

Advanced Technology Academy (ATA) Curriculum & Course Descriptions for 2026 - 2027

Early Childhood Development Center

Pre-School

ATA offers a Great Start Readiness Program (GSRP) as a preschool opportunity for children who are 4 years old. The program follows the Creative Curriculum - students learn through creative and active teaching strategies. Creative Curriculum focuses on big ideas, high interest projects, and individual students' passions. All specific needs of the students are accommodated. The students start the beginning of the year with the basic rules of a classroom and progresses into a more structured environment with routines. Individual units include trees, recycling, insects, sand, simple machines, exercise, clothing, and tunnels. The year finishes with activities to prepare them for the transition to Kindergarten.

Kindergarten

Kindergarten is offered as a self-contained classroom with no more than 19 students at the Early Childhood Development Center. The students receive core instruction in English Language Arts (including comprehension, phonics, and writing instruction), Math, Science, and Social Studies. They have one hour of STEAM in which their core instruction is supplemented.

Grade School: 1st through Fifth Grade

ATA offers its 1st through 3rd Grade as self-contained classrooms with a core curriculum in English Language Arts + Writing, Mathematics, Science and Social Studies. Also supplemental opportunities to participate in the Special Classes: STEAM, Technology, and Health and Wellness. For the 4th and 5th Grades, a rotational schedule is offered for English Language Arts + Writing, Mathematics, Science and Social Studies, with the following Electives offered: STEAM, Technology, and Health and Wellness.

Mathematics Curriculum K - 5

Designed under the leadership of William McCallum, a lead writer of the Common Core, all Illustrative Mathematics (IM) curricula are fully aligned to the rigor and coherence of the standards. IM is used as the primary resource for Grades K - 5.

In a problem-based curriculum, students work on carefully crafted and sequenced mathematics problems during most of the instructional time. Teachers help students understand the problems and guide discussions to be sure that the mathematical takeaways are clear to all. In the process, students explain their ideas and reasoning and learn to articulate mathematical ideas. The goal is to give students just enough background and tools to solve initial problems successfully, and then set them to increasingly sophisticated problems as their expertise increases.

The value of a problem-based approach is that students spend most of their time in math class doing mathematics, making sense of problems, estimating, trying different approaches, selecting and using appropriate tools, and evaluating the reasonableness of their answers. Students go on to analyze the significance of their answers, noticing patterns and making generalizations, communicating their reasoning verbally and in writing, listening to the reasoning of others, and building their understanding.

In addition to IM, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Applied Mathematics & Graphical Literacy from ACT Workkeys; and Henry Ford College's basic math courses.

Supplement curricular resources include: IXL Math, Flocabulary, Brainpop, GimKit, Kahoot and OMG Foldables.

The curriculum follows the Michigan K -12 Standards in Mathematics.

Kindergarten: The instructional focus is on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space.
[Kindergarten Math- ATA Curriculum Map Template](#)

First Grade: The instructional time focus is on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

[First Grade Curriculum Map](#)

Second Grade: The instructional time focus is on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

[Second Grade Curriculum Map](#)

Third Grade: The instructional time focus is on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

[Third Grade Curriculum Map](#)

Fourth Grade: The instructional time focus is on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

[Fourth Grade Curriculum Map](#)

Fifth Grade: The instructional time focus is on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

[Fifth Grade Curriculum Map](#)

English Language Arts + Writing Curriculum K - 5

Into Reading is the adopted reading program for all grades at ATA. It is a comprehensive K – 5 English language arts program. It provides an instructional system for reading both literature and informational texts, acquiring foundational skills, and developing mastery of speaking, listening, and writing. It is sequential, rooted in building strong reading skills, and utilizes high quality literature and non-fiction for instruction. Into Reading offers students exposure to paired texts (fiction and nonfiction on the same topic), close-reading lessons, and required readings in which all students in a grade participate. Guided reading is also a key component of daily instruction. Teachers are able to supplement their ELA block and differentiate their lessons by incorporating guided reading groups, centers, and programs such as Reading A-Z, IXL, Edmentum, and MAP Accelerator within their small group instructional times.

K-3 teachers will also use LETRS and UFLI to strengthen phonics instruction, reading, and spelling. Lexia® LETRS® stands for: Language Essentials for Teachers of Reading and Spelling. LETRS is a professional learning course for instructors of reading, spelling, and related language skills. It provides educators with in-depth knowledge and tools that they can use with any reading program. UFLI is an ongoing effort by UF faculty, students, and staff to improve literacy outcomes for children learning to read. The work of UFLI focuses on two main areas: teacher development and reader development.

In addition to the Into Reading curriculum, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Reading Comprehension and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading comprehension, and critical thinking skills .

Kindergarten: By the end of kindergarten, most children associate letters with sounds, and they can identify and write upper and lower case letters. Children usually know consonant sounds before vowel sounds. Most kindergarten children learn to recognize whole words by sight. Sight words include words they use often, like "the," or their names. By the end of the year many children can recognize and read sight words in books. Most kindergarten children develop a stronger concept of print. They learn to differentiate punctuation marks, letters from words, and when words start and end. Kindergarteners learn that writing goes from left to right. They understand that we read until the end of the line, then we return to the left to read a new line. Most kindergarten children can understand basic motivations for characters and events. They can make predictions and relate the story to their own lives.

[Kindergarten ELA Map](#)

First Grade: First graders will read, write, and discuss a range of different text types (poems, informational books) Introduce new words and teach strategies for learning to spell new words. Demonstrate and model strategies to use when comprehension breaks down. Help children build lists of commonly used words from their writing and reading.

[First Grade Curriculum Map](#)

Second Grade: Key skills that'll help second graders build their knowledge bank: Reading silently and aloud with enough accuracy, expression, and speed to support understanding. Being able to retell stories in a way that covers the central message or lesson. Describing how characters respond to events and challenges.

[Second Grade Curriculum Map](#)

Third Grade: A third grader should be able to read multi-syllable and grade-appropriate, irregularly spelled words. Reads grade-level text with appropriate pace, accuracy, expression, and understanding. Self-corrects mistakes and re-reads when necessary. Talks about and answers questions about a text using specific examples from the text and connects different parts of a text. Reads a variety of texts including, fiction, non-fiction, fables, and poetry, and understands and talks about their main ideas and lessons. Begins to understand the difference between literal and non-literal text such as metaphors and analogies. Uses the text and context to determine the meaning of words. Is able to express their own point of view about characters or a text. Makes comparisons between books written by the same author and books in series that are about the same characters.

[Third Grade Curriculum Map](#)

Fourth Grade: Use more advanced reading comprehension strategies to understand text, including making inferences, determining the main idea and identifying key details. Synthesize information from two texts. Support analytical thinking with specific examples from the text. Summarize information.

[Fourth Grade Curriculum Map](#)

Fifth Grade: Upon finishing fifth grade, your student should be able to summarize and paraphrase information from a text. They will be able to read and interpret charts, graphs and other graphic representations in a text. They will also be able to analyze a writer's point of view and compare points of view from various writers on the same topic.

[Fifth Grade Curriculum Map](#)

Social Studies Curriculum K - 5

Grade school social studies focuses on local issues before branching out onto the State and National stage. All grades use the MDE Social Studies standards to create units of inquiry that meet the needs of their students with the goal of creating engaged and informed citizens. Starting in the 2025-26 school year, K-5 teachers propose to use TCI's Social Studies Curriculum. TCI consists of Informational Texts, Primary Sources, Videos, and Inquiry Projects to drive student learning. All K-5 teachers have access to the following resources to supplement their instruction: IXL - social studies, Flocabulary - social studies, Nearpod - social studies, and Brainpop - social studies. In addition to the proposed TCI curriculum, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Graphic Literacy and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading, and critical thinking skills ."

Kindergarten - Using a familiar context for five- and six-year-olds, kindergarteners learn about the social studies disciplines (history, geography, civics and government, and economics) through the lens of "Myself and Others."

[Kindergarten Social Studies Curriculum Map](#)

1st Grade - Students explore the social studies disciplines of history, geography, civics and government, and economics through an integrated approach using the context of school and families. This is the students' first introduction to social institutions.

[First Grade Curriculum Map](#)

2nd Grade - Students use the integrative approach to social studies through the context of the local community. Students are introduced to a social environment larger than their immediate surroundings.

[Second Grade Curriculum](#)

3rd Grade - Students explore the social studies disciplines of history, geography, civics and government, and economics through the context of Michigan studies.

[Third Grade Curriculum Map](#)

4th Grade - Using the context of the state of Michigan post statehood and the United States, 4th grade students learn significant social studies concepts within an increasingly complex social environment. They examine fundamental concepts in geography, civics and government, and economics organized by topic, region, or issue.

[Fourth Grade Curriculum Map](#)

5th Grade - Building upon the geography, civics and government, and economics concepts of the United States mastered in 4th grade and historical inquiry from earlier grades, the 5th grade expectations begin a more discipline-centered approach concentrating on the early history of the United States. Students begin their study of American history with Indigenous Peoples before the arrival of European explorers and end with the adoption of the Bill of Rights in 1791. Although the content expectations are organized by historical era, they build upon students' understanding of the other social studies disciplines from earlier grades and require students to apply these concepts within the context of American history.

[5th Grade Curriculum Map](#)

Science Curriculum K - 5

Grade school science utilizes Amplify Science to deliver interactive and inquiry-based units to the students. Amplify is a comprehensive suite of results-oriented STEM curriculum and professional development solutions. Built on a digital platform, enriched by print & Investigation Notebooks, and brought to life in hands-on kits, Amplify employs 3D learning to comprehensively address the Disciplinary Core Ideas, Crosscutting Concepts, and Science and Engineering Practices through the student-driven inquiry of phenomena across flexible storylines. Amplify uses the 5E model and then adds intervention and acceleration resources across three platforms—digital, kit and print—to help students understand the three dimensions of the Next Generation Science Standards (NGSS).

The curriculum follows the Next Generation Science Standards.

In addition to Amplify Science, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Graphic Literacy and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading, and critical thinking skills .

All K-5 teachers have access to the following science resources to supplement their instruction: Picture Perfect Science (picture book collection), Amplify Science, IXL - science, Flocabulary - science, Nearpod - science, and Brainpop & Brainpop Jr. - science.

Kindergarten - Kindergarteners learn about forces such as pushes & pulls and speed & direction through hands-on experiments. Students learn about and recognize patterns regarding the needs of life for plants and for animals. Students also study and observe weather conditions and weather patterns, and learn about various weather hazards.

[Kindergarten Science- ATA Curriculum Map](#) Science

1st Grade - Students in first grade use inquiry-based activities to learn about light, sound and communication. They observe and predict patterns of the sun, moon and stars. Students observe and recognize seasonal patterns, including the amount of daylight. Students also observe and recognize how offspring are similar to their parents and that living things use both structures and behavior to help them survive.

[First Grade Curriculum Map](#)

2nd Grade - In second grade, students describe and classify different materials based on their properties. They explore changes in matter due to heat such as freezing, melting, etc. Students study plants by investigating plant needs of sunlight and water, and exploring seed dispersal strategies. Students investigate where bodies of water can be found on Earth and how to represent those bodies of water using models. They also study slow and quick changes to the land due to environmental factors such as erosion, volcanic eruptions and earthquakes. Students design solutions to prevent changes to the land due to factors such as wind and water.

[Second Grade Curriculum Map](#)

3rd Grade - Third grade students investigate balanced and unbalanced forces, allowing them to make predictions about the motion of an object under different circumstances. Students also explore the properties of magnets and utilize them to design a solution to a problem that can be solved by using magnetic forces. Students explore many different animal life cycles. They study different traits of living organisms and recognize both that these traits can be influenced by the environment and that some traits are similar to parents and siblings while still varying. They use examples to explain that different traits and habits (including animals that live in herds or packs) may make some individuals more likely to survive and reproduce than others. They use fossils as evidence for organisms and the environments in which they existed long ago. Students also represent weather data in tables or graphical displays to show typical weather patterns during a particular season. They learn about different climates throughout the world and study different solutions for lessening the impacts of weather-related hazards such as hurricanes, floods, etc.

[Third Grade Curriculum Map](#)

4th Grade - Students in fourth grade investigate speed and energy, including energy in the form of collisions, sound, light, heat and electricity. They model and investigate visible and invisible waves, as well as learning about using patterns to communicate such as morse code, binary code, etc. Students also learn about plant and animal structures & behaviors that contribute to their survival. They learn about how animals receive, interpret and respond to sensory information. Students also use fossils to describe changes in the land over time. They observe the effects of weathering and erosion and learn about how Earth's features are represented using maps. Students learn about natural fuel resources and how their use changes the environment. They also construct and compare solutions for how to reduce the impact of volcanic eruptions, floods, tsunamis and earthquakes on human life.

[Fourth Grade Curriculum Map](#)

5th Grade - In the fifth grade, students investigate matter to discover that matter is made of particles smaller than we are able to see and that matter is conserved even when it changes state. Students learn about combining substances to create new substances. They also learn about gravitational force. Students learn that energy in both plants and animals comes from the sun and they model the cycling of this energy and matter among plants, animals and the environment. Students also learn about stars and the rotation of the Earth, especially as it contributes to predictable patterns of shadows and day & night. They model Earth's various spheres (geosphere, hydrosphere, biosphere, etc) and how they interact. Students also compare and contrast saltwater and freshwater reservoirs and learn about ways to protect Earth's resources.

[Fifth Grade Curriculum Map](#)

Specials & Electives Curriculum 1st - 5th

STEAM - STEAM is a contextual curriculum where the subjects are coordinated to support each other under a formal educational structure of how science, technology, engineering, mathematics and the broad spectrum of the arts all relate to each other in reality. This framework not only includes the art of aesthetics and design, but also the divisions of the liberal, language, musical, physical and manual arts. The STEAM structure describes how all the divisions of education and life work together; therefore it offers a formal place in the STEM structure for the Language Arts, Social Studies, and the purposeful integration of the exploratory subjects including the Arts, Music, CTE and Physical Education divisions of public education.

[STEAM curriculum map](#)

Health and Wellness - The *Michigan Model for Health™* Program (MMH) provides educators with a comprehensive, evidence-based Pre-K to 12 curriculum that promotes positive healthy decision-making, personal well-being, and lifelong wellness through engaging, age-appropriate lessons.

[Health and Wellness Curriculum Map.](#)

Technology - The Elementary Technology course will enable students to develop basic skills in computer science through engaging and age-appropriate content. The courses will expose students, within developmentally appropriate stages, to concepts such as problem solving and algorithms, security/privacy/copyright, computer programming basics and keyboarding skills. Students will learn block-based coding in offline environments in kindergarten through 2nd grade and will build upon those skills in online coding environments in grades 2-5. In addition to the computer skills, the Technology suite integrates standards from Social Studies, Health and Language Arts with topics in each grade about safety and health (online and offline), bullying/cyberbullying and being a responsible citizen/digital citizen. The upper grades will complete research projects focused on adaptive technology, social media and/or robotics.

Middle School: 6th through 8th Grades

Middle School students are provided a core curriculum in English Language Arts + Writing, Mathematics, Science and Social Studies. Elective courses: Computer Literacy, Art, Exploratory Science and Career Explorations.

Mathematics Curriculum 6 - 8

Designed under the leadership of William McCallum, a lead writer of the Common Core, all Illustrative Mathematics (IM) curricula are fully aligned to the rigor and coherence of the standards. IM is used as the primary resource for Grades 6th through 8th Grades.

In a problem-based curriculum, students work on carefully crafted and sequenced mathematics problems during most of the instructional time. Teachers help students understand the problems and guide discussions to be sure that the mathematical takeaways are clear to all. In the process, students explain their ideas and reasoning and learn to communicate mathematical ideas. The goal is to give students just enough background and tools to solve initial problems successfully, and then set them to increasingly sophisticated problems as their expertise increases.

The value of a problem-based approach is that students spend most of their time in math class doing mathematics: making sense of problems, estimating, trying different approaches, selecting and using appropriate tools, and evaluating the reasonableness of their answers. They go on to interpret the significance of their answers, noticing patterns and making generalizations, communicating their reasoning verbally and in writing, listening to the reasoning of others, and building their understanding.

The curriculum follows the Michigan K -12 Standards in Mathematics.

In addition to IM, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Applied Mathematics & Graphical Literacy from ACT Workkeys; and Henry Ford College's basic math courses.

The mathematics curriculum is further supplemented with the following resources: IXL, NWEA Map Accelerator - Khan Academy, Nearpod, Flocabulary, Maneuvering the Middle Math, Open Middle & Edpuzzle.

Sixth Grade: [6th Grade Mathematics Curriculum Map 2025- 2026](#) The instructional time focus is on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking

Seventh Grade: [7th Grade Mathematics Curriculum 2025-2026](#) The instructional time focus is on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

Eighth Grade: 8th Grade Curriculum Map 2025-2026 The instructional time focus is on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

English Language Arts + Writing Curriculum 6 - 8

Common Lit 360 is the adopted ELA program for all Middle School. It is a comprehensive 6-8 English language arts program. It provides an instructional system for reading both literature and informational texts, acquiring foundational skills, and developing mastery of speaking, listening, and writing. It is rooted in building strong reading skills, and utilizes high quality literature and non-fiction for instruction. Common Lit 360 offers students exposure to fiction and nonfiction, close-reading lessons, and required readings in which all students in a grade participate. Guided reading is also a key component of daily instruction. In addition, teachers are able to supplement and differentiate their lessons by incorporating programs such as IXL, Edmentum, and MAP Accelerator.

In addition to the Common Lit 360 curriculum, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Reading Comprehension and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading comprehension, and critical thinking skills .

6th Grade: 6th Grade English Language Arts curriculum map 2025-2026 This course is designed for sixth grade and integrates all aspects of the English Language Arts curriculum—Reading, writing, speaking, listening and viewing skills. Students will engage in the reading and writing processes in a variety of genres, both informational and narrative. Strategies in grammar usage and mechanics will also be included in the writing process instruction. The course textbooks cover a variety of topics, including literary analysis, vocabulary, grammar, writing, extension activities, assessment, and technology enhancements.

7th Grade: 7th Grade English Language Arts curriculum map 2025-2026 This course is designed for seventh grade and integrates all facets of the English Language Arts curriculum—reading, writing, speaking, listening, and viewing skills. Students will engage in the reading and writing processes in a variety of genres, including narrative, informational, and argumentative. Strategies in grammar usage and mechanics will also be included in the writing process instruction. The course textbooks cover a variety of topics, including literary analysis, vocabulary, grammar, writing, extension activities, assessment, and technology enhancements.

8th Grade: 8th Grade English Language Arts curriculum map 2025-2026 This course is designed for eighth grade and integrates all facets of the English Language Arts curriculum—reading, writing, speaking, listening, and viewing skills. Students will engage in the reading and writing processes in a variety of genres, including narrative, informational, and argumentative. Strategies in grammar usage and mechanics will also be included in the writing process instruction. The course textbooks cover a variety of topics, including literary analysis, vocabulary, grammar, writing, extension activities, assessment, and technology enhancements.

6th-8th Grade: English as a Second Language curriculum map 2025-2026

English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then

move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to “regular” English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States.

Social Studies Curriculum 6 - 8

Middle school social studies focuses on world geography, world history and American history. All grades use the MDE Social Studies standards to create units of inquiry that meet the needs of their students with the goal of creating engaged and informed citizens. Social studies in middle school also supplement lessons with academic writing, research, and projects.. Starting in the 2025-26 school year, 6th teachers propose to use TCI’s Social Studies Curriculum. TCI consists of Informational Texts, Primary Sources, Videos, and Inquiry Projects to drive student learning. All 6-8 teachers have access to the following resources to supplement their instruction: IXL - social studies, Flocabulary - social studies, Nearpod - social studies, and Brainpop - social studies, Edpuzzle, and DBQ project.. In addition to the proposed TCI curriculum, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Graphic Literacy and Workplace documents from ACT Workkeys and Henry Ford College’s basic writing, reading, and critical thinking skills ."

6th Grade - [6th Grade Social Studies curriculum map 2025-2026](#) students will explore the tools and mental constructs used by geographers as they study contemporary world geography. Contemporary civics/government and economics content is integrated throughout the year. As a capstone, the students will conduct an investigation of a global issue. Using knowledge, research, and inquiry, they will analyze an issue and propose a plan for the future, including a persuasive essay.

7th Grade - [7th Grade Social Studies curriculum map 2025-2026](#) students will review the tools and mental constructs used by historians and geographers. They will develop an understanding of World History, Eras 1–4. Geography, Civics/Government, and Economics content is integrated throughout the year. As a capstone, the students will conduct investigations about past and present global issues. Using significant content knowledge, research, and inquiry, they will analyze the issue and propose a plan for the future. As part of the inquiry, they will compose civic, persuasive essays using reasoned argument.

8th Grade - [8th Grade Social Studies Curriculum Map 2025-2026](#) students continue their study of U.S. history from the development of the Constitution through Reconstruction. Geographic, civics/government, and economics content is integrated within the historical context under study. Students should understand the relevancy and connections of this history to their lives. Students will use significant content knowledge, research skills, and inquiry practices to analyze issues and convey conclusions.

Science Curriculum 6 - 8

Middle school science utilizes Amplify Science to deliver interactive and inquiry-based units to the students. Amplify is a comprehensive suite of results-oriented STEM curriculum and professional development solutions. Built on a digital platform, enhanced by print & Investigation Notebooks, and brought to life in hands-on kits, Amplify employs 3D learning to comprehensively address the Disciplinary Core Ideas, Crosscutting Concepts, and Science and Engineering Practices through the student-driven inquiry of phenomena across flexible storylines.

Amplify uses the 5E model and then adds intervention and acceleration resources across three platforms—digital, kit and print—to help students understand the three dimensions of the Next Generation Science Standards (NGSS).

The curriculum follows the Next Generation Science Standards.

In addition to Amplify Science, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Graphic Literacy and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading, and critical thinking skills .

All 6-8 teachers have access to the following science resources to supplement their instruction: Amplify Science, IXL - science, Flocabulary - science, Nearpod - science, Brainpop - science, & Legends of Learning - science.

6th Grade - [6th Grade Science Curriculum Map 2025-2026](#)

6th grade topics include cells and body systems, including mitosis and meiosis. Students also learn about water cycling, weather patterns, changes to the Earth over time (including global warming) and cycling of Earth's resources. In addition, they learn about kinetic & potential energy and different types of energy transfer.

7th Grade - [7th Grade Science Curriculum Map 2025 - 2026](#)

Topics included during the 7th grade year include chemical interactions and reactions, the structure and properties of matter, the history of planet Earth, Earth's materials, systems, and natural hazards, growth and development of organisms, and interdependent relationships of ecosystems

8th Grade - [8th Grade Science Curriculum Map 2025-2026](#)

Areas covered in 8th grade science include a systems approach to the big ideas of science, including inheritance and variation of traits, ancestry and diversity, natural selection, adaptation, universe and the stars, Earth and the solar system, the History of Planet Earth, forces and motion, definitions of energy, wave properties, and electromagnetic radiation. Students will also apply their knowledge and skills to design solutions to meet real world challenges. Students are engaged in science not only in their daily lives as from the food they eat, the clothes they wear, technology they use, and the sports they play but also in becoming aware of the issues around the world that will impact us now and in the future.

Specials & Electives Curriculum 6 - 8

Computer Literacy: 2025-2026 Curriculum Map

Students will use the design and engineering process to create images, animations, digital stories, games, and 3D models to gain real world teamwork and problem solving skills. The course is 100% computer based using a blended learning model. Instruction will come in the form of brief in-class tutorials, online 'how to' videos and PDF/web based textbooks and guides. All work will be submitted via Google Classroom. All software and websites used in this course

are available for free. Students are encouraged to work from home and at their own pace whenever possible.

Art: [2025- 2026 Art Curriculum Map](#)

The MS Creative Art Education Program is a sequential course, which will increase each student's creative expressions and their appreciation for art. The Art Education Program offers the maximum opportunity for each student to have hands-on experiences in producing their art, enhanced through Nearpod, Seesaw, art history, art appreciation and visual outlook. Students will establish a purpose for creating ideas and develop a successful visual vocabulary. Students will incorporate the elements of art and principles of design to communicate ideas. Recognize and describe personal, family, and community connections with artworks at a developing level. Identify various careers in the visual arts. Students will not be handing in art works. Some art works will be on display in the gallery hall.

Exploratory: [Exploratory Science Curriculum Map 2025-2026](#)

Exploratory Science is offered to all 8th grade students and focuses on hands-on science topics that both relate to everyday life and pique student interest. During the first semester, students learn about various important health topics such as vital signs, communicable diseases, vaccines, genetic disorders, pedigrees, and the brain & nervous system. Students also complete the state-required sexually transmitted infections curriculum (Michigan Model: Growing Up & Staying Healthy). During the second semester, students explore various forensic science topics. They participate in mock crime scenes and other hands-on forensics labs. Some of the forensics topics that are covered include careers in forensics, evaluating the crime scene & collecting evidence, fingerprinting, handwriting analysis & forgery, DNA, footprints & toolmark analysis, and many more.

Career Explorations: Links are Below

Career Exploration prepares 6th - 8th grade students to make informed decisions about their future academic and occupational goals. Through direct instruction, interactive skills, demonstrations, and practice assignments, students learn how to assess their own skills and interests, explore industry clusters and pathways, and develop plans for career and academic development. This course is designed to provide flexibility for students. Inquiry-Based Lessons and Project-Based Learning will drive the course so that students have the ability to plan and choose the career that is best for them, based on their own unique personality and interests. Students will begin to develop the necessary leadership and technology skills that allows them to compete in an ever changing workplace.

Links: [6th Grade Career Exploration Curriculum Map 2025-2026](#)

[7th Grade Career Exploration Curriculum Map 2025-2026](#)

[8th Grade Career Exploration Curriculum Map 2025-2026](#)

High School: 9th through 12th Grades

ATA offers its 9th through 12th Grade students a core curriculum in the areas of English Language Arts, Mathematics, Science, and Social Studies. Additionally, courses in eight other areas are available.

Area 1: English Language and Literature (Michigan Common Core ELA Standards)

Curriculum Resources ELA 9th - 12th Grades

In conjunction with the MDE Literacy strands and Common Core Standards, the ELA Curriculum utilizes HMH curriculum for our students. Other resources include trade books for diverse novels and longer works. Our focus in these novels is to have students exposed to general fiction, Narrative memoirs, Drama, Poetry, and classic American literature. In addition, we use APA and 6+1 Writing Traits to stylize our writing and grammar instruction. Another pillar of our ATA Language Arts is to introduce diverse stories and minority authors to extend the notion of equity and choice in the classroom. In addition to the HMH curriculum, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Reading Comprehension and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading comprehension, and critical thinking skills .

01001 English/Language Arts I (9th grade)

English/Language Arts I (9th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

Curriculum Map Link: [📄 ELA9 2025-26](#)

01002 English/Language Arts II (10th grade)

English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

Curriculum Map Link: [📄 ELA 10 Curriculum Map](#)

01003 English/Language Arts III (11th grade)

English/Language Arts III (11th grade) courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

Curriculum Map Link: [📄 ELA11 2025-2026](#)

01004 English/Language Arts IV (12th grade)

English/Language Arts IV (12th grade) courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write one or more major research papers.

Curriculum Map Links:  ELA12 2025-2026

01102 English/Composition* (12th grade) (Davenport University Course Objectives)

English/Composition (juniors and seniors) courses are designed for juniors and/or seniors and build upon previous writing skills. Reinforcing the logic and critical-thinking skills that accompany good writing, these courses—which emphasize word choice, usage, and writing mechanics—provide continued and advanced instruction in writing for a variety of purposes and audiences. English/Composition (juniors and seniors) courses may emphasize college or business preparation; literature study may be offered as an additional component in which students analyze examples of several genres.

Curriculum Map Link: *Unavailable, course not offered in 2025-2026*

ENGL 109 (12th grade) Davenport University Concurrent - Enrollment

This course introduces students to expository and persuasive writing. Employing critical thinking and the writing process, students will compose academic essays utilizing a variety of modes. They will also analyze and respond to a variety of academic and professional readings.

Students will evaluate information and audience to improve form and content. Students are also introduced to the research process, including finding, evaluating, and documenting sources, to complete a short research project using the American Psychological Association Style.

Curriculum Map Link: *Unavailable, course not offered in 2025-26*

01008 English as a Second Language

English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to “regular” English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States. Course may be credit or resource.

Curriculum Map Link:  ESL 2025 - 2026

01009 Language Arts Laboratory (9th Grade) Title-I Funded

Language Arts Laboratory courses provide instruction in basic language skills, integrating reading, writing, speaking, and listening, while placing great emphasis on the progress of individual students. Course content depends upon students' abilities and may include vocabulary building, improving spelling and grammar, developing writing and composition skills, reading silently or aloud, and improving listening and comprehension abilities.

Curriculum Map Link: [!\[\]\(8c38bcc0fae4558cd7ebc6fc44ec565d_img.jpg\) ELA 9 Lab](#)

ENG131 - Henry Ford College

ENG-131 is the first college-level composition course in a two-semester sequence. Students will be introduced to writing, reading, critical thinking, and using information at the college level. In particular, the course will help students develop writing that reveals rhetorical and academic flexibility.

ENG132 - Henry Ford College

ENG-132 is the second college-level composition course in a two-semester sequence. Students will continue to write, read, think critically, and use information at the college level. In particular, students will be exposed to a range of literary texts and will be instructed in ethical, effective research writing.

SPC131 - Henry Ford College

This course explores how to develop public speaking skills through practice in preparing and delivering speeches for various audiences and situations.

Area 2: Mathematics (Michigan Common Core Standards)

Designed under the leadership of William McCallum, a lead writer of the Common Core, all Illustrative Mathematics (IM) curricula are fully aligned to the rigor and coherence of the standards. IM is used as the primary resource for all High School mathematics courses.

In a problem-based curriculum, students work on carefully crafted and sequenced mathematics problems during most of the instructional time. Teachers help students understand the problems and guide discussions to be sure that the mathematical takeaways are clear to all. In the process, students explain their ideas and reasoning and learn to communicate mathematical ideas. The goal is to give students just enough background and tools to solve initial problems successfully, and then set them to increasingly sophisticated problems as their expertise increases.

The value of a problem-based approach is that students spend most of their time in math class doing mathematics: making sense of problems, estimating, trying different approaches, selecting and using appropriate tools, and evaluating the reasonableness of their answers. They go on to interpret the significance of their answers, noticing patterns and making generalizations, communicating their reasoning verbally and in writing, listening to the reasoning of others, and building their understanding.

In addition to the mathematics curriculum, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Applied Mathematics & Graphical Literacy from ACT Workkeys; and Henry Ford College's introductory & intermediate algebra courses.

02052 Algebra I (9th grade)

Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

Curriculum Map Link: [📄 Algebra I 2025-2026](#)

02072 Geometry (10th)

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

Curriculum Map Link: [📄 Geometry 2025-2026](#)

02056 Algebra II (11th grade)

Algebra II course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

Curriculum Map Link:  Algebra II 2025-2026

02057 Algebra III (12th grade)

Algebra III courses review and extend algebraic concepts for students who have already taken Algebra II. Course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. The courses may introduce topics in discrete math, elementary probability and statistics; matrices and determinants; and sequences and series.

Curriculum Map Link: *Unavailable, course not offered in 2025-2026*

02152 Occupationally Applied Math

Occupationally Applied Math courses reinforce general math skills, extend these skills to include some pre-algebra and algebra topics, and use these skills primarily in occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations.

Curriculum Map Link: *Unavailable, course not offered in 2025-2026*

02154 Business Math

Business Math courses reinforce general math skills, emphasize speed and accuracy in computations, and use these skills in a variety of business applications. Business Math courses reinforce general math topics (e.g., arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations) by applying these skills to business problems and situations; applications might include wages, hourly rates, payroll deductions, sales, receipts, accounts payable and receivable, financial reports, discounts, and interest.

Curriculum Map Link: [Business Math 25-26 CM](#)

02003 Particular Topics in Foundation Math (9th grade)

These courses examine particular topics in Foundation math, such as arithmetic or basic conceptual skills, rather than provide a general overview.

Curriculum Map Link: *Unavailable - Resource Hour for 2024 -2025*

02201 Probability and Statistics

Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

Curriculum Map Link: [📄 Prob and stats CURRICULUM MAP 2025 - 2026 -](#)

22210 Consumer Economics/Personal Finance (Michigan Pathway Standards)

Consumer Economics/Personal Finance courses provide students with an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.

Curriculum Map Link: [📄 Personal Finance CURRICULUM MAP 2025 - 2026 -](#)

Area 3: Life and Physical Sciences (NGSS Standards)

In addition to the science curriculum resources, the Academy has embedded resources and instructional materials to support the teaching & learning of essential skills in Graphic Literacy and Workplace documents from ACT Workkeys and Henry Ford College's basic writing, reading, and critical thinking skills .

03003 Environmental Science

Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.

The curriculum used for Environmental Science is the LAB-AIDS EDC Earth Science Course.

EDC Earth Science is a full-year, activity-driven high school earth science course developed with support from the National Science Foundation, and fully aligned to A Framework for K–12 Science Education: Practices, Crosscutting Concepts, and Core Ideas (the Framework) (National Research Council [NRC], 2012). The course involves students by challenging them with provocative investigations and questions. EDC Earth Science has been designed in the belief that students are capable of rigorous and in-depth explorations in science when given adequate support, structure, and motivation for learning.

Each chapter of EDC Earth Science offers a cluster of activities that addresses a specific set of concepts and practices and is centered on a challenge that embodies the learning goals. The challenges focus on real, relevant, and often complex problems that scientific information and data analyses can help resolve.

Curriculum Map Link:  [Environmental Science Curriculum Map 2025-2026](#)

03051 Biology

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

The curriculum used for Biology is the LAB-AIDS SGI Biology.

Curriculum Map Link: [Biology Map 2025-2026](#)

03053 Anatomy and Physiology* (Davenport University Course Objectives)

Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.

Curriculum Map Link:

03063 Particular Topics in Biology*

BIOL 115, BIOL 116 03062 Conceptual Biology Davenport University Concurrent Enrollment

Students will study the structure, function, common disease processes, characteristics, and treatments related to the following body systems: integumentary, skeletal, muscular, nervous, senses, and endocrine. Each organ system will be studied with emphasis on the relationship between systems.

Curriculum Map Link: *Unavailable NOT offered 2025-2026*

03101 Chemistry

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

The curriculum used for Chemistry is the textbook *Modern Chemistry* by Holt, Rinehart, & Winston, plus supplements.

Curriculum Map Link: [📖 Chemistry 2025-2026](#)

03151 Physics

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

Curriculum Map Link: *Not offered 2025-2026*

03161 Conceptual Physics* (Lake Superior State University Course Objectives)

Conceptual Physics courses introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize accurate measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

Curriculum Map Link: *Unavailable, University Course Not offered 2025-2026*

03162 Particular Topics in Physics

Particular Topics in Physics courses used the Ford Next Generation Learning Module. *Energy for the Future* introduces students to innovative ways in which renewable energy sources and technologies are used to provide energy for society. Students become familiar with the different forms and sources of energy and learn about renewable and non-renewable energy sources.

Curriculum Map Link: [📖 Copy of Physics Curriculum Map 2021-22.docx](#) *Not offered 2025-2026*

Area 4: Social Sciences and History (MDE Standards, Common Core Literacy Standards, MC3 Framework)

Curriculum Resources:

Flocabulary - social studies, Nearpod - social studies. Edpuzzle, MI open book project and DBQ project

04053 Modern World History

Modern World History courses provide an overview of the history of human society in the past few centuries—from the Renaissance period, or later, to the contemporary period—exploring political, economic, social, religious, military, scientific, and cultural developments.

Curriculum Map Link: [📅 World History CURRICULUM MAP 2025 - 2026](#)

04064 Contemporary World Issues

Contemporary World Issues courses enable students to study 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.

Curriculum Map Link: [📅 Contemporary World Issues Curriculum Map](#) Not Offered 25-26

04101 U.S. History—Comprehensive

U.S. History—Comprehensive courses provide students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

Curriculum Map Link: [📅 USH Curriculum Map 2025-2026](#)

04151 U.S. Government—Comprehensive

U.S. Government—Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.

Curriculum Map Link: Not offered 2025-2026

04161 Civics

Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

Curriculum Map Link: [📄 Civics MAP 2025-2026](#)

04201 Economics

Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

Curriculum Map Link: [📄 Economics 2025-2026](#)

04254 Psychology* (National Psychology Standards for High School)

Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*

PSYC 155 Lifespan Development (LSSU Course)

This covers Human Psychological development from birth to death. The course covers social, emotional and intellectual development across the lifespan (3 college credits)

Curriculum Map Link: *New Course Offered 2025-26, College Curriculum Used*

04258 Sociology

Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

Curriculum Map Link: [📄 Turgeon HS CURRICULUM MAP TEMPLATE 2025 - 2026 -](#)

Area 5: Fine and Performing Arts (National Art Standards)

05154 Creative Art—Comprehensive

Creative Art—Comprehensive courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art.

As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.

Curriculum Map Link: [!\[\]\(8a290070f8f4fe66461b1fbc567fb9b1_img.jpg\) 12th Grade Art - CURRICULUM MAP - 2025 - 2026](#)

Area 6: Foreign Language and Literature (Michigan World Language Standards)

06101 Spanish I

Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

Curriculum Map Link: [📅 Spanish 2025 - 2026 -](#)

06102 Spanish II

Spanish II courses build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

Spanish II resources: The primary resource is Asi' se dice! textbook from McGraw Hill. In addition to the textbook, McGraw Hill has teacher resources including: videos, audio, and interactive whiteboard slides. Resources are also supplemented with Scholastics magazines: ahora and Que' Tal.

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*

Area 7: Physical, Health, and Safety Education (Michigan Physical Education and Health Education Standards)

Health and Safety Education classes use Glencoe Health curriculum, textbook and student workbook. Course also supplements with Xello for Social and Emotional Learning curriculum.

08001 Physical Education

Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

Curriculum Map Link:  PhysEd CURRICULUM MAP TEMPLATE 2025 - 2026 -

HLTH110 Medical Terminology (11th grade) Davenport University Concurrent - Enrollment

This course introduces the concept of a system-based approach to learning the professional language of those who are directly or indirectly engaged in the healing arts. Word building through knowledge, use of prefixes, suffixes, root words, and combining forms is a central theme of this course. Spelling, pronunciation, abbreviations, medical symbols, and use of a medical dictionary are also emphasized.

Curriculum Map Link: Course not offered from Davenport University

HLTH110 Introduction to Health Careers (11th grade) Eastern Michigan University- Enrollment

Introduction to Health Careers: An introductory course designed to familiarize the student with careers in the health sciences. Various careers such as medical technology, nursing, dietetics, health administration, occupational therapy, medicine, clinical psychology, physical therapy, and others will be presented. Educational requirements, career opportunities, and clinical experience requirements will be highlighted.

Curriculum Map Link:
[Intro To Health Curriculum Map 2025 - 2026.docx](#)

08051 Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*

14001 Exploration of Health Care Occupations

Exploration of Health Care Occupations courses expose students to the variety of opportunities available within the health care industry (e.g., nursing, therapy, dental care, administrative services, and lab technology). These courses provide experiences in several of these occupational clusters, along with information and knowledge related to the health care industry as a whole.

Curriculum Map Link: See HLTH110

14154 Medical Terminology

In Medical Terminology courses, students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

Curriculum Map Link: [Med. Term. Curriculum Map 2025 - 2026.docx](#)

14062 Care of Athletes

Provides an overview of the athletic training profession, including basic sports medicine concepts, injury prevention and emergency care. Topics may include injury assessment, phases of healing and the use of exercise and equipment.

Curriculum Map Link: **Not offered in 2025-26**

14055 Emergency Medical Technology

Emergency Medical Technology courses place a special emphasis on the knowledge and skills needed in medical emergencies. Topics include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest.

Curriculum Map Link: **Not offered for 2025-26**

Area 8: Computer and Information Sciences

Network Systems: Careers in Network Systems involve network analysis, planning and implementation, including design, installation, maintenance and management of network systems. Successful establishment and maintenance of information technology infrastructure is critical to the success of almost every 21st century organization.

The Common Career Technical Core (CCTC) includes a set of standards for each of the 16 Career Clusters™ and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills and dispositions that are important to becoming career ready.

10008 Particular Topics in Computer Literacy*

These courses examine particular topics related to general computer literacy other than those already described, such as privacy issues or instruction in using a particular software application.

Curriculum Map Link: Not Offered in 2025-26

10051 Information Management* (Davenport University Course Objectives)

Information Management courses provide students with the knowledge and skills to develop and implement a plan for an information system that meets the needs of business. Students develop an understanding of information system theory, skills in administering and managing information systems, and the ability to analyze and design information systems.

Curriculum Map Link: Not Offered 2025-26

10004 Computer Applications

In Computer Applications courses, students acquire knowledge of and experience the proper and efficient use of software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics and database programs. They will also cover the proper use of emails, security computer issues and desktop publishing. Microsoft Suite will be used.

Curriculum Map Link : CIS Course Offered through Henry Ford College Platform

10151 Computer Programming

Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with block-based languages, but other text-based languages may be used. Students learn to structure, create, document, and debug computer programs. Advanced courses may include instruction in object-oriented programming to help students develop applications for Windows, database, multimedia, games, mobile and/or web environments. An emphasis is placed on design, style, clarity, and efficiency. In these courses, students apply the skills they learn to relevant authentic applications.

Curriculum Map Link: [w Programming I - JavaScript - 2025-2026.docx](#)
[w Programming II - Java - 2025-2026.docx](#)

Area 9: Communication and Audio/Visual Technology (Michigan ELA and Technology Literacy Common Core Standards)

11102 Photojournalism

Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.

Curriculum Map Link: [!\[\]\(c60ce5f1586b7dcb9ed6bccf6949cf15_img.jpg\) Photojournalism 2025-2026](#)

05251 Digital Imaging

Digital Imaging courses explore the creative and conceptual aspects of designing and producing digital imagery, graphics, and photography. Students study the techniques, genres, and styles from multiple mediums and forms. Topics may include aesthetic meaning, appreciation and analysis; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution, and marketing; and contextual, cultural and historical aspects and considerations.

Curriculum Map Link: [Edgenuity \(Scope and Sequence\)](#)

Area 10: Business and Marketing

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

The Common Career Technical Core (CCTC) includes a set of standards for each of the 16 Career Clusters™ and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills and dispositions that are important to becoming career ready.

12051 Introductory Business

Introductory Business courses survey an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the American economic system and corporate organization. Introductory Business courses may also expose students to the varied opportunities in secretarial, accounting, management, and related fields.

Curriculum Map Link: [Intro to Business 25-26 CM](#)

12054 Business Law

Business Law courses emphasize legal concepts that are relevant to business and business organizations. Topics examined in these courses typically include contracts, buying/renting property, installment buying, insurance, buyer/seller relationships, negotiable instruments, employment, taxes, insurance, commercial papers, legal organizational structures, and consumer liabilities.

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*

12104 Accounting*

Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

Curriculum Map Link: *Unavailable, course not offered in 2025-26*

12152 Marketing—Comprehensive

Marketing—Comprehensive courses focus on the wide range of factors that influence the flow of goods and services from the producer to the consumer. Topics may include (but are not limited to) market research, the purchasing process, distribution systems, warehouse and inventory control, salesmanship, sales promotions, shoplifting and theft control, business management, and entrepreneurship. Human relations, computers, and economics are often covered as well.

Curriculum Map Link: *Unavailable, course not offered in 2025-26*

12248 Sales—Workplace Experience

Sales—Workplace Experience courses provide students with work experience in fields related to sales. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

Curriculum Map Link: *Unavailable, course not offered*

12053 Entrepreneurship

Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.

Curriculum Map Link: [Curriculum Map Entrepreneurship 2025-26](#)

Area 11: Engineering and Technology

21002 Engineering Applications Henry Ford College Engineering Applications-Mechatronics Modules

Engineering Applications courses provide students with an overview of the practical uses of a variety of engineering applications. Topics covered usually include hydraulics, pneumatics, computer interfacing, robotics, computer-aided design, computer numerical control, and electronics.

Curriculum Map Link: [Addison's AC/DC Curriculum Map 2025-26](#)

[Addison's Industrial Safety Awareness Curriculum Map 2025-26](#)

[Addison's Pneumatics Curriculum Map 2025](#)

21014 Biotechnical Engineering (NGSS Standards)

Forensic Science and Biotechnology: Biotechnical Engineering courses enable students to develop and expand their knowledge and skills in biology, physics, technology, and mathematics. Course content may vary widely, drawing upon diverse fields such as biomedical engineering, biomolecular genetics, bioprocess engineering, agricultural biology, or environmental engineering. Students may engage in problems related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, human interfaces, bioprocesses, forensics, and bioethics.

Curriculum Map Link: [Forensics Curriculum Map 2025 - 2026.docx](#)

21107 CAD Design and Software - PDET122 Engineering Graphics Eastern Michigan University Concurrent - Enrollment

Frequently offered as an intermediary step to more advanced drafting courses (or as a concurrent course), CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.

Curriculum Map Link: *Not Offered in 2025-26*

49.0101 Introduction to Aeronautics, Aviation, and Aerospace Science and Technology

This foundational course introduces students to the dynamic world of aviation, aeronautics, and aerospace technologies. Designed for students interested in piloting, aerospace engineering, unmanned aerial systems (drones), air traffic control, or aviation management, this course explores the fundamental physical laws, historical milestones, and modern systems that define global flight. Course offered through AOPA

Curriculum Map Link - New for 2026-27 Curriculum through AOPA

Area 12: Miscellaneous

22003 Study Skills (FordPas—Ford NGL Standards)

Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.

In conjunction with study skills, this class incorporates the FordPas curriculum. Modules 2, 3, 4 are developed around the themes of Media and Messages; People at Work; and Careers, Companies, and Communities, respectively. Students participate in activities that utilize 21st Century Skills: Application of Academic Knowledge and Skills, Problem-solving, Critical Thinking, Teamwork, Communication, Creativity and Innovation, and Global Awareness.

Curriculum Map Link: *Unavailable, course not offered in 2025-26*

22151 Career Exploration

Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*

22152 Employability Skills

Employability Skills courses help students match their interests and aptitudes to career options with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in and advance within the workplace. Course content may also include consumer education and personal money management topics.

Curriculum Map Link: *Not offered in 2026-27*

22001 Standardized Test Preparation

Standardized Test Preparation courses help prepare students for national standardized tests such as the PSAT, SAT, and ACT. In particular, these courses assist students in developing and/or expanding their vocabulary, test-taking, and reasoning skills through study, lecture, and practice drills. Course topics may include vocabulary review; root words, prefixes, and suffixes; mathematical concepts, logic, and rules; and general problem-solving and test-taking strategies.

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*

22002 State Test Preparation

State Test Preparation courses prepare students for particular state tests required for graduation. These courses may cover specific content areas (such as citizenship, mathematics,

language arts, and so on) according to individual student needs, or they may provide a more general course of study, similar to the Standardized Test Preparation course described above

Curriculum Map Link: *Unavailable, course offered through Edgenuity (virtual platform)*