Athens Virtual Academy of Indiana

Curriculum Guide
2024-2025

General Information

Athens Virtual Academy of Indiana (AVA) is a comprehensive middle and high school with a curriculum designed to allow students to complete requirements for graduation as prescribed by the State Board of Education and the Crawfordsville Community School Corporation School Board, as well as to prepare for entry into post-secondary institutions, vocational education, and entry level employment.

Crawfordsville Community School Corporation does not discriminate on the basis of race, color, religion, gender, national origin, including limited English proficiency, military service, age, or disability, in its educational programs, activities, or employment policies as required by the Indiana Civil Rights Law (I.C. 22-9-1), Title VI and VII (Civil Rights Act of 1964), the Equal Pay Act of 1973, Title IX (Educational Amendments), Section 504 (Rehabilitation Act of 1973), and the Americans with Disabilities Act (42 USCS §12101, et. seq.).

Inquiries regarding compliance by the Crawfordsville Community School Corporation with Title IX and other civil rights laws may be directed to the Superintendent/Designee at 1000 Fairview Lane, Crawfordsville, IN, or by telephone at 765-362-2342

A minimum of 40 credits are required to graduate from Crawfordsville Virtual Academy.

Graduation Ceremony
Only those students who have completed all requirements for graduation may participate in the graduation ceremony. Students who have not earned a passing grade for the semester in all courses required for graduation will not receive a diploma and will not participate in graduation exercises. There are no exceptions.

If desired, it may be possible for a student to complete their coursework by the end of their junior year. Athens Virtual Academy will work with students and parents to create an individualized plan of study that may include high school courses taken during 8th grade or summer school sessions. Thus, allowing students to complete all required coursework for the high school diploma within three academic years.

Helpful Terms

Credit: One point toward graduation and is earned by receiving a passing grade for one semester's work in a particular subject.

Required Course: A course that a student must take and pass according to the regulations of the State of Indiana or the local school system. If a required course fails at the end of a semester, it must be repeated and passed before the student can be graduated.

Directive Elective Course: A course that a student may choose to complete in addition to the required courses.

Pathway Course: Career and Technical courses that students must complete to graduate

Core 40 Diploma Requirements

nglish/Language Arts	**8 Credits**
	Including a balance of literature, composition and speech. English 9-12 fulfills this requirement
Iathematics	**6 Credits (grade 9-12)**
	2 credits: Algebra I
	2 credits: Geometry
	2 credits: Algebra II
	Students must complete a math or QR course each year.
cience	**6 Credits**
	2 credits: Biology
	2 credits: Integrated Chemistry-Physics, Chemistry I, or Physics I
	2 credits: Any Core 40 science course
ocial Studies	**6 credits**
	2 credits: World Civilization or Geography of the World
	2 credits: US History
	1 credit: Economics
	1 credit: Government
)irected Electives	**5 credits**
	World Languages, Fine Arts, Career and Technical Courses
hysical Education	**2 credits**
	1 credit: Basic PE I
	1 credit: Basic PE II
Iealth and Wellness	**1 Credit**
lectives	**6 Credits**
	NLPS Pathway strongly recommended

Quantitative Reasoning Courses

A quantitative reasoning course is a high school course that advances a student's ability to apply mathematics in real world situations and contexts and that deepens a student's understanding of high school mathematics standards. The Indiana Department of Education will provide an annual review to determine the high school courses that meet these criteria. For the Core 40 students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.

Business
Personal Financial Responsibility
Advanced Accounting

Science
Chemistry I
Integrated Chemistry – Physics
Physics I

Social Studies
Economics
Global Economics

Graduation Pathways
Must complete all 3 requirements to obtain an Indiana Core 40 High School Diploma

raduation Requirement		athway Options
High School Diploma		leet the requirements for the Indiana Core 40 Diploma
Learn and Demonstrate mployability Skills		tudents must complete at least one of the following:
		roject-Based Learning Experience
		ervice-Based Learning Experience
		Work Based Learning Experience
Post-Secondary-Readiness ompetencies		tudents must complete at least one of the following:
		CT - College Ready Benchmark
		AT - College Ready Benchmark
		tate/Industry Recognized Credential or Certification
		ederally Recognized Apprenticeship
		areer-Technical Education Concentrator

Plans of Study

Students will have the option of individualizing their plan of study with the school counselor. All plans of study will include the graduation requirements for the Indiana Core 40 diploma. AVA will also offer all students the capability to earn their high school diploma in three years.

Core 40

Grade 9	
Semester 1	**Semester 2**
English 9	English 9
Algebra I	Algebra I
Biology	Biology
PE	PE II
World Geography	World Geography
Pathway Course	Pathway Course

Grade 10	
Semester 1	**Semester 2**
English 10	English 10
Geometry	Geometry
ICP/Chem/Physics	ICP/Chem/Physics
Pathway Course	Pathway Course
Personal Finance	Health

Grade 11	
Semester 1	**Semester 2**
English 11	English 11
Algebra II	Algebra II
Life Science	Life Science
Pathway Course	Pathway Course
U.S. History	U.S. History

Grade 12	
Semester 1	**Semester 2**
English 12	English 12
Government	Econ
Directive Elective	Directive Elective
CTE Elective	CTE Elective

Core 40 (3 year track)

Grade 8 - 4 Credits	
Semester 1	**Semester 2**
Health	**PCC**
CTE Intro Course	**CTE Intro Course**
English 8	English 8
Math 8	Math 8
Science 8	Science 8
Social Studies 8	Social Studies 8

Grade 9 - 12 Credits	
Semester 1	**Semester 2**
English 9	English 9
Algebra I	Algebra I
Biology	Biology
PE	PE II
World Geography	World Geography
Pathway Course	Pathway Course

Grade 10 - 12 Credits	
Semester 1	**Semester 2**
English 10	English 10
Geometry	Geometry
ICP/Chem/Physics	ICP/Chem/Physics
Pathway Course	Pathway Course
Pathway Course	Pathway Course
Science Course	Science Course

Grade 11 - 12 Credits	
Semester 1	**Semester 2**
English 11	English 11
English 12	English 12
Algebra II	Algebra II
Government	Econ
Fine Arts Elective	Ethnic Studies
CTE Elective	CTE Elective

Grade 7 and Grade 8 Plans of Study

Grade 7	
Semester 1	**Semester 2**
English	English
Math	Math
Science	Science
Social Studies	Social Studies
Fine Arts	CTE Exploration
Physical Ed.	FACS

Grade 8	
Semester 1	**Semester 2**
English	English
Math	Math
Science	Science
Social Studies	Social Studies
PE	FACS
Health	***PCC***
CTE Intro Course	***CTE Intro Course***
**These will be available as high school credit*	

Language Arts

English 9 **Grades: 9 | Credits: 2**

English 9, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information..

English 10 **Grades: 10 | Credits: 2**

English 10, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9- 10, is a study of language, literature, composition, and oral communication, focusing on literature with an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

English 11 **Grades: 11 | Credits: 2**

English 11, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on literature with an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

English 12 **Grades: 12 | Credits: 2**

English 12, an integrated English course based on the Indiana Academic Standards for English/Language Arts for Grades 11- 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

Mathematics

Algebra I **Grades: 9-12 | Credits: 2**

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of six strands: Number Systems and Expressions; Functions; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. These critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students will also engage in methods for analyzing, solving, and using quadratic functions. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Geometry **Grades: 9-12 | Credits: 2**

Geometry formalizes and extends students 'geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Seven critical areas comprise the Geometry course: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; High School Course Titles and Descriptions 2022-2023 141 Quadrilaterals and Other Polygons; Circles; Transformations; and Three-dimensional Solids. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Algebra II **Grades: 9-12 | Credits: 2**

Algebra II builds on work with linear, quadratic and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using properties of logarithms. Algebra II is made up of 5 strands; Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential and Logarithmic Equations and Functions; Polynomial, Rational, Equations and Functions; and Data Analysis, Statistics, and Probability.

Physical Education

Health & Wellness Education **Grades: 9-12 | Credits: 1**

Health and Wellness, a course based on Indiana's Academic Standards for Health and Wellness and provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts); determine personal values that support health behaviors; develop group norms that value a healthy lifestyle; develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, comprehensive health education curriculum. Priority areas include: promoting personal health and wellness, physical activity, and healthy eating; promoting safety and preventing unintentional injury and violence; promoting mental and emotional health, a tobacco free lifestyle and an alcohol- and other drug-free lifestyle; and promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

Physical Education I **Grades: 9-12 | Credits: 1**

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.).

Physical Education II **Grades: 9-12 | Credits: 1**

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following areas that were not included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.)

Science

Biology **Grades: 9-12 | Credits: 2**

Biology I is a course based on the following core topics: cellular structure and function, matter cycles and energy transfer; interdependence; inheritance and variation in traits; evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by the Science and Engineering Practices (SEPS) and crosscutting concepts.

Chemistry **Grades: 10-12 | Credits: 2**

This course should be considered by college bound students who are interested in taking several advanced science courses and/or those who want to major in a science college. Topics studied will include the Indiana Academic Standards, as well as advanced theoretical and mathematical applications of the content. Students who consider applying for this course should be organized and highly motivated. Good attendance is essential to success in this course, as much of the lab work and group work cannot be recreated as make up assignments.

Integrated Chemistry-Physics **Grades: 10-12 | Credits: 2**

Integrated Chemistry-Physics is a course focused on the following core topics: constant velocity; uniform acceleration; Newton's Laws of motion (one dimension); energy; particle theory of matter; describing substances; representing chemical change; electricity and magnetism; waves; nuclear energy. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation using the Science and Engineering Practices (SEPS) and cross-cutting concepts.

Physics **Grades: 10-12 | Credits:**

Physics I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Physics topics. Disciplinary Core Ideas for this course include Forces and Interactions, Energy, Wave Properties, and ElectromagneticRadiation. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

Earth and Space Science **Grades: 9-12 | Credits: 2**

Earth and Space Science offers a focused curriculum that explores Earth's composition, structure, processes, and history; its atmosphere, freshwater, and oceans; and its environment in space. Course topics include an exploration of the major cycles that affect every aspect of life, including weather, climate, air movement, tectonics, volcanic eruptions, rocks, minerals, geologic history, Earth's environment, sustainability, and energy resources. Optional teacher-scored labs and projects encourage students to apply the scientific method.

Social Studies

World Civilization & History of the World

Grades: 9-12 | Credits: 2

Geography and History of the World is designed to enable students to use geographical tools, skills and historical concepts to deepen their understanding of major global themes including the origin and spread of world religions; exploration; conquest, and imperialism; urbanization; and innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety of primary and secondary sources, organizing information by creating graphic representations, analyzing information to determine and explain patterns and trends, planning for the future, and documenting and presenting findings orally or in writing. The historical geography concepts used to explore global themes include change over time, origin, diffusion, physical systems, cultural landscapes, and spatial distribution/patterns and interaction/relationships. Students use the knowledge, tools, and skills obtained from this course in order to analyze, evaluate, and make predictions about major global developments. This course is designed to nurture perceptive and responsible citizenship, to encourage and support the development of critical thinking skills and lifelong learning, and to help prepare Indiana students for the 21st.

U.S. Government **Grades: 12 | Credits: 1**

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students will understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students will examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. How the United States interacts with other nations and the government's role in world affairs will be examined. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, political, and civic activities and the need for civic and political engagement of citizens in the United States.

Economics **Grades: 12 | Credits: 1**

Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

United States History **Grades: 11 | Credits: 1**

United States History builds upon concepts developed in previous studies of U.S. History. Students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. They will develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

Career and Technical Education (CTE)

Preparing for College and Careers

Grades: 9 | Credits: 1

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals, examining multiple life roles and responsibilities as individuals and family members, planning and building employability skills, transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real world experiences, is recommended.

Introduction to Business **Grades: 9-12 | Credits: 2**

Introduction to Business introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operation a business in the twenty-first century on a local, national, and/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments.

Principles of Business Management

Grades: 9-12 | Credits: 2

Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem solving, and decision making skills using spreadsheets, word processing, data management, and presentation software.

Marketing Fundamentals **Grades: 10-12 | Credits: 2**

Marketing Fundamentals provides a basic introduction to the scope and importance of marketing in the global economy. Course tics include the seven functions of marketing: promotion, channel management, pricing, product/service management, market planning, marketing information management, and professional selling skills. Emphasis is marketing content but will involve use of oral and written communications, mathematical applications, problem-solving, and critical thinking skills through the development of an integrated marketing plan and other projects.

Accounting Fundamentals **Grades: 10-12 | Credits: 2**

Accounting Fundamentals introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making**.**

Personal Finance and Banking

Grades: 10-12 | Credits: 2

Personal Finance and Banking emphasizes management of individual financial resources for growth and maintenance of personal wealth. Covers home buying and mortgage financing, installment financing, life and health insurance, securities commodities and other investment opportunities. Students will gain an overview of the banking industry and the financial services provided by banks for individuals and businesses.

Finance and Investment **Grades: 11-12 | Credits:**

Finance and Investments addresses the need of schools in areas that have workforce demand in the finance industry. It analyzes and synthesizes high-level skills needed for a multitude of careers in the banking and investment industry. Students learn banking, investments,and other finance fundamentals and applications related to financial institutions,business and personal financial services, investment and securities,risk management products,and corporate finance.

Principles of Digital Design **Grades: 9-12 | Credits: 2**

Principles of Digital Design introduces students to fundamental design theory. Investigating design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. Students will have the opportunity to apply the design theory through an understanding of basic photographic theory and technique. Topics will include image capture, processing, various output methods, and light.

Digital Design Graphics **Grades: 10-12 | Credits: 2**

Digital Design Graphics will help students to understand and create the most common types of computer graphics used in visual communications. Skills are developed through work with professional vector-based and page layout software used in the industry. Additionally, students will be introduced to a full range of image input technology and manipulation including conventional photography,digital imaging, and computer scanners. Students Will learn to communicate concepts and ideas using various imaging devices.

Graphic Design and Layout **Grades: 10-12 | Credits: 2**

Graphic Design and Layout teaches the design process and the proper and creative use of types as a means to develop effective communications for global, corporate and social applications. Students will create a sample portfolio, which may include elements or comprehensive projects in logo, stationary, posters, newspaper, magazine, billboard, and interface design.

Principles of Culinary and Hospitality **Grades: 9-12 | Credits: 2**

Principles of Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making that affects operation management, products, labor, and revenue. Additionally, this course will help students learn basic principles of sanitation and safety in order to maintain a safe and healthy food service environment. It presents laws and regulations related to safety, fire, and sanitation and how to adhere to them in the foodservice operation.

Nutrition **Grades: 9-12 | Credits: 2**

Nutrition students will learn the characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient dense meals or examining nutritional needs of student athletes.

Culinary Arts **Grades: 10-12 | Credits: 2**

Culinary Arts teaches students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

Grade 7 and Grade 8 Curriculum

Language Arts

Grade 7 Language Arts

Language Arts, grade seven , based on Indiana's Academic Standards for English/Language Art, is integrated instruction emphasizing reading , writing, speaking, listening, and media interest and age-appropriate content. Students develop advanced skills and strategies in reading. Students understand comparisons, such as analogies and metaphors, and they begin to use their knowledge of roots and word parts to understand science, social studies, and mathematics vocabulary. Students begin to read reviews, as well as critiques of both informational and literary writing. Students read and respond to fiction selections, such as classic and contemporary literature, historical fiction, fantasy or science fiction, mystery or adventure, folklore or mythology, poetry, short stories, and dramas, and nonfiction selections, such as subject area books, biographies or autobiographies, magazines and newspapers, various reference or technical materials, and online information. Students self-select books of interest and read independently for enjoyment. Students develop advanced skills and strategies in language. Using oral discussion, reading, writing, art, music, movement, and drama, students respond to fiction, nonfiction, and informational selections or reality-based experiences, multimedia presentations, and classroom or group experiences. Students write or deliver longer research reports that take a position on a topic, and they support their positions by citing a variety of sources. Students use a variety of sentence structures and modifiers to express their thoughts. Students deliver argumentative presentations that state a clear position in support of an argument or proposal. Students also listen to literature read aloud and write independently for enjoyment.

Grade 8 Language Arts

Language Arts, grade eight , based on Indiana's Academic Standards for English/Language Arts, is integrated instruction emphasizing reading, writing, speaking, listening, and media interest and age-appropriate content. Students begin to study the history and development of English vocabulary. Students begin to compare different types of writing as well as different perspectives on similar topics or themes. Students evaluate the logic of informational texts and analyze how literature reflects the backgrounds, attitudes, and beliefs of the authors. Students read and respond to fiction selections, such as classic and contemporary literature, historical fiction, fantasy or science fiction, mystery or adventure, folklore or mythology, poetry, short stories, and dramas, and nonfiction selections, such as subject area books, biographies or autobiographies, magazines and newspapers, various reference or technical materials, and online information. Students self-select books of interest and read independently for enjoyment. Students get ready for the language challenges of high school materials. Using oral discussion, reading, writing, art, music, movement, and drama, students respond to fiction, nonfiction, and informational selections or reality- based experiences, multimedia presentations, and classroom or group experiences. Students not only write or deliver research reports but also conduct their own research. Students use subordination, coordination, noun phrases and other devices of English language conventions to indicate clearly the relationship between ideas. Students deliver a variety of types of presentations and effectively respond to questions and concerns from the audience. Students also listen to literature read aloud and write independently for enjoyment.

Mathematics

Grade 7 Mathematics

Mathematics grade seven standards are made up of five strands: Number Sense; Computation; Algebra and Functions; Geometry and Measurement; and Data Analysis, Statistics, and Probability. The skills listed in each strand indicate what students in grade seven should know and be able to do in mathematics. grade seven continues the trajectory towards a more formalized understanding of mathematics that occurs at the high school level that began in grade six. Students extend ratio reasoning to analyze proportional relationships and solve real-world and mathematical problems; extend previous understanding of the number system and operations to perform operations using all rational numbers; apply properties of operations in the context of algebraic expressions and equations; create, describe, and analyze geometric figures and the relationships between them; apply understandings of statistical variability and distributions by using random sampling, making inferences, and investigating chance processes and probability models. Using the Process Standards for mathematics in a planned and deliberate method to present the mathematics content standards will prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of the mathematics. Along with the current academic standards, the Science/Technical Studies Content Area Literacy Standards are incorporated in the teaching of this subject with the expectation of a continuum of reading and writing skills development.

Grade 8 Mathematics

Mathematics grade eight standards are made up of five strands: Number Sense; Computation; Algebra and Functions; Geometry and Measurement; and Data Analysis, Statistics, and Probability. The skills listed in each strand indicate what students in grade eight should know and be able to do in Mathematics. grade eight continues the trajectory towards a more formalized understanding of mathematics that occurs at the high school level that was started in grades 6 and 7. Students extend their understanding of rational numbers to develop an understanding of irrational numbers; connect ratio and proportional reasoning to lines and linear functions; define, evaluate, compare, and model with functions; build understanding of congruence and similarity; understand and apply the Pythagorean Theorem; and extend their understanding of statistics and probability by investigating patterns of association in bivariate data. Using the Process Standards for Mathematics in a planned and deliberate method to present the mathematics content standards will prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of the mathematics. Along with the current academic standards, the Science/Technical Studies Content Area Literacy Standards are incorporated in the teaching of this subject with the expectation of a continuum of reading and writing skills development.

Science

Grade 7 Science

Incorporating the crosscutting concepts, disciplinary core ideas, and science and engineering practices, students in grade seven apply Newton's third law, investigate what determines a change in an object's motion, determine the factors that affect the strength of electric and magnetic forces, investigate gravitational interactions and other forces. Students investigate how arrangement of objects changes the amount of potential energy in the system and what relationships affect kinetic energy in a system. Students will understand that all living things are made of cells and be able to describe the structure, function, and overall interactions of cells. Students will investigate how rock strata tell the age of the planet, how geoscience processes have changed the Earth's surface, and how Earth's materials drive cycling and flow of energy. Students will learn how previous natural catastrophes inform the development of technologies to mitigate their effects.

Grade 8 Science

Incorporating the crosscutting concepts, disciplinary core ideas, and science and engineering practices, students in grade eight will understand basic chemistry including the atomic structure of simple elements and molecules, laws of conservation of mass, and simple chemical reactions. They will also learn that synthetic materials come from natural resources and how substances react when thermal energy is provided to a system. Students will learn about reproduction in plants, genetic factors that influence the growth of organisms, and basic statistics of genetic variation. They will analyze the fossil record for organisms that have gone extinct that resemble organisms present today and investigate how humans can manipulate genetic traits. Students will also investigate the interactions of the Earth's systems, its climate, and its weather and how humans impact Earth's systems.

Social Studies

Grade 7 Social Studies

Students in grade seven explore the history, geography, government, economic systems, current issues, and cultures of the Eastern World with an emphasis on: (1) Asia, (2) Africa, (3) the Middle East, (4) the Pacific Islands, (5) Australia, and (6) New Zealand. Learning experiences for students in grade seven should help them to make the transition from concrete information to abstract ideas, concepts, and generalizations. In-depth studies provide greater understanding of environmental influences on economic, cultural, and political institutions. Opportunities to develop thinking and research skills include reading and interpreting maps, graphs, and charts. Decision-making and problem-solving activities should include the following: (1) identifying problems, issues and questions; (2) information gathering; (3) hypothesizing; and (4) evaluating alternative solutions and actions. Along with the current academic standards for this subject, the History/Social Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

Grade 8 Social Studies

Students in grade eight focus on United States history. This study begins with a brief review of early history, including the Revolution and Founding Era, and the principles of the United States and Indiana constitutions, as well as other founding documents and their applications to subsequent periods of national history and to civic and political life. Students then study national

development, westward expansion, social reform movements, the Civil War, and the Reconstruction Period. Students examine major themes, issues, events, movements, and figures in United States history through the Reconstruction Period (1877) and explore relationships to modern issues and current events.

Career and Technical Education

Grades 7-8 FACS

Middle level FACS prepares students to begin their journey toward becoming independent, productive citizens. The middle school curriculum includes standards for five units of study that are essential for ALL students: Life and Careers, Financial Literacy, Nutrition and Wellness, Human Development, and Relationships . Family and Consumer Sciences (FACS), Middle Level prepares students to acquire personal skills and plan ways to transfer those skills to the workplace; investigate and assume appropriate individual and family roles; understand and apply concepts of balancing work and family; and acquire skills and attitudes that lead them to contribute to the good of the community and society. FACS curriculum includes acquisition of problem-solving, decision-making, higher-order thinking, communication, literacy, and numerical skills in applied community, work, and family contexts. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

Grade 7-8 Exploring College and Careers

Exploring College and Careers provides students opportunities to explore their personal goals, interests, and aptitudes as they relate to career concepts, including the 16 national career clusters and Indiana's College and Career Pathways , and determine what they want and expect for their future. Students learn about various traditional and nontraditional careers and gain an awareness of the level of education and type of training needed for a variety of careers and occupations. Students build good study habits, expand their technology skills, develop or update their graduation plans, and complete a college and career readiness exam. Virtual and real life opportunities are provided for students to observe and explore various careers. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

Grade 7-8 Exploring Business and Information Technology

Business and Information Technology, Middle Level provides concepts and applications that facilitate the development of competencies required for success in all academic areas and in real-world contexts. The curriculum relates closely to understandings and competencies students will need as their world expands and as they develop career interests. The four broad areas included in this curriculum are technology, career exploration, personal financial responsibility, and basic business (business communications, marketing, and entrepreneurship). The domains and standards for each area provide many opportunities to engage students in learning essential business content and in applying technology as a tool. This approach is in keeping with the National Education Technology Standards (NETS) approach, which places heavy emphasis on integrating technology into the curriculum. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

Physical Education and Health

Grade 7 Physical Education

Physical Education in grade seven is based on the Indiana Academic Standards for Physical Education. Students in grade seven physical education continue to refine complex combinations of movement in selected sports and activities. Students apply more advanced strategies in physical activities and try new sports and lifetime physical activities. The focus is on meeting challenges and making decisions in the context of expanded personal responsibility. Students learn about different cultures and how they relate to the physical activities and dances from those countries. Students continue to expand their knowledge of rules and strategies, sportsmanship, and cooperative skills as well as fitness concepts and the benefits of health-related fitness. Ongoing assessment includes both written and performance-based skill evaluations. Along with the current academic standards, the Science/Technical Studies Content Area Literacy Standards are incorporated in the teaching of this subject with the expectation of a continuum of reading and writing skills development.

Grade 8 Physical Education

Physical Education in grade eight based on the Indiana Academic Standards for Physical Education. Students in grade eight physical education further refine complex motor skills and competencies in selected individual and dual lifetime physical activities, teamsports, aquatics, adventure, and rhythmic activities. Students work toward achieving competence in increasingly complex physical activity contexts. Students learn to apply interdisciplinary knowledge (e.g., anatomy, physics) to activity settings and focus on working as a team to solve problems. Students develop plans to enhance their own health-related physical fitness and participate in vigorous activities linked to their skills and levels of fitness. Physical activity is used as a venue for self-expression and for developing positive relationships. Ongoing assessment includes both written and performance-based skill evaluations. Along with the current academic standards, the Science/Technical Studies Content Area Literacy Standards are incorporated in the teaching of this subject with the expectation of a continuum of reading and writing skills development.

Grade 7-8 Health and Wellness

Health and Wellness, grade seven and grade eight, provides for the continued development of attitudes and behaviors related to becoming a health-literate individual as part of a planned, sequential, comprehensive health education curriculum that uses the Indiana Academic Standards for Health and Wellness to support student development of essential health skills within the ten health content areas. Developmentally appropriate concepts of personal and community health; safety and injury prevention; nutrition and physical activity, mental health; alcohol, tobacco and other drug use; and family life and human sexuality are areas used for skill development. The adolescent student has instructional opportunities to investigate how health behaviors impact health, well-being, and disease prevention and to accept personal responsibility for health-related decisions. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

Visual Performing Arts

Grade 7-8 Exploring Music

Exploring Music, Middle Level is based on the Indiana Academic Standards for Music. Students are provided with activities that build on kindergarten through grade six musical knowledge and skills. Instruction is designed to enable students to perform and create music, respond to music,and integrate music study into other subject areas. Activities and experiences in music are designed to develop students' appreciation of music as an art form, to build the foundation for music literacy, and to understand music as it relates to history, culture, and the community. Along with the current academic standards, the Science/Technical Studies Content Area Literacy Standards are incorporated in the teaching of this subject with the expectation of a continuum of reading and writing skills development.

Grade 7-8 Visual Arts

Visual Arts Middle Level is based on the Indiana Academic Standards for Visual Arts. Students in the middle level program build on the sequential learning experiences of the elementary program that encompass art history, criticism, aesthetics, and production. Through self-reflection, including dialogue, reading, and writing, students analyze each component of their arts education as well as their own personal growth. Throughout the program, students engage in various forms of communication, utilizing a rich vocabulary and a variety of technological resources. Students continue to utilize their art knowledge and skills to make connections across the curriculum, study career options, and identify skills required for those careers. Additionally, students identify how to utilize resources of the arts community as well as how they can support the arts community. Along with the current academic standards, the Science/Technical Studies Content Area Literacy Standards are incorporated in the teaching of this subject with the expectation of a continuum of reading and writing skills development.