that understanding culture and cultural differences will help us all overcome and prevent division and misunderstandings (like racial and ethnic division, gender bias, stereotyping, etc.).
- ✚ We know that understanding and appreciating culture is a vital first step to building community.

**IV. Community** (based on a sense of belonging and *responsibility* to others/*all* the diverse groups we are a part of – a sense and understanding that we are all brothers and sisters of the human race)

- ✚ We *know* – not just recognize – that while we must be aware of and learn from others different from us (capitalizing on the diversity of the world), we are *more* similar than different and are all brothers and sisters of the human race.
- ✚ We consistently and actively communicate with those around us – those in our various communities.
- ✚ We are responsible for more than just ourselves; we belong to, support, and are responsible/loyal to a great variety of groups/communities including:
  - One's family (parents, siblings, immediate and extended family), neighbors, friends, teams, and school.
  - One's affiliations/organizations/memberships, city/village/tribe, state, country, culture, species, environment, and the entire world.

### **Educational program**

The Academy offers a variety of educational programs that comply with the Michigan Core/Merit Curriculum Content (MMC) and Common Core Standards recommended by the Michigan State Board of Education. Students will receive instruction in the following areas:

Computer and Information Sciences  
English Language and Literature (Reading/Writing)  
Fine and Performing Arts  
Foreign Language and Literature  
Physical Health and Safety Education

Life and Physical Sciences  
Life/Study Skills & Other Electives  
Mathematics  
Social Sciences and History  
Violence Prevention/Character Education



All students are expected to follow a course of study. All students in 6<sup>th</sup> grade will be given an opportunity to create an Educational Development Plan before entering high school, and the Academy currently uses Career Cruising. All 6<sup>th</sup> grade students outline their course of study in their Educational Development Plan (EDP), in preparation for high school and Post-secondary education or career readiness. Each plan is individualized to address individual student needs to ensure successful completion of the educational program itself.

## MDE CORE COURSES

- 🎵 **English Language Arts:** Language Arts, English, Reading
- 🎵 **Social Studies:** Social Studies, Economics, Geography, History, Political Science
- 🎵 **Science:** Science, Biology, Chemistry, Physics, Geology-Earth Science, Astronomy, Integrated Science, Physical Science
- 🎵 **Mathematics:** Mathematics
- 🎵 **World Language:** French, German, Greek, Latin, Russian, Spanish, Other World Languages, Italian, Polish, Hebrew, Japanese, Chinese, Arabic
- 🎵 **The Arts:** Music Education, Visual Art, Theatre/Performance, Dance
- 🎵 **Level-Related Assignments:** General Elementary, K-5 All Subjects, K-8 Self-Contained

## Grade Scale & Schedule

The following grade scale is used for students to determine their proficiency:

A	93-100 4.0	C	73-77 2.3
A-	90-92 3.7	C-	70-72 1.8
B+	88-89 3.5	D+	65-69 1.5
B	83-87 3.3	D	64-63 1.3
B-	80-82 2.8	F	0-62 0.0
C+	78-79 2.5		

<b>Semester I</b>	<b>September 3, 2019 – February 7, 2019</b>
<b>Semester II</b>	<b>February 10, 2020 – June 12, 2020</b>

## High Scope Curriculum

The High Scope Curriculum for Preschool addresses children's development through eight content areas. Each one includes key developmental indicators, or specific learning experiences. The curriculum defines **what** to teach; **why** the content and skills are appropriate expectations for young children; and **where, when, and how** to teach effectively. It is linked to an assessment system so the teachers can use information from assessments to plan and guide instructions both for individuals and groups of students. The High Scope Curriculum for Preschool is based on five fundamental principles. They guide the teacher's planning and help them to understand the reasons for intentionally setting up and operating our program in particular ways. These principles are:

- ☐ Positive interactions and relationships with adults provide critical foundation for successful learning.
- ☐ Social-emotional competence is a significant factor in school success.
- ☐ Constructive, purposeful play supports essential learning.
- ☐ The physical environment affects the type and quality of learning interactions.
- ☐ Teacher-family partnerships promote development and learning.

## **High Scope Preschool Curriculum Content Key Developmental Indicators (KDIs)**

Within High Scope's eight content areas, listed below, are 58 key developmental indicators (KDIs) that define important learning goals for young children.

A. Approaches to Learning 1. Initiative: Children demonstrate initiative as they explore their world. 2. Planning: Children make plans and follow through on their intentions. 3. Engagement: Children focus on activities that interest them. 4. Problem solving: Children solve problems encountered in play. 5. Use of resources: Children gather information and formulate ideas about their world. 6. Reflection: Children reflect on their experiences.

B. Social and Emotional Development 7. Self-identity: Children have a positive self-identity. 8. Sense of competence: Children feel they are competent. 9. Emotions: Children recognize, label, and regulate their feelings. 10. Empathy: Children demonstrate empathy toward others. 11. Community: Children participate in the community of the classroom. 12. Building relationships: Children build relationships with other children and adults. 13. Cooperative play: Children engage in cooperative play. 14. Moral development: Children develop an internal sense of right and wrong. 15. Conflict resolution: Children resolve social conflicts.

C. Physical Development and Health 16. Gross-motor skills: Children demonstrate strength, flexibility, balance, and timing in using their large muscles. 17. Fine-motor skills: Children demonstrate dexterity and hand eye coordination in using their small muscles. 18. Body awareness: Children know about their bodies and how to navigate them in space. 19. Personal care: Children carry out personal care routines on their own. 20. Healthy behavior: Children engage in healthy practices.

D. Language, Literacy, and Communication 21. Comprehension: Children understand language. 22. Speaking: Children express themselves using language. 23. Vocabulary: Children understand and use a variety of words and phrases. 24. Phonological awareness: Children identify distinct sounds in spoken language. 25. Alphabetic knowledge: Children identify letter names and their sounds. 26. Reading: Children read for pleasure and information. 27. Concepts about print: Children demonstrate knowledge about environmental print. 28. Book knowledge: Children demonstrate knowledge about books. 29. Writing: Children write for many different purposes. 30. English language learning: (If applicable) Children use English and their home language(s) (including sign language).

E. Mathematics 31. Number words and symbols: Children recognize and use number words and symbols. 32. Counting: Children count things. 33. Part-whole relationships: Children combine and separate quantities of objects. 34. Shapes: Children identify, name, and describe shapes. 35. Spatial awareness: Children recognize spatial relationships among people and objects. 36. Measuring: Children measure to describe, compare, and order things. 37. Unit: Children understand and use the concept of unit. 38. Patterns: Children identify, describe, copy, complete, and create patterns. 39. Data analysis: Children use information about quantity to draw conclusions, make decisions, and solve problems.

F. Creative Arts 40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art. 41. Music: Children express and represent what they observe, think, imagine, and feel through music. 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement. 43. Pretend play: Children express and represent what they observe, think, imagine, and feel through pretend play. 44. Appreciating the arts: Children appreciate the creative arts.

G. Science and Technology 45. Observing: Children observe the materials and processes in their environment. 46. Classifying: Children classify materials, actions, people, and events. 47. Experimenting: Children experiment to test their ideas. 48. Predicting: Children predict what they expect will happen. 49. Drawing conclusions: Children draw conclusions based on their experiences and observations. 50.

Communicating ideas: Children communicate their ideas about the characteristics of things and how they work. 51. Natural and physical world: Children gather knowledge about the natural and physical world. 52. Tools and technology: Children explore and use tools and technology.

H. Social Studies 53. Diversity: Children understand that people have diverse characteristics, interests, and abilities. 54. Community roles: Children recognize that people have different roles and functions in the community. 55. Decision making: Children participate in making classroom decisions. 56. Geography: Children recognize and interpret features and locations in their environment. 57. History: Children understand past, present, and future. 58. Ecology: Children understand the importance of taking care of their environment.

Language, Literacy, and Communication KDIs 21–29 may be used for the child's home language(s) as well as English. KDI 30 refers specifically to English language learning

### **About the High Scope Curriculum**

HighScope is a high quality approach to learning based on more than 40 years of longitudinal research and practice. It is a coherent curriculum which draws on the constructivist theories of Piaget, Dewey, Erikson, Vygotsky and others. HighScope was developed by Dr. David Weikart in 1962 in Ipsilanti, Michigan USA and is now used in over 90 countries around the world. It is a flexible framework and can be used across all settings, ages and abilities. The High Scope classroom is a materials-rich learning environment that is purposely arranged to allow children to explore and build social relationships, often with well-defined areas for different activities. The curriculum content, according to the High Scope [Foundation](#), is organized into eight main categories: Approach to learning; social and emotional development; physical development and health; language, literacy and communication; mathematics; creative arts; science and technology; and social studies.

### **TURN DATA INTO ACTION- ONLINE COR ASSESSMENT**

COR Advantage is built on 36 items that are proven by research to best prepare children for school success. With the fewest items of any early childhood assessment, COR saves teachers time and keeps them focused on what matters most. Teachers can use the valuable insight that they put in to the tool to create individualized lesson plans and detailed reports on child and classroom progress. The online tool's in-the-moment support increases the accuracy of teacher's scores, delivering consistent data administrators can rely on to meaningfully guide their program to the next level.

### **COR ADVANTAGE'S 8 CATEGORIES:**

1. Approaches to Learning
2. Social and Emotional Development
3. Physical Development and Health
4. Language, Literacy, and Communication
5. Mathematics
6. Creative Arts
7. Science and Technology
8. Social Studies
9. English language learners

### **Foreign Language in Pre-School**

Michigan students, like students throughout the United States, are living in and contributing to an increasingly diverse society and interdependent community of nations in the 21st century. To realize their personal, social and long-term career goals, individuals need to be able to communicate with others skillfully, appropriately, and effectively. The challenge of contemporary education is to prepare all students for life in this new world. Because language and communication are at the heart of the human experience, the United States must equip students linguistically and culturally to communicate successfully in a pluralistic American society and abroad. This imperative addition to our students'



learning experience envisions a future in which all students develop and maintain proficiency in English and in at least one other language. Michigan has setup its standards to cover five major areas of learning:

- 👉 Communication – communicate in languages other than English
- 👉 Cultures – gain knowledge and understanding of other cultures
- 👉 Connections – connect with other disciplines and acquire information
- 👉 Comparisons – develop insight into the nature of language and culture
- 👉 Communities – participate in multilingual communities at home and around the world

The proficiency guidelines of the American Council on the Teaching of Foreign Languages (**ACTFL**) describe language proficiency in terms of five levels: Novice, Intermediate, Advanced, Superior and Distinguished. At the Novice, Intermediate, and Advanced levels, proficiency is further defined as low, mid, or high. This is why we offer Arabic language for students from Kindergarten through 6th grade as students will need the opportunity to attain high levels of proficiency for meeting proficiency guidelines and requirements.

Our Foreign Language and Literature courses are setup so that students' progress from one level to another each trimester and are able to enroll in higher levels at a grade level based on their proficiency. Courses are scheduled at the school level based on need and levels of experience of students and classes.

Students may fulfill the language requirements for Arabic by demonstrating proficiency at the Novice High level in speaking and writing (productive skills) and in listening and reading (interpretive skills) based on years of experience per Principal and Assistant Superintendent approval.

The assessment process can be a powerful tool when students are actively involved in the process. Involvement allows students to take ownership of their learning and builds confidence in their ability over time. Reliable formative and summative assessments\*\* provide teachers with information they need to make informed instructional decisions and be more responsive to students' needs. Both assessment of learning and assessment for learning are essential and share common elements. World languages assessments will:

- 👉 Align with learning goals and instruction;
- 👉 Incorporate performance-based assessments that have application beyond the classroom;
- 👉 Vary in type and format;
- 👉 Use criteria scoring tools such as rubrics or exemplars;
- 👉 Demonstrate the acquisition of important language skills and cultural knowledge;
- 👉 Cause students to use critical thinking skills;
- 👉 Meet the needs of diverse learners;
- 👉 Provide opportunities for students to reflect on their own learning and progress through timely feedback.

## **Arabic/VCO**

### **(Pre-K)**

### **CREDIT TYPE: ForeignLanguageandLiterature**

Arabic courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Arabic language and students' knowledge of Arabic-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Arabic-speaking people to deepen their understanding of the culture(s). Students are leveled by section in grades 2nd-6th: Novice, Low Intermediate, High Intermediate & Advanced. This course may offer sections of Virtual Course Offering (VCO).

## **COMPUTER AND INFORMATION SCIENCES DEPARTMENTS**

The MMC's Online Learning Experience Guidelines document<sup>1</sup> identifies the three manners in which a

---

<sup>1</sup> [http://www.michigan.gov/documents/mde/Online10.06\\_final\\_175750\\_7.pdf](http://www.michigan.gov/documents/mde/Online10.06_final_175750_7.pdf)

student in middle school can have a meaningful online learning experience. From the guidelines we see that online learning is identified as “a structured learning activity that utilizes technology with intranet/Internet-based tools and resources as the delivery method for instruction, research, assessment, and communication.” The three manners in which a student can have an online learning experience are Online Courses, Online Learning Experiences & Online Learning incorporated into each of the Required Credits.

Based on the guidelines, a quality online learning experience is a combination of structured, sustained, integrated, meaningful learning activities accessed via a telecommunications network. A student that has been successful in this type of experience should develop competency for being able to learn in a virtual environment (life-long learning). The total collection across all grades 6-8 of these experiences are required to be a minimum of 20 hours. Since Online Learning is incorporated into each of the Required Core Classes, students will not be required to submit learning experience logs. Instructional Staff will collaborate at the beginning of the school year to include specific activities in the course syllabus and planning documents so that one full year meets a minimum of 20 hours giving students the opportunity to accumulate 140+ hours of online learning experience.

## **Computer & Information Technology**

**GRADES: (K-5)**

**CREDIT TYPE: Technology**

**Course No/MI ID: 60003**

**CREDIT(S): 0.5**

Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use.

- 🔗 **WebQuests** – an inquiry-oriented activity in which most or all of the information used by students is online.
- 🔗 **Educational Blog** – a personal online journal that is frequently updated and intended for public consumption.
- 🔗 **Wiki** – collaborative editing place on the web.
- 🔗 **Podcast/Videocast** – the distribution of audio or video files over the Internet for listening on mobile devices and personal computers.
- 🔗 **RSS Feed** – RSS stands for “Really Simple Syndication”. It is a way to easily distribute a list of headlines, update notices, and sometimes content to a wide number of people. It is used by computer programs that organize those headlines and notices for easy reading.
- 🔗 **Learning Management System** – a software application or Web-based technology that provides a teacher a way to create and deliver content, monitor student progress and assess performance.
- 🔗 **Online Research** – teacher directed and guided practical online searching that weeds out poor or non-relevant sites and directs students to sites easily recognizable as valid and trustworthy.
- 🔗 **Electronic Portfolio** – a type of learning record that provides actual evidence of achievement – a collection of electronic documents that demonstrate your skills.
- 🔗 **Online Resource Validation** – process of confirming the validity of the data, information and/or source of web information.
- 🔗 **Interactive Discussions with Experts** – a connection via audio and video (video conferencing) or audio (phone conferencing) with an expert.
- 🔗 **Interactive Discussions between Students** – a connection using video and audio (video conferencing) or audio (phone conferencing) with another class.
- 🔗 **Online Field Trips** – high-tech field trips on the web that offer video and audio segments to make the visit more interactive and provide opportunities for new discovery in the classroom.
- 🔗 **Online Simulations** – a web-based re-creation of an authentic experience.
- 🔗 **Educational Gaming** – Online gaming in education implies experiential, discovery-driven learning through play.
- 🔗 **Online Project** – a curriculum lesson that incorporates a variety of online activities.

- 🔊 **Test Preparation Tool** – web-based practice test taking and feedback.
- 🔊 **Career Planning Tools** – structured and extended web-based programs incorporating interest inventories, career exploration and portfolio compilation.

Students are expected to meet technology proficiency standard requirements by no later than the 8<sup>th</sup> grade. Below are the MDE's technology standards for grades K-6 that teachers will incorporate into their lessons:

#### 2009 Michigan Educational Technology Standards—Grades PK -2

##### **PK-2.CI. Creativity and Innovation—By the end of grade 2 each student will:**

PK-2.CI.1. use a variety of digital tools (e.g., word processors, drawing tools, simulations, presentation software, graphical organizers) to learn, create, and convey original ideas or illustrate concepts

##### **PK-2.CC. Communication and Collaboration—By the end of grade 2 each student will:**

PK-2.CC.1. work together when using digital tools (e.g., word processor, drawing, presentation software) to convey ideas or illustrate simple concepts relating to a specified project

PK-2.CC.2. use a variety of developmentally appropriate digital tools (e.g., word processors, paint programs) to communicate ideas to classmates, families, and others

##### **PK-2.RI. Research and Information Literacy—By the end of grade 2 each student will:**

PK-2.RI.1. interact with Internet based resources

PK-2.RI.2. use digital resources (e.g., dictionaries, encyclopedias, graphs, graphical organizers) to locate and interpret information relating to a specific curricular topic, with assistance from teachers, school library media specialists, parents, or student partners

##### **PK-2.CT. Critical Thinking, Problem Solving, and Decision Making —By the end of grade 2 each student will:**

PK-2.CT.1. explain ways that technology can be used to solve problems (e.g., cell phones, traffic lights, GPS units)

PK-2.CT.2. use digital resources (e.g., dictionaries, encyclopedias, search engines, web sites) to solve developmentally appropriate problems, with assistance from teachers, parents, school media specialists, or student partners

##### **PK-2.DC. Digital Citizenship—By the end of grade 2 each student will:**

PK-2.DC.1. describe appropriate and inappropriate uses of technology (e.g., computers, Internet, e-mail, cell phones) and describe consequences of inappropriate uses

PK-2.DC.2. know the Michigan Cyber Safety Initiative's three rules (Keep Safe, Keep Away, Keep Telling)

PK-2.DC.3. identify personal information that should not be shared on the Internet (e.g. name, address, phone)

PK-2.DC.4. know to inform a trusted adult if he/she receives or views an online communication which makes him/her feel uncomfortable, or if someone whom he/she doesn't know is trying to communicate with him/her or asking for personal information

##### **PK-2.TC. Technology Operations and Concepts—By the end of grade 2 each student will:**

PK-2.TC.1. discuss advantages and disadvantages of using technology

PK-2.TC.2. be able to use basic menu commands to perform common operations (e.g., open, close, save, print)

PK-2.TC.3. recognize and name the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, printer)

PK-2.TC.4. discuss the basic care for computer hardware and various media types (e.g., CDs, DVDs)

PK-2.TC.5. use developmentally appropriate and accurate terminology when talking about technology

PK-2.TC.6. understand that technology is a tool to help him/her complete a task, and is a source of information, learning, and entertainment

PK-2.TC.7. demonstrate the ability to navigate in virtual environments (e.g., electronic books, games, simulation software, web sites)

Approved by the Michigan State Board of Education—October 2009



## 2009 Michigan Educational Technology Standards—Grades 3-5

### **3-5.CI. Creativity and Innovation—By the end of grade 5 each student will:**

3-5.CI.1. produce a media-rich digital project aligned to state curriculum standards (e.g., fable, folk tale, mystery, tall tale, historical fiction)

3-5.CI.2. use a variety of technology tools and applications to demonstrate his/her creativity by creating or modifying works of art, music, movies, or presentations

3-5.CI.3. participate in discussions about technologies (past, present, and future) to understand these technologies are the result of human creativity

### **3-5.CC. Communication and Collaboration—By the end of grade 5 each student will:**

3-5.CC.1. use digital communication tools (e.g., e-mail, wikis, blogs, IM, chat rooms, videoconferencing, Moodle, Blackboard) and online resources for group learning projects

3-5.CC.2. identify how different software applications may be used to share similar information, based on the intended audience (e.g., presentations for classmates, newsletters for parents)

3-5.CC.3. use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences

### **3-5.RI. Research and Information Literacy—By the end of grade 5 each student will:**

3-5.RI.1. identify search strategies for locating information with support from teachers or library media specialists

3-5.RI.2. use digital tools to find, organize, analyze, synthesize, and evaluate information

3-5.RI.3. understand and discuss that web sites and digital resources may contain inaccurate or biased information

3-5.RI.4. understand that using information from a single Internet source might result in the reporting of erroneous facts and that multiple sources should always be researched

### **3-5.CT. Critical Thinking, Problem Solving, and Decision Making —By the end of grade 5 each student will:**

3-5.CT.1. use digital resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)

3-5.CT.2. use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving problems

3-5.CT.3. use digital resources to identify and investigate a state, national, or global issue (e.g., global warming, economy, environment)

### **3-5.DC. Digital Citizenship—By the end of grade 5 each student will:**

3-5.DC.1. discuss scenarios involving acceptable and unacceptable uses of technology (e.g., file-sharing, social networking, text messaging, cyber bullying, plagiarism)

3-5.DC.2. recognize issues involving ethical use of information (e.g., copyright adherence, source citation)

3-5.DC.3. describe precautions surrounding personal safety that should be taken when online

3-5.DC.4. identify the types of personal information that should not be given out on the Internet (name, address, phone number, picture, school name)

### **3-5.TC. Technology Operations and Concepts—By the end of grade 5 each student will:**

3-5.TC.1. use basic input and output devices (e.g., printers, scanners, digital cameras, video recorders, projectors)

3-5.TC.2. describe ways technology has changed life at school and at home

3-5.TC.3. understand and discuss how assistive technologies can benefit all individuals

3-5.TC.4. demonstrate proper care in the use of computer hardware, software, peripherals, and storage media

3-5.TC.5. know how to exchange files with other students using technology (e.g., network file sharing, flash drives)

## 2009 Michigan Educational Technology Standards—Grades 6-8

### **6-8.CI. Creativity and Innovation—By the end of grade 8 each student will:**

- 6-8.CI.1. apply common software features (e.g., spellchecker, thesaurus, formulas, charts, graphics, sounds) to enhance communication with an audience and to support creativity
- 6-8.CI.2. create an original project (e.g., presentation, web page, newsletter, information brochure) using a variety of media (e.g., animations, graphs, charts, audio, graphics, video) to present content information to an audience
- 6-8.CI.3. illustrate a content-related concept using a model, simulation, or concept-mapping software

### **6-8.CC. Communication and Collaboration—By the end of grade 8 each student will:**

- 6-8.CC.1. use digital resources (e.g., discussion groups, blogs, podcasts, videoconferences, Moodle, Blackboard) to collaborate with peers, experts, and other audiences
- 6-8.CC.2. use collaborative digital tools to explore common curriculum content with learners from other cultures
- 6-8.CC.3. identify effective uses of technology to support communication with peers, family, or school personnel

### **6-8.RI. Research and Information Literacy—By the end of grade 8 each student will:**

- 6-8.RI.1. use a variety of digital resources to locate information
- 6-8.RI.2. evaluate information from online information resources for accuracy and bias
- 6-8.RI.3. understand that using information from a single Internet source might result in the reporting of erroneous facts and that multiple sources should always be researched
- 6-8.RI.4. identify types of web sites based on their domain names (e.g., edu, com, org, gov, net)
- 6-8.RI.5. employ data-collection technologies (e.g., probes, handheld devices, GPS units, geographic mapping systems) to gather, view, and analyze the results for a content-related problem

### **6-8.CT. Critical Thinking, Problem Solving, and Decision Making —By the end of grade 8 each student will:**

- 6-8.CT.1. use databases or spreadsheets to make predictions, develop strategies, and evaluate decisions to assist with solving a problem
- 6-8.CT.2. evaluate available digital resources and select the most appropriate application to accomplish a specific task (e.g., word processor, table, outline, spreadsheet, presentation program)
- 6-8.CT.3. gather data, examine patterns, and apply information for decision making using available digital resources
- 6-8.CT.4. describe strategies for solving routine hardware and software problems

### **6-8.DC. Digital Citizenship—By the end of grade 8 each student will:**

- 6-8.DC.1. provide accurate citations when referencing information sources
- 6-8.DC.2. discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, viruses, file-sharing)
- 6-8.DC.3. discuss the consequences related to unethical use of information and communication technologies
- 6-8.DC.4. discuss possible societal impact of technology in the future and reflect on the importance of technology in the past
- 6-8.DC.5. create media-rich presentations on the appropriate and ethical use of digital tools and resources
- 6-8.DC.6. discuss the long term ramifications (digital footprint) of participating in questionable online activities (e.g., posting photos of risqué poses or underage drinking, making threats to others)
- 6-8.DC.7. describe the potential risks and dangers associated with online communications

## Educational Technology Standards for Students prior to graduation.<sup>2</sup>

<sup>2</sup> ISTE's Educational Technology Standards for Students [http://www.iste.org/docs/pdfs/20-14\\_ISTE\\_Standards-S\\_PDF.pdf](http://www.iste.org/docs/pdfs/20-14_ISTE_Standards-S_PDF.pdf)



## **PHYSICAL HEALTH AND SAFETY EDUCATION DEPARTMENT**

Movement is critical to all aspects of a child's growth and development. Physical education provides unique learning opportunities for students in to acquire knowledge, skills, fitness, and attitudes to enhance their quality of life through physical activity.

Physical education is an integral component of the education process. Researchers have shown that students who participate in regular physical education will enjoy enhanced memory and learning, better concentration, and increased problem-solving abilities. Regular physical education encourages a positive attitude towards self and others, which is an important factor in creating a healthy learning environment.

Quality physical education programs provide the foundation for healthy, active lifestyles that support all learning and help ensure success in future pursuits. Statistics related to chronic disease, disability and death, health care costs, and quality of life issues clearly illustrate that there are severe problems associated with attending to the intellectual but not the physical being.

A physically educated person who participates in health-enhancing physical activity:

- ♪ Demonstrates competence in selected motor skills.
- ♪ Assesses, achieves, and maintains physical fitness.
- ♪ Applies cognitive concepts in making wise lifestyle choices.
- ♪ Exhibits appropriate personal/social character traits while participating in physical activity.

### **Presidential Youth Fitness Program (PYFP)**

Along with the MDE's physical and health education standards, the Academy also participates in the Presidential Youth Fitness Program (PYFP) The premier program of the President's Council on Fitness, Sports, and Nutrition. It helps people of all ages and abilities increase their physical activity and improve their fitness through research-based information, easy-to-use tools, and friendly motivation.

The PYFP program is for everyone: fitness beginners, weekend warriors, athletes, physical education teachers, and kids. It takes staying active beyond the school gym, and into everyday life. The challenges are designed to help improve anyone's activity level – young or old. It's about choosing to live healthier – and finding things you really like to do:



- ♪ Physical Fitness Test measures the physical fitness of kids and teens.
- ♪ Adult Fitness Test measures an adult's aerobic fitness, muscular strength, flexibility, and other aspects of health-related fitness.
- ♪ Presidential Active Lifestyle Award (**PALA**) challenge is for people who want to make physical activity and healthy eating part of their everyday lives.
- ♪ Presidential Champions challenge is for people who want to be more active more often.

**Choose the challenge that's right for you, sign up<sup>3</sup>, and then get moving!**

### **GRADES K-5**

#### **Health and Fitness**

**GRADES: (K-5)**

**CREDIT TYPE: PhysicalHealthandSafetyEducation**

**Course No/MI ID: 58052**

**CREDIT(S): 0.25**

Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

#### **Physical Education (KG)**

**GRADES: (K)**

**CREDIT TYPE: PhysicalHealthandSafetyEducation**

**Course No/MI ID: 58030**

**CREDIT(S): 0.25**

Physical Education (Kindergarten) courses emphasize fundamental movement skills, body awareness and control, safety, and the enjoyment of physical activity. Specific content depends upon state standards for Kindergarten.

---

<sup>3</sup> <https://www.fitness.gov/participate-in-programs/presidents-challenge/>

**Physical Education (1st)** **Course No/MI ID: 58031**  
**GRADES: (1)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.25**  
Physical Education (grade 1) courses typically emphasize knowledge and skills that lead to health, enjoyment, and social development through physical activity. Course content may include activities that strengthen gross and fine motor skills, body awareness, safety, and the relationship between physical activity and health. Specific content depends upon state standards for grade 1.

**Physical Education (2nd)** **Course No/MI ID: 58032**  
**GRADES: (2)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.25**  
Physical Education (grade 2) courses typically emphasize knowledge and skills that lead to health, enjoyment, and social development through physical activity. Course content may include activities that strengthen gross and fine motor skills, body awareness, safety, and the relationship between physical activity and health. Specific content depends upon state standards for grade 2.

**Physical Education (3rd)** **Course No/MI ID: 58033**  
**GRADES: (3)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.25**  
Physical Education (grade 3) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Loco motor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 3.

**Physical Education (4th)** **Course No/MI ID: 58034**  
**GRADES: (4)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.25**  
Physical Education (grade 4) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Loco motor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 4.

**Physical Education (5th)** **Course No/MI ID: 58035**  
**GRADES: (5)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.25**  
Physical Education (grade 5) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Loco motor skills, strength, endurance, flexibility, safety, and rules and conventions of games and sports are often the focus; health education topics may also be included. Specific content depends upon state standards for grade 5.

## **GRADES 6**

**Physical Education (6th)** **Course No/MI ID: 58036**  
**GRADES: (6)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.5**  
Physical Education (grade 6) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 6.

**Physical Education (7th)** **Course No/MI ID: 58037**  
**GRADES: (7)** **CREDIT TYPE: PhysicalHealthandSafetyEducation** **CREDIT(S): 0.5**  
Physical Education (grade 7) courses typically involve the acquisition of knowledge and skills that provide the foundation for sport, a physically active lifestyle, and social development through physical activity. Activities typically include those that increase strength, endurance, and flexibility; reinforce safe technique; teach the rules and conventions of games and sports; and explore the relationship between physical activity and health. Health topics (such as the effects of drugs and alcohol, sexual education, and healthy lifestyles) may also be included. Specific content depends upon state standards for grade 7.

## **FINE AND PERFORMING ARTS DEPARTMENT**

It is through sight, sound, movement, and creative play that we first learn about the world. Throughout life, the arts remain critical to our balanced development as creative, problem-solving members of our communities. Art not only enriches children's lives, it also has a profound impact on their academic achievement. Research shows students with an education in the Arts outperform others by virtually every measure. Moreover, learning through the Arts can help "level the playing field" for youngsters from disadvantaged circumstances.

### **GRADES K-5**

<b>Music (KG)</b>		<b>Course No/MI ID: 55130</b>
<b>GRADES: (K)</b>	<b>CREDIT TYPE: FineandPerformingArts</b>	<b>CREDIT(S): 0.25</b>

Music (Kindergarten) courses provide developmentally appropriate activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Specific course content conforms to any existing state standards for Kindergarten.

<b>Music (1st)</b>		<b>Course No/MI ID: 55131</b>
<b>GRADES: (1)</b>	<b>CREDIT TYPE: FineandPerformingArts</b>	<b>CREDIT(S): 0.25</b>

Music (grade 1) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 1.

<b>Music (2nd)</b>		<b>Course No/MI ID: 55132</b>
<b>GRADES: (2)</b>	<b>CREDIT TYPE: FineandPerformingArts</b>	<b>CREDIT(S): 0.25</b>

Music (grade 2) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and to incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 2.

<b>Music (3rd)</b>		<b>Course No/MI ID: 55133</b>
<b>GRADES: (3)</b>	<b>CREDIT TYPE: FineandPerformingArts</b>	<b>CREDIT(S): 0.25</b>

Music (grade 3) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 3.

<b>Music (4th)</b>		<b>Course No/MI ID: 55134</b>
<b>GRADES: (4)</b>	<b>CREDIT TYPE: FineandPerformingArts</b>	<b>CREDIT(S): 0.25</b>

Music (grade 4) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 4.

<b>Music (5th)</b>		<b>Course No/MI ID: 55135</b>
<b>GRADES: (5)</b>	<b>CREDIT TYPE: FineandPerformingArts</b>	<b>CREDIT(S): 0.25</b>

Music (grade 5) courses provide activities to enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and establishing the ability to discern and critique. Specific course content conforms to any existing state standards for grade 5.

<b>Creative Art (3rd - 5th)</b>		<b>Course No/MI ID: 55155</b>
---------------------------------	--	-------------------------------



**CREDIT(S): 0.25**

### Art (3rd)

**Course No/MI ID: 55183**

**CREDIT(S): 0.25**

## Art (4th)

**Course No/MI ID: 55184**

**CREDIT(S): 0.25**

**Art (5th)**

**Course No/MI ID: 55185**

**CREDIT(S): 0.25**

**Art (6th)**

**Course No/MI ID: 55186**

**CREDIT(S): 0.5**

**Art (7th)**

**Course No/MI ID: 55187**

**CREDIT(S): 0.5**

## GRADES 6

## Music (6th)

**Course No/MI ID: 55136**

**GRADES: (6)**

**CREDIT TYPE: FineandPerformingArts**

**CREDIT(S): 0.5**

Music (grade 6) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 6.

**Music (7th)**

**Course No/MI ID: 55137**

**GRADES: (7)**

**CREDIT TYPE: FineandPerformingArts**

**CREDIT(S): 0.5**

Music (grade 7) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 7.

**Drama – Comprehensive (6th)**

**Course No/MI ID: 55076**

**GRADES: (6)**

**CREDIT TYPE: FineandPerformingArts**

**CREDIT(S): 0.5**

Drama - Comprehensive (grade 6) courses are intended to help develop students' experience and skill in one or more aspects of theatrical production. Initial courses are usually introductory in nature, providing an overview of the features of drama such as acting, set design, stage management, and so on. The more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater. Specific course content conforms to any existing state standards for grade 6.

**Drama – Comprehensive (7th)**

**Course No/MI ID: 55077**

**GRADES: (7)**

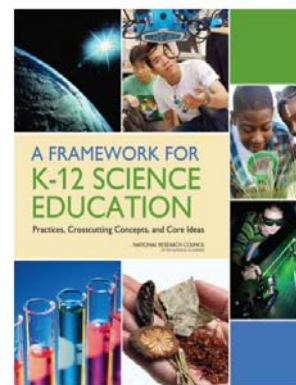
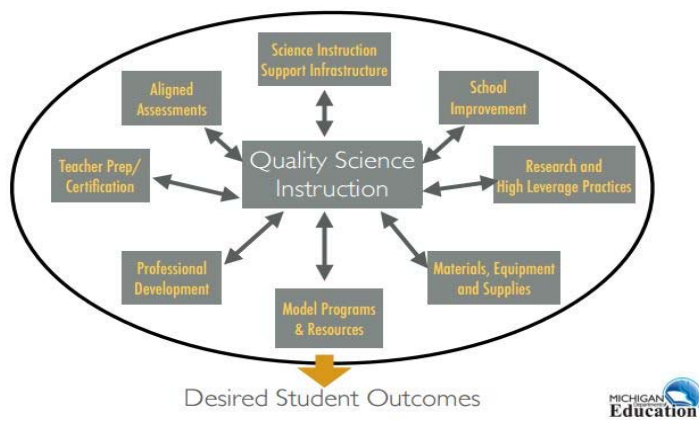
**CREDIT TYPE: FineandPerformingArts**

**CREDIT(S): 0.5**

Drama - Comprehensive (grade 7) courses are intended to help develop students' experience and skill in one or more aspects of theatrical production. Initial courses are usually introductory in nature, providing an overview of the features of drama such as acting, set design, stage management, and so on. The more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater. Specific course content conforms to any existing state standards for grade 7.

## SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS (STEM)

### ACHIEVING THE VISION



Science, Technology, Engineering, Mathematics (STEM), is a process of teaching that integrates these four disciplines to promote real-world experience, teamwork, and the application of technology, to prepare students for their future.

STEM education refers to teaching school subjects in a cross-disciplinary way so students can see how subjects relate to one and other and how it is useful in every day applications. STEM offers students opportunities to make sense of the world and take charge of their learning, with a focus on engaging in real world problems and experiences through project-based, experiential learning activities that lead to understanding and innovation.

It is essential to hold high expectations in STEM for all students, whether they will enter the workforce or go on to post-secondary education. Quality STEM skills are a central element of a well-rounded education are essential in preparing students for jobs of the future.

**The Academy integrates STEM practices into its math, science and technology courses. Engineering concepts are implemented within science and math labs to give students a hands on approach to learning that is engaging and gives them a real world approach to learning.**

### LIFE AND PHYSICAL SCIENCES DEPARTMENT

Noor International Academy has adopted the newly released K-12 Michigan Science Standards that were adopted in November 2015 by the State. Design teams working in four domains – life sciences, physical sciences, earth and space sciences, and engineering and technology. Research suggests students need to be engaged in doing science by engaging the same practices used by scientists and engineers.

Furthermore, students should engage in science and engineering practices in the context of core ideas that become ever more sophisticated as students move through school. Students also need to see the connections of these disciplinary-based core ideas to the bigger science concepts that cross disciplinary lines.

#### Cross Cutting Concepts (CCC)

The seven Crosscutting Concepts outlined by the *Framework for K-12 Science Education* are the overarching and enduring understandings that provide an organizational framework under which students can connect the core ideas from the various disciplines into a “cumulative, coherent, and usable understanding of science and engineering” (*Framework*, pg. 83).

These crosscutting concepts are:

1. Patterns
2. Cause and Effect
3. Scale, Proportion, and Quantity

4. Systems and System Models
5. Energy and Matter in Systems
6. Structure and Function
7. Stability and Change of Systems

### **Disciplinary Core Ideas (DCI)**

The crosscutting concepts cross disciplines. However within each discipline are core ideas that are developed across grade spans, increasing in sophistication and depth of understanding. Each performance expectation (PE) is coded to a DCI. A list of DCIs and their codes can be found on the MDE website and in the MDE Guidance Documents.

### **Science and Engineering Practices**

In addition to the Crosscutting Concepts and Disciplinary Core Ideas, the National Research Council has outlined 8 practices for K-12 science classrooms that describe ways students should be engaged in the classroom as a reflection of the practices of actual scientists and engineers. When students “do” science, the learning of the content becomes more meaningful. Lessons should be carefully designed so that students have opportunities to not only learn the essential science content, but to practice being a scientist or engineer. These opportunities set the stage for students to transition to college or directly into STEM careers.

Listed below are the Science and Engineering Practices from the *Framework*:

1. Asking questions and defining problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations and designing solutions
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

K-7 Science Education, which set forth guidance for science standards development based on the research on how students learn best. This extensive body of research suggests students need to be engaged in doing science by engaging the same practices used by scientists and engineers. Furthermore, students should engage in science and engineering practices in the context of core ideas that become ever more sophisticated as students move through school. Students also need to see the connections of these disciplinary-based core ideas to the bigger science concepts that cross disciplinary lines. The proposed Michigan standards are built on this research-based framework. The framework was used in the development of the Next Generation Science Standards, for which Michigan was a lead partner. The Michigan Science Standards are derived from this effort, utilizing the student performance expectations and their relevant coding (for reference purposes). These standards are intended to guide local curricular design, leaving room for parents, teachers, and schools to surround the standards with local decisions about curriculum and instruction. Similarly, because these standards are performance expectations, they will be used to guide state assessment development.<sup>4</sup>

Michigan’s science standards are organized by grade level K-5, and then by grade span in middle school and high school. The K-7 grade level organization reflects the developmental nature of learning for elementary students in a manner that attends to the important learning progressions toward basic foundational understandings. By the time students reach traditional middle school grades (6-8), they can begin to build on this foundation to develop more sophisticated understandings of science concepts within and across disciplines. This structure also allows schools to design local courses and pathways that make sense for their students and available instructional resources.

With the changes in the learning standards to a more “doing science” approach teachers will be engaging students with scientist and engineering concepts and activities.

---

<sup>4</sup> MDE [http://www.michigan.gov/documents/mde/K-12\\_Science\\_Performance\\_Expectations\\_v5\\_496901\\_7.pdf](http://www.michigan.gov/documents/mde/K-12_Science_Performance_Expectations_v5_496901_7.pdf)

- Lessons will be structured so that the work is driven by questions arising from phenomena, rather than topics sequentially pursued according to the traditional breakdown of lesson.
- The goal of investigations is to guide construction of explanatory models rather than simply testing hypotheses.
- Answers to science investigations are more than whether and how two variables are related, but need to help construct an explanatory account.
- Students should see what they are working on as answering explanatory questions rather than learning the next assigned topic.
- A large part of the teachers' role will be to support the knowledge building aspects of practices, not just the procedural skills in doing experiments.
- Extensive class focus needs to be devoted to argumentation and reaching consensus about ideas, rather than having textbooks and teachers present ideas to students.

## Michigan Science Standards Update

### A Plan for Adoption and Implementation

Michigan's current K-12 Science Standards were written in 2005 to provide guidance for our state's K-12 science education as described by the Michigan Merit Curriculum. Since that time, the understanding and skill-sets of sciences and engineering, as well as our general understanding of the natural world, has changed considerably. And, research on learning and science education provides a better understanding of how children best learn science and related skills and concepts necessary for science literacy.

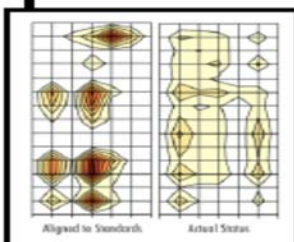
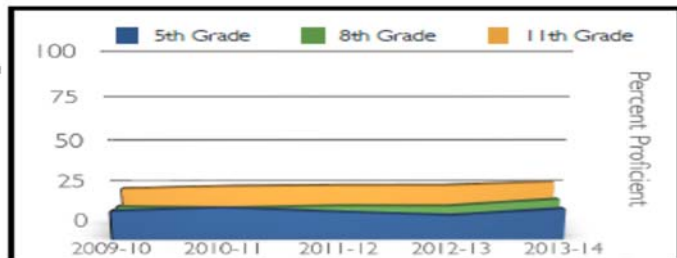


### The State of Science Education

Michigan lags behind several states in student proficiency, with nearly 3/4 of students in tested grades not proficient in science, for many reasons, including:

- poor preparation of primary grades educators,
- district use of outdated resources,
- diminished time allocated to science instruction,
- a lack of alignment between focus of the standards (as shown in the left image), and educator focus (as shown on the right).

Adoption of new standards brings a renewed focus for educators on what is expected for students to be career and college ready, and how to get there.



### A Vision for Science Education

The effort to revise science standards comes from a vision for science education that is based on over thirty years of research on how students best learn science, as well as the ever changing needs in our workplaces and communities for scientific understanding.

Starting early on, educators and communities can develop deeper understanding of scientific concepts and practices in children in ways that utilize their natural curiosity about the world. These concepts can be further developed and expanded as children grow through regular investigation of science through hands-on practices and experimentation.

This vision for the learning of science and engineering is the foundation for the **Framework for K-12 Science Education**, which was used to develop the proposed new standards. The framework provides a new foundation for all educators, to focus on preparing the next generation of learners and leaders in Michigan.





## Developing Michigan's New K-12 Science Standards

Michigan became a lead state in the development of the Next Generation Science Standards in 2011. Michigan was one of 26 lead states involved, with over 60 Michigan educators and scientists participating as lead developers or reviewers. Many college and university professors, teacher educators, business and industry professionals, district and ISD leaders, and classroom teachers became involved in the process, representing several organizations that will eventually support implementation of the standards.



## CROSS-CUTTING CONCEPTS

Patterns			
Cause and Effect			
Scale, Proportion, and Quantity			
Systems and System Models			
Energy and Matter			
Structure and Function			
Stability and Change			
Engineering and Design			
Cross-disciplinary Integration			
Mathematics and Language Arts			

Based upon the Framework, the new standards are really a set of student performance expectations. These performance expectations incorporate three main elements:

- **Disciplinary Core Ideas** (science specific concepts in the life, earth, and physical sciences),
- **Science and Engineering Practices** (the practices of engaging in scientific investigation to answer questions, and engineering design to solve problems),
- **Cross-Cutting Concepts** (conceptual ideas common to all areas of science).

These expectations are also interwoven across disciplines, including connections to language arts and mathematics.

## Implementing the Standards

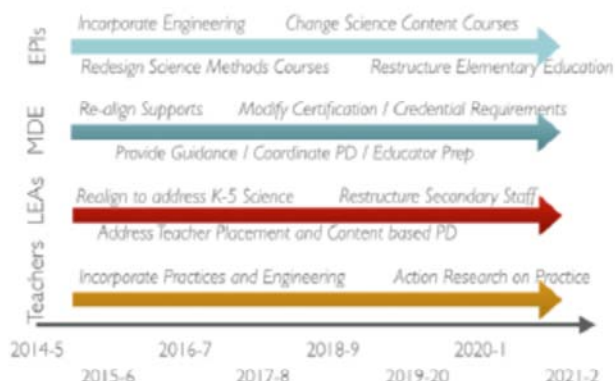
Upon adoption of new standards, the real challenge of implementing the standards throughout Michigan's educational system begins. Parts of this are already in development,



including professional development from organizations like the Michigan Science Teachers Association and the Michigan Mathematics and Science Center Network. These efforts need to happen with a variety of stakeholders to develop a new support structure to address school district and higher education systems to engage in continuous improvement.

The Michigan Department of Education is working with the State Board of Education to ensure that our legislature and the education community at large understand the benefits and challenges of implementation of these new standards. Next steps, upon legislative review and adoption, include initial stages of an implementation plan, including communication to all stakeholders, identification of instructional and systems development of Michigan-specific guidance for how to incorporate Michigan examples engineering content into classroom instruction for all students.

## TRANSITION TIMELINE



For additional information, contact Stephen Best (BestS1@michigan.gov).



**Virtual Course Offering (VCO)** is a 50/50 blended virtual learning course where students receive academic instruction online through a computer over the internet in addition to traditional academic instruction.

<b>Science</b>	<b>Course No/MI ID: 53230</b>
<b>GRADES: (K)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (kindergarten) courses encourage students to observe and describe properties of organisms, systems, and the environment. Students may raise questions, identify patterns, and record observations. Specific content depends upon state standards for kindergarten.

<b>Science</b>	<b>Course No/MI ID: 53231</b>
<b>GRADES: (1)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 1) courses allow students to identify interactions and patterns in objects and events and to record observations in written or visual form. Typically, students investigate systems of living organisms and the environment. Specific content depends upon state standards for grade 1.

<b>Science</b>	<b>Course No/MI ID: 53232</b>
<b>GRADES: (2)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 2) courses continue to introduce students to basic scientific processes and principles. Course content may include identification of patterns, classification and sequencing, or manipulation of systems to observe interactions between parts and record the effects of change. Specific content depends upon state standards for grade 2.

<b>Science</b>	<b>Course No/MI ID: 53233</b>
<b>GRADES: (3)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 3) courses involve observation, measurement, and description of simple systems. Course content may include the scientific process; life and environmental science; and physical, earth, and space science. Specific content depends upon state standards for grade 3.

<b>Science</b>	<b>Course No/MI ID: 53234</b>
<b>GRADES: (4)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 4) courses typically explore complex systems, such as plant and animal adaptation, forces and motion, and physical and chemical changes in matter, or content consistent with state academic standards. Students may identify causes and effects of change, make predictions, and gather data from multiple sources. Specific content depends upon state standards for grade 4.

<b>Science</b>	<b>Course No/MI ID: 53235</b>
<b>GRADES: (5)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 5) courses build on the study of various systems. They may include identification and description of cycles, comparisons of forms of matter and energy, forces, or content consistent with state academic standards. Students may make comparisons and interpret and analyze information. Specific content depends upon state standards for grade 5.

<b>Science/VCO</b>	<b>Course No/MI ID: 53236</b>
<b>GRADES: (6)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 6) courses typically include subject matter from several strands of science, including earth/space sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 6. This course may offer sections of Virtual Course Offering (VCO).

<b>Science/VCO</b>	<b>Course No/MI ID: 53237</b>
<b>GRADES: (7)</b>	<b>CREDIT TYPE: LifeandPhysicalSciences</b>
	<b>CREDIT(S): 1</b>

Science (grade 7) courses build on previous years of scientific inquiry and typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 7. This course may offer sections of Virtual Course Offering (VCO).

### **Principles of Technology/VCO**

**GRADES: (6-7)**

**CREDIT TYPE: LifeandPhysicalSciences**

**Course No/MI ID: 53153**

**CREDIT(S): 0.25**

Principles of Technology courses focus on the study of the forces and laws of nature and their application to modern technology. Equilibrium, motion, momentum, energy conversion, electromagnetism, and optical phenomena are presented in the context of current, real-world applications. Demonstrations, math labs, and applied laboratory experiments are an integral part of the Principles of Technology curriculum. This course provides opportunities for the enhancement of learning, and may significantly support students in their inquiries, and in developing their conceptual understanding. Students will use available technologies integrated into their inquiries. This course may offer sections of Virtual Course Offering (VCO).

## **MATHEMATICS DEPARTMENT**

Per MI Merit Curriculum (MMC) Course/Credit Requirements<sup>5</sup>, Mathematical understanding and skills are essential elements for meaningful participation in the global information society. US expectations in mathematics for students have not kept pace with expectations in high-achieving countries around the world. And, expectations about who can do mathematics in the US have led to inequitable and unacceptably low opportunities to learn for students living in poor and urban communities. In Michigan, the K-8 Mathematics Common Core Standards represent a major step forward in raising expectations in mathematics for all students.

Additionally, The National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) released a set of state-led education standards, recently known as the Common Core State Standards. The mathematics standards for grades K-12 were developed in collaboration with a variety of stakeholders including content experts, states, teachers, school administrators and parents. The standards establish clear and consistent goals for learning that will prepare America's children for success in college and work.

The Common Core Standards define the knowledge and skills students should have within their K-12 education careers so that they will graduate high school fully prepared for college and careers.

The standards are aligned with college and work expectations;

- Clear, understandable and consistent;
- Include rigorous content and application of knowledge through high-order skills; build upon strengths and lessons of current state standards;
- Informed by other top performing countries, so that all students are prepared to succeed in our global economy and society; and
- Evidence and research-based.

It is essential to hold high expectations in mathematics for all students for completion of middle school and eventually high school, whether they will enter the workforce or go on to post-secondary education.

As schools transition to the Common Core Standards, and realign their curriculum to such, both the Common Core Standards and Middle School Mathematics Standards will be carefully utilized to ensure appropriate instruction for middle school students is taking place.

The MI Common Core Standards in Mathematics for K-8<sup>6</sup> prescribe a thorough treatment of number,

---

○ <sup>5</sup> Michigan Merit Curriculum – Mathematics [http://www.michigan.gov/documents/mde/K-12\\_MI\\_Math\\_Standards\\_REV\\_470033\\_7\\_550413\\_7.pdf](http://www.michigan.gov/documents/mde/K-12_MI_Math_Standards_REV_470033_7_550413_7.pdf)

<sup>6</sup> MI Common Core Standards for K-8 – Mathematics



including strong emphasis on computational fluency and understanding of number concepts, to be completed largely by the sixth grade.

In the middle grades, students see the progressive generalization of arithmetic to algebra. They learn symbolic manipulation skills and use them to solve equations. They study simple forms of elementary polynomial functions such as linear, quadratic, and power functions as represented by tables, graphs, symbols, and verbal descriptions.

In grades K-5, students study figures such as triangles, rectangles, circles, rectangular solids, cylinders, and spheres. They examine similarities and differences between geometric shapes. They learn to quantify geometric figures by measuring and calculating lengths, angles, areas and volumes. In grades 6-8, students broaden their understanding of area and volume and develop the basic concepts of congruence, similarity, symmetry and the Pythagorean Theorem. They apply these ideas to solve geometric problems, including ones related to the real world.

In K-6, students develop the ability to read, analyze, and construct a repertoire of statistical graphs. Students also examine the fundamentals of experimental and theoretical probability in informal ways. The Basic Counting Principle and tree diagrams serve as tools to solve simple counting problems in these grades.



**The Standard 2 focus is on Algebra & Functions in which students will:**

- ☛ Recognize, construct, interpret, and evaluate expressions; fluently transform symbolic expressions into equivalent forms; determine appropriate techniques for solving each type of equation, inequality, or system of equations, apply the techniques correctly to solve, justify the steps in the solutions, and draw conclusions from the solutions; know and apply common formulas.
- ☛ Understand functions, their representations, and their attributes; perform transformations, combine and compose functions, and find inverses; classify functions and know the characteristics of each family; work with functions with real coefficients fluently; construct or select a function to model a real-world situation in order to solve applied problems; draw on their knowledge of families of functions to do so.
- ☛ Study the symbolic and graphical forms of each function family; recognize the unique characteristics of each family; use them as tools for solving problems or for modeling real-world situations.

**Virtual Course Offering (VCO)** is a 50/50 blended virtual learning course where students receive academic instruction online through a computer over the internet in addition to traditional academic instruction.

**Mathematics**

**GRADES: (K)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52030**

**CREDIT(S): 1**

Mathematics (kindergarten) courses typically introduce and reinforce basic concepts of mathematics such as counting whole numbers and understanding patterns, time, and money. Specific content depends upon state standards for kindergarten.

**Mathematics**

**GRADES: (1)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52031**

**CREDIT(S): 1**

Mathematics (grade 1) courses typically help build a conceptual foundation in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. These courses often require students to develop their numerical fluency and to make calculation predictions. Specific content depends upon state standards for grade 1.

**Mathematics**

**GRADES: (2)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52032**

**CREDIT(S): 1**

Mathematics (grade 2) courses typically continue to build a conceptual foundation in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. These courses often require students to develop their numerical fluency, School Codes for the Exchange of Data • 17 particularly in addition and subtraction, and to solve problems using those operations as well as estimation. Specific content depends upon state standards for grade 2.

**Mathematics**

**GRADES: (3)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52033**

**CREDIT(S): 1**

Mathematics (grade 3) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. These courses often require students to improve their numerical fluency, adding multiplication and division to addition and subtraction operations, using whole numbers and parts (quarters, thirds, halves), and estimation. Specific content depends upon state standards for grade 3.

**Mathematics**

**GRADES: (4)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52034**

**CREDIT(S): 1**

Mathematics (grade 4) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. Course content may include activities that help students increase operational fluency, make connections between abstract symbols and concrete events or concepts, or present conclusions based on data. Specific content depends upon state standards for grade 4.

**Mathematics**

**GRADES: (5)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52035**

**CREDIT(S): 1**

Mathematics (grade 5) courses typically emphasize number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; and measurement. Course content may include activities that help students increase operational fluency, make connections between abstract symbols and concrete events or concepts, or present their mathematical reasoning. Specific content depends upon state standards for grade 5.

**Mathematics/VCO**

**GRADES: (6)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52036**

**CREDIT(S): 1**

Mathematics (grade 6) courses typically emphasize skills in numerical operations (including basic operations and their proper order); measurement; patterns; simple functions; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state and national common core standards for grade 6. This course may offer sections of Virtual Course Offering (VCO).

**Mathematics/VCO**

**GRADES: (7)**

**CREDIT TYPE: Mathematics**

**Course No/MI ID: 52037**

**CREDIT(S): 1**

Mathematics (grade 7) courses typically emphasize proficiency in skills involving numbers and operations; measurement; patterns; functions; algebraic formulas; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state and national common core standards for grade 7. This course may offer sections of Virtual Course Offering (VCO).

## **ACADEMIC ENRICHMENT, TUTORIAL & MISCELLANEOUS COURSES**

Academic Enrichment courses are based on student individual targeted needs and are focused on remediation. These courses are also supplemental courses to provide make-up credit for areas where students need additional time to master curriculum content expectations. Students are also scheduled for caseload roster sections to allow tutorial staff to track progress in supplemental services provided for our

before, during, and after School tutorial programs.

## **GRADES K-7**

### **Miscellaneous - AM Attendance**

**Course No/MI ID: 72999**

**GRADES: (K-7) CREDIT TYPE: AcademicEnrichment**

**CREDIT(S): 0**

Miscellaneous - AM Attendance Courses allow teachers to communicate electronically with parents and students on their approaches to learning skills related to student learning and submission of required forms and checklist items. This course is also used for pupil accounting requirements for grades K-5th only reporting elementary AM attendance.

### **Miscellaneous - PM Attendance**

**Course No/MI ID: 72999b**

**GRADES: (K K-7) CREDIT TYPE: AcademicEnrichment**

**CREDIT(S): 0**

Miscellaneous - PM Attendance Courses is used for pupil accounting requirements for grades K-5th only reporting elementary PM attendance.

### **Tutorial - Team Teaching**

**Course No/MI ID: 72005a**

**GRADES: (K K-7) CREDIT TYPE: AcademicEnrichment**

**CREDIT(S): 0**

Tutorial courses provide the assistance students need to successfully complete their coursework. Students may receive help in one or several subjects.

### **Tutorial - During, After, Before, & Summer School**

**Course No/MI ID: 72005b/c/d/f**

**GRADES: (K-7) CREDIT TYPE: AcademicEnrichment**

**CREDIT(S): 0**

Tutorial courses provide the assistance students need to successfully complete their coursework. Students may receive help in one or several subjects.

### **Tutorial - Support Services**

**Course No/MI ID: 72005e**

**GRADES: (K K-7) CREDIT TYPE: AcademicEnrichment**

**CREDIT(S): 0**

Tutorial courses provide the assistance students need to successfully complete their coursework. Students may receive help in one or several subjects.

## **LITERACY ACROSS THE CURRICULUM (LAC)**

Literacy Across the Curriculum allows educators to make links between subjects: empowering students across a wide variety of disciplines, subject areas, and work practices. This approach is the collection of efforts to make explicit extensions of reading and writing across the curriculum. Proficient reading skills are essential to learning mathematics, science, and social studies concepts. The strategies below are meant to help all students to successfully transfer reading skills to other content areas. It is critical to draw on students' cultural background, prior knowledge, and ability to make connections to the world as they know it.

<b>Pre-Reading Strategies</b>	<b>Reading Strategies</b>	<b>After-Reading Strategies</b>
<ul style="list-style-type: none"><li>• Activate prior knowledge;</li><li>• Use culturally relevant materials to build background knowledge;</li><li>• Use picture books and other literature to introduce concepts;</li><li>• Support connecting knowledge and building schemata using graphic organizers; and</li><li>• Make predictions about text.</li></ul>	<ul style="list-style-type: none"><li>• Reconsider and confirm predictions about texts;</li><li>• Ask specific questions;</li><li>• Restate or summarize information in their own words; and</li><li>• Outline, highlight, and draw on their own background knowledge.</li></ul>	<ul style="list-style-type: none"><li>• Discuss, elaborate, and clarify text;</li><li>• Apply information they have read;</li><li>• Use implicit questions related to text; and</li><li>• Complete related projects, learning log, and retellings through poetry, lyrics, raps or other research activities.</li></ul>

### **Literacy Across the Curriculum (LAC)**

**Course No/MI ID: 51999a**

**GRADES: (K-5th) CREDIT TYPE: LiteracyAcrossTheCurriculum**

**CREDIT(S): 1**

Literacy Across the Curriculum (LAC) focuses on student proficiency in literacy across disciplines, in addition to social studies content standards. Units focus on student proficiency in written expression,

reading comprehension, vocabulary building, speaking and listening skills across all disciplines. Additionally, the Social Studies Grade Level Content Expectations are aligned to holistic units with students making real-world connections.

## **ENGLISH LANGUAGE AND LITERATURE DEPARTMENT**

Per MI Merit Curriculum (MMC) Course/Credit Requirements<sup>7</sup>, the English Language and Literature Standards are built upon the expectation that students will engage in broad reading and writing experiences to encompass literary texts, nonfiction literary texts, and other informational texts. In addition to the English Language and Literature Standards and English High School Content Expectations, The National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) released a set of state-led education standards, recently known as the Common Core State Standards.

The English Language and Literature standards for grades K-12 were developed in collaboration with a variety of stakeholders including content experts, states, teachers, school administrators and parents. The standards establish clear and consistent goals for learning that will prepare America's children for success in college and work.

Students advancing through the grades are expected to meet each year's grade-specific standards, retain or further develop skills and understanding mastered in preceding grades, and work steadily toward meeting the more general expectations described by the CCR<sup>8</sup> standards. The following is a portrait of students who meet the standards set out in the CCR and are College and Career Ready in Reading, Writing, Speaking, Listening, and Language.

### **They demonstrate independence.**

Students can, without significant scaffolding, comprehend and evaluate complex texts across a range of types and disciplines, and they can construct effective arguments and convey intricate or multifaceted information. Likewise, students are able independently to discern a speaker's key points, request clarification, and ask relevant questions. They build on other's ideas, articulate their own ideas, and confirm they have been understood. Without prompting, they demonstrate command of Standard English and acquire and use a wide-ranging vocabulary. More broadly, they become self-directed learners, effectively seeking out and using resources to assist them, including teachers, peers, and print and digital reference materials.

### **They build strong content knowledge.**

Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They become proficient in new areas through research and substance. They become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise. They refine and share their knowledge through writing and speaking.

### **They respond to the varying demands of audience, task, purpose, and discipline.**

Students adapt their communication in relation to audience, task, purpose, and discipline. They set and adjust purpose for reading, writing, speaking, listening, and language use as warranted by the task. They appreciate nuances, such as how the composition of an audience should affect tone when speaking and how the connotations of words affect meaning. They also know that different disciplines call for different types of evidence (e.g., documentary evidence in history, experimental evidence in science).

### **They comprehend as well as critique.**

Students are engaged and open-minded – but discerning – readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author's or speaker's assumptions and premises and assess the veracity of claims and the soundness of reasoning.

### **They value evidence.**

---

<sup>7</sup> Michigan Merit Curriculum – English Language Arts [http://www.michigan.gov/mde/0,4615,7-140-28753\\_38924\\_41644\\_42674---,00.html](http://www.michigan.gov/mde/0,4615,7-140-28753_38924_41644_42674---,00.html)

<sup>8</sup> [http://www.michigan.gov/mde/0,4615,7-140-28753\\_38924\\_41644\\_42668---,00.html](http://www.michigan.gov/mde/0,4615,7-140-28753_38924_41644_42668---,00.html)

Students cite specific evidence when offering an oral or written interpretation of a text. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others' use of evidence.

**They use technology and digital media strategically and capably.**

Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

**They come to understand other perspectives and cultures.**

Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own.

**Virtual Course Offering (VCO)** is a 50/50 blended virtual learning course where students receive academic instruction online through a computer over the internet in addition to traditional academic instruction.



**English Language & Literature**

**Course No/MI ID: 51999**

**GRADES: (K-5) CREDIT TYPE: EnglishLanguageLiterature**

**CREDIT(S): 1**

English Language and Literature - Other courses cover foundational skills and concepts related to English & Language Arts. This course helps ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. Standards covered are Conventions of Standard English, Knowledge of Language (Begins in grade 2), Vocabulary Acquisition and Use. Wherever possible, language will be taught through the relevant, authentic context of the units of inquiry.

**English Language & Literature/VCO**

**Course No/MI ID: 51999**

**GRADES: (6-7) CREDIT TYPE: EnglishLanguageLiterature**

**CREDIT(S): 1**

English Language and Literature - Other courses cover foundational skills and concepts related to English & Language Arts. This course helps ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. Standards covered are Conventions of Standard English, Knowledge of Language (Begins in grade 2), Vocabulary Acquisition and Use. Wherever possible, language will be taught through the relevant, authentic context of the units of inquiry. This course may offer sections of Virtual Course Offering (VCO).

**Composition - Online Writing/VCO**

**Course No/MI ID: 51149**

**GRADES: (67) CREDIT TYPE: EnglishLanguageLiterature**

**CREDIT(S): 0.25**

Composition - Online Writing courses emphasize writing style and technique in developing students' skills in writing and editing stories, headlines, captions and online learning blogs/web posts (journal entries) using PowerSchool Studio class web pages and other online resources. This course provides opportunities for the enhancement of learning, and may significantly support students in their inquiries, and in developing their conceptual understanding. Students will use available technologies integrated into their inquiries. This course may offer sections of Virtual Course Offering (VCO).

## SOCIAL SCIENCES AND HISTORY DEPARTMENT

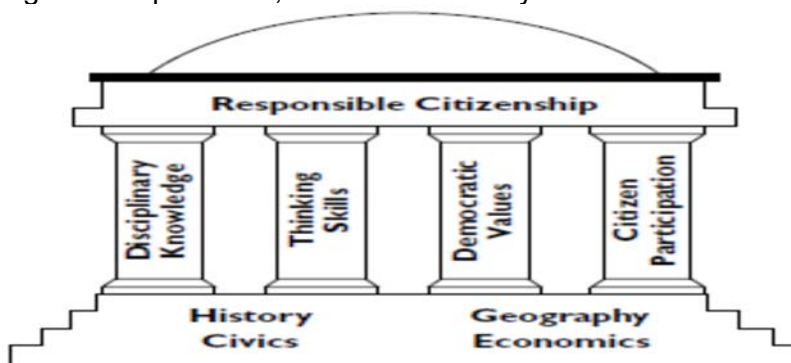


Noor International Academy has adopted the newly revised and adopted Michigan Social Studies Standards for K-67 Effective Social Studies instruction and assessment incorporate methods of inquiry, involve public discourse and decision making, and provide opportunities for citizen involvement. Each year; students will receive instruction that allows them to think and act as historians, geographers, political scientists, and economists. For this type of thinking to occur, teachers will utilize the following disciplinary processes with their students:

- 👉 Acquiring, organizing, and presenting social studies information
- 👉 Conducting investigations on social studies questions
- 👉 Analyzing public issues in our various communities
- 👉 Engaging in constructive conversation around social studies topics
- 👉 Composing cohesive essays expressing a position on public issues
- 👉 Participating constructively as community members

Respect for the underlying values of a democratic society is developed through effective social studies education. Rigorous standards provide a framework for designing curriculum, assessment, and effective classroom instruction that result in relevant learning experiences.

Social Studies are the integrated study of the social sciences to prepare young people to become responsible citizens. Responsible citizens display social understanding of civic efficacy. Social understanding includes knowledge of the human condition, how it has changed over time, the variations that occur in different physical environments and cultural settings, and the emerging trends that appear likely to shape the future in an interdependent world. Civic efficacy is the readiness and willingness to assume responsibilities of citizenship, knowing how, when, and where to make informed and reasoned decisions for the public good in a pluralistic, democratic society.



Our constitutional democracy requires active citizens. Responsible citizenship requires students to participate actively while learning in the classroom. Instruction provides activities that actively engage students so that they simultaneously learn about civic participation while involved in the civic life of their communities, our state, and our nation. The social studies curriculum prepares students to participate in political activities, to serve their communities, and to regulate themselves responsibly.

### ***The Responsible Citizen:***

- 👉 Uses knowledge of the past to construct meaningful understanding of our diverse cultural heritage and inform his/her civic judgments (Historical Perspective)
- 👉 Uses knowledge of spatial patterns on earth to understand processes that shape both the natural environments and the diverse societies that inhabit them (Geographic Perspective)



- Uses knowledge of American government and politics to make decisions about governing his/her community (Civic Perspective)
- Uses knowledge of the production, distribution and consumption of goods and services to make personal, career and societal decisions about the use of scarce resources (Economic Perspective)
- Knows how, when, and where to construct and express reasoned positions on public issues (Public Discourse and Decision Making)
- Acts constructively to further the public good (Citizen Involvement)

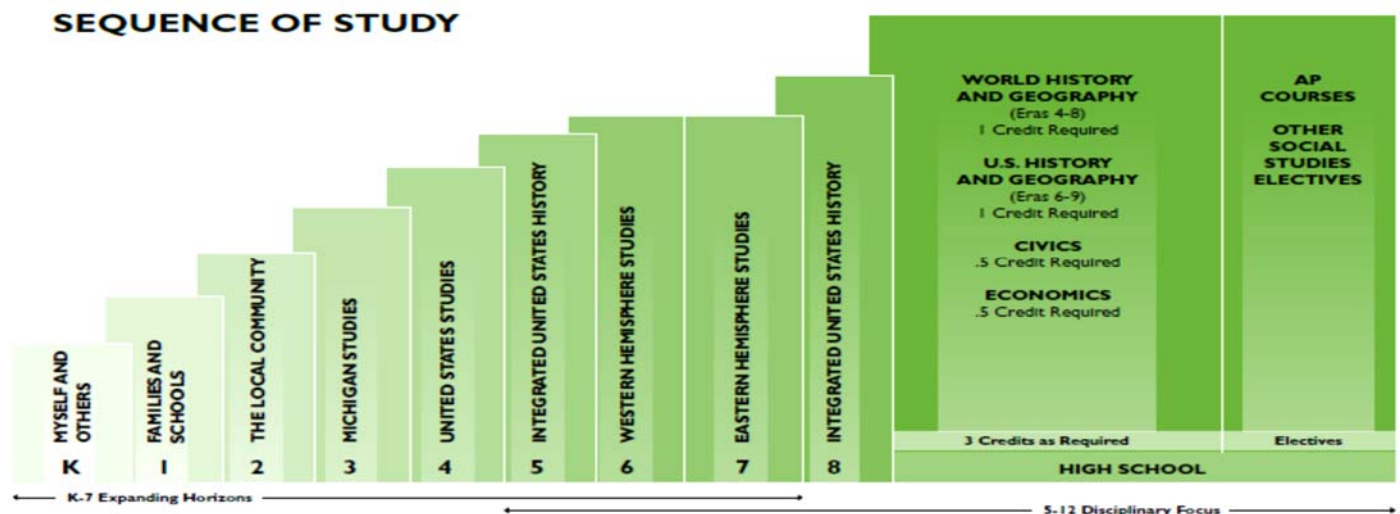
The use of technology is critical for responsible citizenship. Citizens must know how to read and comprehend narratives from a variety of sources, understand and use data effectively, as well as know how to compile and present valid and reliable data. The development of vocabulary, critical to understanding and communication, is an important component of the social studies curriculum. Finally, writing especially expository, informational and persuasive writing is an empowering skill needed by all citizens. The ability to clearly communicate one's ideas and reasoned viewpoints is the hallmark of a responsible citizen.

In order to thrive in a digital economy, students will need digital-age proficiencies. These proficiencies include:

- Basic, scientific, technological, financial, economic, and civic literacy
- Visual and information literacy
- Cultural literacy and global awareness
- Adaptability, ability to manage complexity, and self-direction
- Curiosity, creativity, and risk-taking
- Higher order thinking and sound reasoning
- Teaming and collaboration
- Personal and social responsibility
- Interactive communication
- Prioritizing, planning, and managing for results
- Effective use of real-world tools
- High quality results with real-world application

Michigan's Process Standards, which are organized into four groups:

- Process Standards Group 1: **Reading and Communication**
- Process Standards Group 2: **Inquiry, Research, and Analysis**
- Process Standards Group 3: **Public Discourse and Decision Making**
- Process Standards Group 4: **Citizen Involvement**





## Michigan Social Studies C3 Update

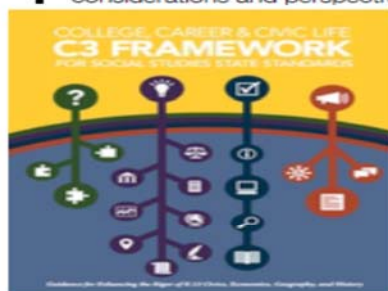
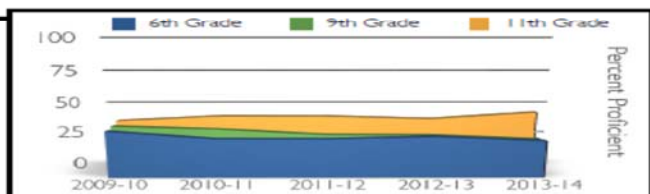
### A Plan for Adoption and Implementation

Michigan's current K-12 Social Studies Standards were written in 2006 to provide guidance for our state's K-12 social studies education as described by the Michigan Merit Curriculum. The C3 Framework, which promotes career, college, and civic readiness, and specifically addresses geography, history, economics, and civics, was released in 2013. Michigan was a lead developer in this framework, which guides states in updating content standards in these topics.

#### Student Proficiency in Social Studies

Michigan students continue to struggle in social studies, and lag behind many states in student achievement in this topic, with less than half of our students being proficient in social studies. There are a variety of possible reasons for this, including poor preparation of educators, the lack of appropriate resources and time for instruction, a lack of focus on higher-order thinking skills, and an overly complex set of standards.

As a result of this and other feedback from educators, Michigan's social studies communities came together this past year to update the standards, with the mantra of "fewer, clearer, higher." The goal was to reduce and clarify the standards and introduce a framework for inquiry and questioning that focuses on higher order thinking skills. The group also focused on incorporating civil rights considerations and perspectives, and aligning the standards to the C3 Framework.



#### The Arc of Inquiry

The organizing structure for the social studies framework, the "Arc of Inquiry," guides the instructional process, and is at the heart of the learning experience. It involves:

- Developing Questions and Planning Inquiries
- Applying Disciplinary Concepts and Tools
- Evaluating Sources and Using Evidence
- Communicating Conclusions and Taking Informed Action

This organizer supports social studies instruction at all levels, whether students are exploring questions around 21st century global economies or participating in an archeological "dig" (at right) to discover how people lived in Michigan over 700 years ago.



The State Board of Education is beginning to review the new standards now, and will be considering adoption later this year. For more information about this update, contact Gregg Dionne ([dionneg@michigan.gov](mailto:dionneg@michigan.gov)).



**Virtual Course Offering (VCO)** is a 50/50 blended virtual learning course where students receive academic instruction online through a computer over the internet in addition to traditional academic instruction.

#### Social Studies

**GRADES: (K)** **CREDIT TYPE: SocialSciencesandHistory**

**Course No/MI ID: 54430**

**CREDIT(S): 1**

Social Studies (kindergarten) courses generally provide initial foundations in the social studies disciplines: history, geography, civics and government, and economics. Specific content depends upon state standards for kindergarten.

#### Social Studies

**GRADES: (1)** **CREDIT TYPE: SocialSciencesandHistory**

**Course No/MI ID: 54431**

**CREDIT(S): 1**

Social Studies (grade 1) courses develop foundational skills in the social studies disciplines: history, geography, civics and government, and economics. These disciplines are often taught together and organized around a theme. Specific content depends upon state standards for grade 1.

#### Social Studies

**GRADES: (2)** **CREDIT TYPE: SocialSciencesandHistory**

**Course No/MI ID: 54432**

**CREDIT(S): 1**

Social Studies (grade 2) courses help students reach greater understanding of the social studies disciplines: history, geography, civics and government, and economics. Courses often offer study of these disciplines in an integrated fashion, through the context of a specific theme or discipline, such as state-based social studies or the history of a people. Specific content depends upon state standards for grade 2.



**Social Studies** **Course No/MI ID: 54433**  
**GRADES: (3)** **CREDIT TYPE: SocialSciencesandHistory** **CREDIT(S): 1**  
Social Studies (grade 3) courses build on previous knowledge and introduce concepts in the social studies disciplines: history, geography, civics and government, and economics. Instruction of the disciplines is often integrated for instructional purposes. Students may study these disciplines through the context of a specific theme or discipline, such as state-based social studies or U.S. history. Specific content depends upon state standards for grade 3.

**Social Studies** **Course No/MI ID: 54434**  
**GRADES: (4)** **CREDIT TYPE: SocialSciencesandHistory** **CREDIT(S): 1**  
Social Studies (grade 4) courses continue to develop skills in history, geography, civics and government, and economics. Although the four disciplines are typically integrated, these courses may take a more discipline-specific approach, such as concentrating on U.S. history, state-specific history, or civic engagement for periods of time. Specific content depends upon state standards for grade 4.

**Social Studies** **Course No/MI ID: 54435**  
**GRADES: (5)** **CREDIT TYPE: SocialSciencesandHistory** **CREDIT(S): 1**  
Social Studies (grade 5) courses continue to develop skills in history, geography, civics and government, and economics. These courses may be more discipline-specific (dividing up state history, U.S. history, geography, government, and so on). Specific content depends upon state standards for grade 5.

**Social Studies/VCO** **Course No/MI ID: 54436**  
**GRADES: (6)** **CREDIT TYPE: SocialSciencesandHistory** **CREDIT(S): 1**  
Social Studies (grade 6) courses provide a greater understanding of social studies disciplines, including history, geography, civics and government, and economics. These courses often focus on the history, culture, and government of various specific world societies. Typically, students develop skills used in the social studies disciplines. Specific content depends upon state standards for grade 6. This course may offer sections of Virtual Course Offering (VCO).

**Social Studies/VCO** **Course No/MI ID: 54437**  
**GRADES: (7)** **CREDIT TYPE: SocialSciencesandHistory** **CREDIT(S): 1**  
Social Studies (grade 7) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Specific content depends upon state standards for grade 7. This course may offer sections of Virtual Course Offering (VCO).

**SS & History - Online Current Events/VCO** **Course No/MI ID: 54999**  
**GRADES: (6-7)** **CREDIT TYPE: SocialSciencesandHistory** **CREDIT(S): 0.25**  
Social Sciences & History Online Current Events courses enable students to use technology to research and evaluate political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions. Students will use PowerSchool Studio class web pages and other online resources to keep an online blog/web posts (journal entries) related to the current events studied. This course provides opportunities for the enhancement of learning, and may significantly support students in their inquiries, and in developing their conceptual understanding. Students will use available technologies integrated into their inquiries. This course may offer sections of Virtual Course Offering (VCO).

## **FOREIGN LANGUAGE AND LITERATURE DEPARTMENT**

Michigan students, like students throughout the United States, are living in and contributing to an increasingly diverse society and interdependent community of nations in the 21<sup>st</sup> century. To realize their personal, social and long-term career goals, individuals need to be able to communicate with others

skillfully, appropriately, and effectively. The challenge of contemporary education is to prepare all students for life in this new world. Because language and communication are at the heart of the human experience, the United States must equip students linguistically and culturally to communicate successfully in a pluralistic American society and abroad. This imperative addition to our students' learning experience envisions a future in which all students develop and maintain proficiency in English and in at least one other language. Michigan has setup its standards to cover five major areas of learning:

- 🎧 Communication – communicate in languages other than English
- 🎧 Cultures – gain knowledge and understanding of other cultures
- 🎧 Connections – connect with other disciplines and acquire information
- 🎧 Comparisons – develop insight into the nature of language and culture
- 🎧 Communities – participate in multilingual communities at home and around the world

The proficiency guidelines of the American Council on the Teaching of Foreign Languages (**ACTFL**) describe language proficiency in terms of five levels: Novice, Intermediate, Advanced, Superior and Distinguished. At the Novice, Intermediate, and Advanced levels, proficiency is further defined as low, mid, or high. This is why we offer Arabic language for students from Kindergarten through 8<sup>th</sup> grade as students will need the opportunity to attain high levels of proficiency for meeting proficiency guidelines and requirements.

Our Foreign Language and Literature courses are setup so that students' progress from one level to another each trimester and are able to enroll in higher levels at a grade level based on their proficiency. Courses are scheduled at the school level based on need and levels of experience of students and classes. Students may fulfill the language requirements for Arabic by demonstrating proficiency at the Novice High level in speaking and writing (productive skills) and in listening and reading (interpretive skills) based on years of experience per Principal and Assistant Superintendent approval.

The assessment process can be a powerful tool when students are actively involved in the process. Involvement allows students to take ownership of their learning and builds confidence in their ability over time. Reliable formative and summative assessments\*\* provide teachers with information they need to make informed instructional decisions and be more responsive to students' needs. Both assessment of learning and assessment for learning are essential and share common elements. World languages assessments will:

- 🎧 Align with learning goals and instruction;
- 🎧 Incorporate performance-based assessments that have application beyond the classroom;
- 🎧 Vary in type and format;
- 🎧 Use criteria scoring tools such as rubrics or exemplars;
- 🎧 Demonstrate the acquisition of important language skills and cultural knowledge;
- 🎧 Cause students to use critical thinking skills;
- 🎧 Meet the needs of diverse learners;
- 🎧 Provide opportunities for students to reflect on their own learning and progress through timely feedback.

**Virtual Course Offering (VCO)** is a 50/50 blended virtual learning course where students receive academic instruction online through a computer over the internet in addition to traditional academic instruction.

## Arabic/VCO

**GRADES: (7)**

**CREDIT TYPE: ForeignLanguageandLiterature**

**Course No/MI ID: 56720**

**CREDIT(S): 1**

Arabic courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Arabic language and students' knowledge of Arabic-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Arabic-speaking people to deepen their

understanding of the culture(s). Students are leveled by section in grades 2nd-7th: Novice, Low Intermediate, High Intermediate & Advanced. This course may offer sections of Virtual Course Offering (VCO).

---

1. Note: Successful completion of one year of Foreign Language in middle school will count towards the two year requirement for high school graduation. For students who will be attending a four-year, higher education institutions following high school, two additional years of Foreign Language in the high school setting is highly recommended.