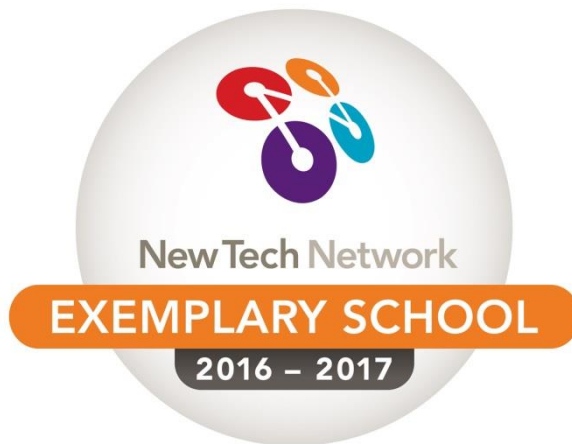
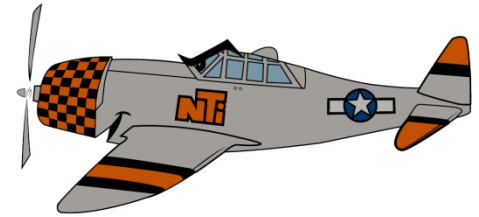


# EVSC NEW TECH INSTITUTE COURSE DESCRIPTION GUIDE

## 2017-18



**A Demonstration Site**  
in the New Tech Network



**EVSC New Tech Institute - Home of the Thunderbolts**

1901 Lynch Road  
Evansville, IN 47711  
(812) 435-0967

<http://evscschools.com/newtech>

## **New Tech Institute – Academics (Course Description Guide)**

**New Tech Institute** began as a full-day, diploma-granting high school in the Evansville Vanderburgh School Corporation in August 2010 with a freshman class. The school added a grade each year until reaching grades 9-12 in the fall of 2013. The first graduates of NTI graduated in May 2014. NTI is part of the nationwide New Tech Network of 180+ schools that employ project-based learning in an atmosphere of trust, respect, and responsibility.

### **NTI Mission Statement**

New Tech Institute provides students relevant project-based learning and leadership opportunities in an atmosphere of trust, respect and responsibility.

### **NTI Vision Statement**

NTI students will:

- Visibly lead and contribute to STEM & entrepreneurial projects connecting the community and the school, and will continue this leadership and contribution as graduates
- Learn through a lens of project-based learning and collaboration
- Value themselves and their peers for their personal, intrinsic worth
- Demonstrate initiative in continuous learning as engaged and active citizens
- Process, analyze, evaluate, and apply information and resources
- Achieve personal success, navigating college, career and civic life

**NTI's Staff will work collaboratively as a Professional Learning Community to inspire students to achieve this vision.**

**All students have a graduation plan as well as a college and career readiness plan.**

### **Grading Scale**

A: 90-100

B: 80-89

C: 70-79

D: 60-69

F: 0-59

### **Diploma Options**

NTI students can qualify for the Indiana Core 40 Diploma, Indiana Academic Honors Diploma, and/or Indiana Technical Honors Diploma. If needed, students may also have a Standard Diploma.

Requirements for those diploma paths, as well as graduation requirements for the EVSC, are on the next two pages.

Students in the Class of 2015 have one set of Academic and Technical Honors requirements, while students in the Class of 2016 and beyond have a different set.

### **Repeated Courses**

New Tech Institute does not provide credit recovery. If a student fails a class, they must retake the course. Or, students may retake the class through the EVSC Virtual Academy – which is NCAA-approved.

## **Graduation Requirements**

All New Tech Institute graduates must have completed all Indiana Graduation Requirements based on the Core 40, Academic Honors, Technical Honors, or Standard diploma. In order to walk at graduation, students must have all graduation requirements complete.

## **Academic Integrity**

Students must complete their own coursework without exception. Students may collaborate with one another in the course of project-based learning, but students will receive individual grades on course content. In addition, plagiarism or cheating will result in a score of 0 on the assignment.

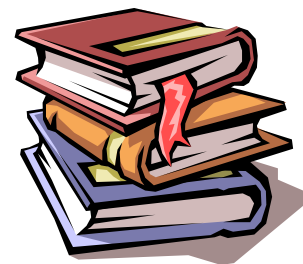
## **Schoolwide Learning Outcomes**

Students at New Tech are assessed on the basis of the following schoolwide learning outcomes:

- Knowledge Content and Thinking
- Oral Communication
- Written Communication
- Collaboration
- Agency

## **Course Descriptions**

\* denotes Concurrent College Credit is offered



## **English/Language Arts**

### **Required Courses**

#### **English 9A**

English 9, an integrated English course based on Indiana's Academic Standards for English Language Arts in Grade 9 and the Common Core State Standards for English Language Arts is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and argumentative/persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information. **TAUGHT CONCURRENTLY WITH US HISTORY AS "INNOVATIVE PERSPECTIVES"**

*Recommended Grade Level: Grade 9*

*Recommended Prerequisites: None*

*Credits: 2 credits, a two-semester course with 1 credit per semester*

*Fulfills an English Language Arts requirement*

#### **English 10A**

English 10, an integrated English course based on Indiana's Academic Standards English Language Arts in Grade 10 and the Common Core State Standards for English Language Arts, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes 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 appropriate for Grade 10 in classic and contemporary

literature balanced with nonfiction. Students write short stories, responses to literature, expository and argumentative/persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

*Recommended Grade Level: Grade 10*

*Recommended Prerequisites: English 9 or teacher recommendation*

*Credits: 2 credits, a two-semester course with 1 credit per semester*

*Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### \*English 11A

English 11, an integrated English course based on Indiana's Academic Standards for English Language Arts in Grade 11 and the Common Core State Standards for English Language Arts, is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes in 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 appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays ( e.g. analytical, persuasive, expository, summary), reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

*Recommended Grade Level: Grade 11*

*Recommended Prerequisites: English 9 and English 10 or teacher recommendation*

*Credits: 2 credits, a two-semester course with 1 credit per semester*

*Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Students may earn 3 hours of college credit in English 101 from the University of Southern Indiana.*

### English 12A

English 12, an integrated English course based on Indiana's Academic Standards for English Language Arts for Grade 12 and the Common Core State Standards for English Language Arts, 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 for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), reflective compositions, historical investigation reports, resumes and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information

*Recommended Grade Level: Grade 12*

*Recommended Prerequisites: English 9, English 10, and English 11 or teacher recommendation*

*Credits: 2 credits, a two-semester course with 1 credit per semester*

*Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

## **Elective Courses**

### Genres of Literature

Genres of Literature, a course based on Indiana's Academic Standards for English Language Arts and the

Common Core State Standards for English Language Arts, is a study of various literary genres, such as poetry, dramas, novels, short stories, biographies, journals, diaries, essays, and others. Students examine a set or sets of literary works written in different genres that address similar topics or themes. Students analyze how each genre shapes literary understanding or experiences differently, how different genres enable or constrain the expression of ideas, how certain genres have had stronger impact on the culture than others in different historical time periods, and what the most influential genres are in contemporary times.

*Recommended Grade Level: Grades 11 or 12*

*Recommended Prerequisites: English 9, English 10, or teacher recommendation*

*Credits: 1 credit*

*Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*

*NOTE: Students are strongly encouraged to combine this course with a composition course that they take before, concurrently, or after the course.*

### Contemporary Literature

Contemporary Literature, a course based on Indiana's Academic Standards for English Language Arts and the Common Core State Standards for English Language Arts, is a study of how post-1950s literature from around the world, such as North and South America, Europe and Great Britain, the Middle East, and post-colonial Africa and Asia, addresses contemporary issues. Students examine multiple genres to develop a sense of how particular genres are used today to represent ideas and events. Students analyze different theories and methods of textual criticism especially theories currently popular. Students analyze how the interpretations and themes of contemporary literature read in this course relate to the time period and to historical issues.

*Recommended Grade Level: Grades 11 or 12*

*Recommended Prerequisites: English 9, English 10, or teacher recommendation*

*Credits: 1 credit*

*Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*

### English Lab

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing language arts course work aligned with Indiana's Academic Standards for English Language Arts in Grades 9-12 and the Common Core State Standards for English Language Arts, focusing on the Writing Standards (Standards 4, 5, and 6).

*Recommended Grade Level: Grades 9-12*

*Recommended Prerequisites: None*

*Credits: 1-8 credits. This course allows for successive semesters of instruction at advancing levels.*

*Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma.*

*This course is for students who need additional support in language arts – especially in writing.*

*Students who have not passed the English 10 end-of-course assessment may take this class.*

## **World Language**

### Spanish I

Spanish I, a course based on Indiana's Academic Standards for World Languages, introduces students to effective strategies for beginning Spanish language learning, and to various aspects of Spanish-speaking



culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

*Recommended Grade Level: 9-12*

*Recommended Prerequisites: None*

*Credits: A 2-credit course*

*Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.*

### Spanish II

Spanish II, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

*Recommended Grade Level: 9-12*

*Recommended Prerequisites: Spanish I*

*Credits: A 2-credit course*

*Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.*

### Spanish III

Spanish III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further

emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.

**D9**

*Recommended Grade Level: 9-12*

*Recommended Prerequisites: Spanish I and II*

*Credits: A 2-credit course*

*Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.*

speakers.

## **Social Studies**



### **Required Courses**

#### US History

United States History is a two-semester course that builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, 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 as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. Students 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. **TAUGHT CONCURRENTLY WITH ENGLISH 9A AS “INNOVATIVE PERSPECTIVES”**

*Recommended Grade Level: None ...in EVSC – freshman year*

*Recommended Prerequisites: None*

*Credits: 2 semester course, 1 credit each semester*

*Fulfills the US History requirement of the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas.*



#### World History and Civilization

World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

*Recommended Grade Level: None*

*in EVSC – sophomore year*

*Recommended Prerequisites: None*

*Credits: 2 semester course, 1 credit per semester*

*Fulfills a Social Studies requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma*

### United States Government

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 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 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 included. 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, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

*Recommended Grade Level: Grades 11 or 12*

*in EVSC – senior year*

*Recommended Prerequisites: None*

*Credits: 1 semester, 1 credit*

*Fulfills the Government requirement for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma.*



### Economics

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 will 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.

*Recommended Grade Level: Grades 11 or 12*

*in EVSC – senior year*

*Recommended Prerequisites: None*

*Credits: 1 semester course, 1 credit*

*Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas, a Social Studies requirement for the General Diploma, or counts as an Elective for any diploma*

*Qualifies as a quantitative reasoning course.*

### **Elective Courses**

#### Sociology

Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. Students describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry



students examine society, group behavior, and social structures. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. The impact of social groups and institutions on group and individual behavior and the changing nature of society will be examined. Influences on group behavior and social problems are included in the course. Students also analyze the role of individuals in the community and social problems in today's world.

*Recommended Grade Level: Grades 11 or 12*

*Recommended Prerequisites: None*

*Credits: 1 semester, 1 credit*

*Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### Psychology

Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas. History & Scientific Method explores the history of psychology, the research methods used, and the ethical considerations that must be utilized. Biological Basis for Behavior focuses on the way the brain and nervous system function, including sensation, perception, motivation and emotion. Development looks at all the changes through one's life; physical, cognitive, as well as emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment looks at the approaches used to explain one's personality and the assessment tools used. Abnormal Psychology explores psychological disorders and the various treatments used for them. Socio-Cultural Dimensions of Behavior covers topics such as conformity, obedience, perceptions, attitudes and influence of the group on the individual. Psychological Thinking explores how to think like a psychologist and expand critical thinking skills needed in the day-to-day life of a psychologist.

*Recommended Grade Level: None [freshmen not allowed to take class]*

*Recommended Prerequisites: None*

*Credits: 1 semester, 1 credit; 1 or 2 semester course*

*Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*



## **Mathematics**

### **Required Courses**

#### Algebra I

Algebra I formalizes and extends the mathematics students learned in the middle grades. Five critical areas comprise Algebra I: Relations and Functions; Linear Equations and Inequalities; Quadratic and Nonlinear Equations; Systems of Equations and Inequalities; and Polynomial Expressions. The 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, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content 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.

*Credits: A two credit course*

*Fulfills the Algebra I/Integrated Mathematics I requirement for the General, Core 40, Core 40 with Academic*

*Honors and Core 40 with Technical Honors diplomas*

*Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9*

**D14**

*Qualifies as a quantitative reasoning course*

### Geometry

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. Six critical areas comprise the Geometry course: Congruency and Similarity; Measurement; Analytic Geometry; Circles; and Polyhedra. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school INCC The Mathematical Practice Standards apply throughout each course and, together with the content 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.

*Recommended Prerequisite: Algebra I*

*Credits: A two credit course*

*Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas and counts as a Mathematics Course for the General Diploma Can be offered as Geometry Honors*

### Algebra II

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 the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, together with the content 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.

*Recommended Prerequisite: Algebra I*

*Credits: A two credit course*

*Fulfills the Algebra II/Integrated Mathematics III requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas and counts as a Mathematics Course for the General Diploma*

*Qualifies as a quantitative reasoning course*

*Can be offered as Algebra II Honors*

### Trigonometry

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming.

*Recommended Prerequisite: Algebra II and Geometry or Integrated Mathematics III*

*Credits: A one credit course*

*Student should not receive credit for both Trigonometry and Pre-Calculus/Trigonometry since they cover the same course content during one semester*



*Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### Probability and Statistics

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Topics include: (1) descriptive statistics, (2) probability, and (3) statistical inference. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing calculators and computer programs is encouraged.

*Recommended Prerequisite: Algebra II or Integrated Mathematics III*

*Credits: A one credit course*

*Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### Pre-Calculus/Trigonometry Honors

Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus is made up of five strands: Polar Coordinates and Complex Numbers; Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. 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.

*Pre-Calculus is first semester, Trigonometry Honors is second semester]*

*Recommended Grade Level: 9, 10, 11, 12*

*Recommended Prerequisite: Algebra II and Geometry or Integrated Mathematics III*

*Credits: 1 semester course, 1 credit per semester*

*Counts as a Mathematics Course for all diplomas*

### Advanced Placement (AP) Calculus AB

Calculus AB, Advanced Placement, is a course based on content established by the College Board. Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

<http://apcentral.collegeboard.com/apc/public/repository/ap-calculus-course-description.pdf>

*Recommended Grade Level: Grades 11 or 12*

*Recommended Prerequisite: Pre-calculus/Trigonometry*

*Credits: A two credit course, one credit per semester*

*Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### Finite Mathematics

Finite Mathematics is an umbrella of mathematical topics. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Math is made up of five strands: Sets, Matrices, Networks, Optimization, and Probability. The skills listed in these strands indicate what students should know and be able to do in Finite Math. 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.

*Recommended Grade Level: 9, 10, 11, 12*

*Recommended Prerequisites: Algebra II or Integrated Mathematics III*

*Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum. Due to the level of rigor, it is recommended that Finite Mathematics be offered as a 2 semester, 2 credit course.*

*Counts as a Mathematics Course for all diplomas*

*For NTI, taught as a math course after AP Calculus*

## **Elective/Directed Course**

### Mathematics Lab

Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana's Academic Standards for Mathematics. It is recommended that Mathematics Lab is taken in conjunction with a Core 40 mathematics course, and the content of Mathematics Lab should be tightly aligned to the content of its corresponding course. Mathematics Lab should not be offered in conjunction with Algebra I or Integrated Mathematics I; instead, schools should offer Algebra Enrichment or Integrated Mathematics Enrichment to provide students with rigorous support for these courses.

*Credits: A one to eight credit elective course*

*Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Clarifying information can be appended to the end of the course title to denote the content covered in each course*

*Example: Mathematics Lab used to support students in Algebra II can be recorded on the transcript as Mathematics Lab – Algebra II.*

*Students who have not passed the English 10 end-of-course assessment may take this class.*

## **Science**

### **Core Courses**

#### Biology I

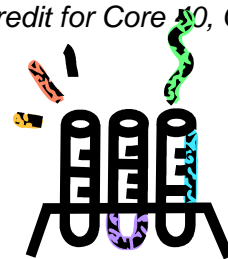
Biology I is a course based on the following core topics: cellular chemistry, structure and reproduction; matter cycles and energy transfer; interdependence of organisms; molecular basis of heredity; genetics and evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by

theory and by evaluating and communicating the results of those investigations according to accepted procedures.

*Recommended Grade Level: 10 taught during freshman year at NTI*

*Credits: A two credit course*

*Fulfills the life science requirement for the General diploma, Fulfills Biology credit for Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*



### Chemistry I

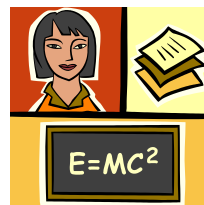
Chemistry I is a course based on the following core topics: properties and states of matter; atomic structure; bonding; chemical reactions; solution chemistry; behavior of gases, and organic chemistry. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. 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 theory and by evaluating and communicating the results of those investigations according to accepted procedures. Recommended Grade Level: 10-12

*Recommended Prerequisite: Algebra II (can be taken concurrently)*

*Credits: A two credit course*

*Fulfills the requirement for physical science for the General diploma. Fulfills Chemistry credit for Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas.*

*Qualifies as a quantitative reasoning course.*



### Physics I

Physics I is a course focused on the following core topics: motion and forces; energy and momentum; temperature and thermal energy transfer; electricity and magnetism; vibrations and waves; light and optics. 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 theory and by evaluating and communicating the results of those investigations according to accepted procedures.

*Recommended Grade Level: 11-12*

*Recommended Prerequisite: Algebra II*

*Credits: A two credit course*

*Fulfills the physical science requirement for the General diploma. Fulfills the 2 credit requirement for Chemistry I, Physics I, or Integrated Chemistry and Physics towards the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas.*

*Qualifies as a quantitative reasoning course.*

*Students may earn 3 hours of college credit in Physics 101 from the University of Southern Indiana.*

### Integrated Chemistry/Physics

Integrated Chemistry-Physics is a course focused on the following core topics: motion and energy of macroscopic objects; chemical, electrical, mechanical and nuclear energy; properties of matter; transport of

energy; magnetism; energy production and its relationship to the environment and economy. 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 theory and by evaluating and communicating the results of those investigations according to accepted procedures

*Recommended Grade Level: 9*

*Recommended Prerequisite: Algebra I (may be taken concurrently with this course)*

*Credits: A two credit course*

*Fulfills the physical science requirement for the General diploma. Fulfills the 2 credit requirement for Chemistry I, Physics I, or Integrated Chemistry and Physics towards the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas.*



### Environmental Science

Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students enrolled in this course conduct in-depth scientific studies of ecosystems, population dynamics, resource management, and environmental consequences of natural and anthropogenic processes. Students formulate, design, and carry out laboratory and field investigations as an essential course component. Students completing Environmental Science, acquire the essential tools for understanding the complexities of national and global environmental systems.

*Recommended Grade Level: 11-12*

*Recommended Prerequisite: Two credits in Core 40 and AHD science coursework*

*Credits: A two credit course*

*Fulfills the life science requirement for the General diploma. Fulfills Core 40 science credit for Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### Earth and Space Science I

Earth and Space Science I is a course focused on the following core topics: study of the earth's layers; atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. 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 theory and by *evaluating and communicating the results of those investigations according to accepted procedures*

*Recommended Grade Level: 9, 10, 11, 12*

*Credits: 2 semester course, 1 credit per semester*

*Counts as an Elective for all diplomas*

*Fulfills a Core 40 science course requirement for all diplomas*



### **Elective Courses**

#### See The Science

Advanced Science, Special Topics is any science course which is grounded in extended laboratory, field, and literature investigations into one or more specialized science disciplines, such as anatomy/physiology, astronomy, biochemistry, botany, ecology, electromagnetism, genetics, geology, nuclear physics, organic chemistry, etc. Students enrolled in this course engage in an in-depth study of the application of science

concepts, principles, and unifying themes that are unique to that particular science discipline and that address specific technological, environmental or health-related issues. Under the direction of a science advisor, students enrolled in this course will complete an end-of-course project and presentation, such as a scientific research paper or science fair project, integrating knowledge, skills, and concepts from the student's year of study. Individual projects are preferred, but group projects may be appropriate if each student in the group has specific and unique responsibilities. Students complete at least one science-themed educational video presentation per semester, with an intended audience of high school science students. Topics of the video can encompass any branch of science. Chronicling of local scientific phenomena and attractions are ideal.

*Recommended Grade Level: 11-12*

*Credits: 1 credit per semester. May be offered for successive semesters*

*Counts as a science course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

## Physics II

Physics II is an extended laboratory, field, and literature investigations-based course. Students enrolled in Physics II investigate physical phenomena and the theoretical models that are useful in understanding the interacting systems of the macro- and microcosms. Students extensively explore the unifying themes of physics, including such topics and applications of physics as mechanics, wave motion, electricity, magnetism, electromagnetism, atomic and nuclear physics, and thermodynamics, etc., in laboratory activities aimed at investigating physics questions and problems concerning personal needs and community issues related to physics.

*Recommended Grade Level: 11-12*

*Credits: 2 semester course, 1 credit per semester*

*Recommended Prerequisite: Physics I, Pre-calculus/Trigonometry (can be taken concurrently)*

*Fulfills the physical science requirement for the General diploma, Fulfills Core 40 science credit for Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Qualifies as a quantitative reasoning course.*

*Students may earn 3 hours of college credit in Physics 101 from the University of Southern Indiana.*



## **Business**

### **Grade 11 Entrepreneurial Academy**

#### Introduction to Accounting

Introduction to Accounting 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.

*Recommended Grade Level: 10, 11*

*Recommended Prerequisites: None*

*Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum*

*Counts as a Directed Elective or Elective for the all diplomas*

#### Personal Financial Responsibility

Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify

sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt. A project based approach and applications through authentic settings such as work based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

*Recommended Grade Level: 10, 11, 12*

*Recommended Prerequisites: None*

*Credits: 1 semester course, 1 credit per semester, 1 credit maximum*

*Counts as a Directed Elective or Elective for all diplomas*

*Qualifies as a quantitative reasoning course*

### Preparing for College and Careers

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 life experiences, is recommended.

*Recommended Grade Level: 9*

*Recommended Prerequisites: None*

*Credits: 1 semester course, 1 credit per semester, 1 credit maximum*

*Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c) (6).*

*Counts as a Directed Elective or Elective for all diplomas*

### Principles of Marketing

Principles of Marketing provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem-solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing information management, pricing, and product/service management.

*Recommended Grade Level: 11, 12*

*Recommended Prerequisites: None*

*Credits: 2 semester course, 1 credit per semester, 2 credits maximum*

*Counts as a Directed Elective or Elective for all diplomas*

## **Business**

### **Grade 12 Entrepreneurial Academy**

#### Introduction to Entrepreneurship

Introduction to Entrepreneurship provides an overview of what it means to be an Entrepreneur. Student will learn about starting and operating a business, marketing products and services, and how to find resources to help in the development of a new venture. This course is ideal for students interested in starting their own art gallery, salon, restaurant, etc.



*Recommended Grade Level: 9, 10*

*Recommended Prerequisites: None*

*Credits: 2 semester course, 1 credit per semester, 2 credits maximum*

*Counts as a Directed Elective or Elective for all diplomas*

### Preparing for College and Careers

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 life experiences, is recommended.

*Recommended Grade Level: 9*

*Recommended Prerequisites: None*

*Credits: 1 semester course, 1 credit per semester, 1 credit maximum*

*Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c) (6).*

*Counts as a Directed Elective or Elective for all diplomas*

### Digital Applications and Responsibility

Digital Applications and Responsibility prepares students to use technology in an effective and appropriate manner in school, in a job, or everyday life. Students develop skills related to word processing, spreadsheets, presentations, and communications software. Students learn what it means to be a good digital citizen and how to use technology, including social media, responsibly. Students expand their knowledge of how to use digital devices and software to build decision-making and problem-solving skills. Students should be provided with the opportunity to seek industry-recognized digital literacy certifications.

*Recommended Grade Level: 9, 10, 11, 12*

*Recommended Prerequisites: None*

*Credits: 2 semester course, 1 credit per semester, 2 credits maximum*

*Counts as a Directed Elective or Elective for all diplomas*

## **Technology**

### **Project Lead The Way Courses**

#### Introduction to Engineering Design

Introduction to Engineering Design is an introductory course which develops student problem solving skills using the design process. Students document their progress of solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts. They develop hand sketches using 2D and 3D drawing techniques. Computer Aided Design (CAD). NOTE: Use of the PLTW Course number is limited to schools that have agreed to be part of the Project Lead the Way network and follow all training and data collection requirements.

*Recommended Grade Level: Grade 9-12*

*Recommended Prerequisites: none*

*Credits: 1 credit per semester, maximum of 2 credits*

*Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Students may earn 3 hours of college credit from the Ivy Tech Community College.*



### Principles of Engineering

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. NOTE: Use of the PLTW Course number is limited to schools that have agreed to be part of the Project Lead the Way network and follow all training and data collection requirements.

*Recommended Grade Level: Grade 9-12*

*Recommended Prerequisites: Introduction to Engineering Design*

*Credits: 1 credit per semester, maximum of 2 credits*

*Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Students may earn 3 hours of college credit from the Ivy Tech Community College.*

*Qualifies as a quantitative reasoning course.*

### **Non-Project Lead The Way Courses**

#### Introduction to Manufacturing

Introduction to Manufacturing is a course that specializes in how people use modern manufacturing systems with an introduction to manufacturing technology and its relationship to society, individuals, and the environment. An understanding of manufacturing provides a background toward developing engineering & technological literacy. This understanding is developed through the study of the two major technologies, material processing and management technology, used by all manufacturing enterprises. Students will apply the

skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students will investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. After gaining a working knowledge of these materials, students will study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling.

*Recommended Grade Level: Grade 9-12*

*Recommended Prerequisites:*

*Credits: 1 credit per semester, maximum of 2 credits*

*Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Students may earn 3 hours of college credit from the Ivy Tech Community College.*

#### Introduction to Advanced Manufacturing and Logistics

Introduction to Advanced Manufacturing and Logistics is a course that specializes in how people use modern

manufacturing systems with an introduction to advanced manufacturing and logistics and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. Students study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling. After gaining a working knowledge of these materials, Students are introduced to advanced manufacturing, logistics, and business principles that are utilized in today's advanced manufacturing industry. Students gain a basic understanding of tooling, electrical skills, operation skills, inventory principles, MSDS's, chart and graph reading and MSSC concepts. There is also an emphasis placed on the flow process principles, material movement, safety, and related business operations. Students have the opportunity to develop the characteristics employers seek as well as skills that will help them in future endeavors.

*Recommended Grade Level: Grade 9-12*

*Recommended Prerequisites: None*

*Credits: 1 credit per semester, maximum of 2 credits*

*Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Students may earn 3 hours of college credit from the Ivy Tech Community College.*

### Introduction to Design Processes

Introduction to Design Processes is a course that specializes in modern design and engineering processes with a focus on creative problem solving in developing, testing, communicating, and presenting post-evaluation of products. Students use the design process to analyze research, develop ideas, and produce product solutions. This process gives a framework through which they design, manufacture tests present their ideas. Students will demonstrate and utilize design principles and elements for visual presentation. Designing aspects will also cover aesthetics, ergonomics, the environment, safety, and production. The design process is a core-learning tool for many courses enabling the student to solve problems in a systematic, logical and creative manner. Students develop a good understanding of the way the process helps them think creatively and developing aesthetic ideas. The design process encourages the students to engage in higher level thinking to create solutions for many types of problems.

*Recommended Grade Level: 10*

*Recommended Prerequisites: none*

*Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum*

*Counts as a Directed Elective or Elective for all diplomas*

## **Fine Arts**

### Introduction to Two-Dimensional Art

Introduction to Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

*Recommended Grade Level: 9, 10, 11, or 12*

*Credits: a 1-semester course for 1 credit*

*Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma*

*Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

### Introduction to Three-Dimensional Art

Introduction to Three-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

*Recommended Grade Level: 9, 10, 11, or 12*

*Recommended Prerequisites: Introduction to Two-Dimensional Art (L)*

*Credits: a 1-semester course for 1 credit*

*Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma*

*Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*

### Theatre Arts I & II

Theatre Arts is based on the Indiana Academic Standards for Theatre. Students enrolled in Theatre Arts read and analyze plays, create scripts and theatre pieces, conceive scenic designs, and develop acting skills. These activities incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.



*Recommended Grade Level: 9, 10, 11, or 12*

*Credits: a 1-semester course for 1 credit. The nature of this course allows for two successive semesters (Theatre Arts I and Theatre Arts II) of instruction at this level, provided that defined standards are utilized.*

*Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma*



## **Physical Education**

### Physical Education I

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide 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 which are within the framework of lifetime physical activities 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 IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

*Recommended Grade Level: 9 – 12*

*Recommended Prerequisites: Grade 8 Physical Education*

*Credits: 1 credit per semester*

*Fulfills part of the Physical Education requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Recommended: Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.*

*Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.*

*As a designated laboratory course, 25% of course time must be spent in activity.*

### Physical Education II

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in four of the following that were not in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities 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 IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

*Recommended Grade Level: 9 – 12*

*Recommended Prerequisites: Physical Education I*

*Credits: 1 credit per semester*

*Fulfills part of the Physical Education requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*

*Recommended: Classes are co-educational unless the activity involves bodily contact or grouping. **D26** on an objective standard of individual performance developed and applied without regard to gender.*

*Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.*

*As a designated laboratory course, 25% of course time must be spent in activity.*

### Physical Education Elective

Elective Physical Education, a course based on selected standards from Indiana's Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports, dual sports activities, individual physical activities, outdoor pursuits, self-defense and martial arts, aquatics; gymnastics; and dance. . It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of 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 IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

*Recommended Grade Level: 10 – 12*

*Recommended Prerequisites: Physical Education I and II*

*Credits: 1 credit per semester, trimester or upon mastery of course standards. There is no maximum amount of credits that may be earned provided that there is no course or skill level duplication.*

*Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.*

*Recommended: Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.*

*Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.*

*As a designated laboratory course, 25% of course time must be spent in activity.*



### Health and Wellness

Health & Wellness, a course based on Indiana's Academic Standards for Health & Wellness, 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, 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.

*Recommended Grade Level: 9 – 12*

*Recommended Prerequisites: 8th grade health education*

*Credits: 1 credit, 1 semester course*

*Fulfills the Health & Wellness requirement for the General, Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors diplomas.*

Effective beginning with students who enter high school in 2012-13 school year. (class of 2016).

**Course and Credit Requirements**

<b>English/Language Arts</b>	<b>8 credits</b> Including a balance of literature, composition and speech.
<b>Mathematics</b>	<b>6 credits (in grades 9-12) (EVSC = 8 credits)</b> 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II <small>Or complete Integrated Math I and II for 6 credits. Students must take a math or quantitative reasoning course each year in high school.</small>
<b>Science</b>	<b>6 credits</b> 2 credits: Biology I 2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World
<b>Selected Electives</b>	<b>5 credits</b> World Languages Fine Arts Career and Technical Education
<b>Physical Education and Health/Fitness*</b>	<b>2 credits (+1 credit in EVSC)</b>  <b>1 credit</b>
<b>Electives*</b>	<b>6 credits</b> <small>(College and Career Pathway courses recommended)</small>

**40 Total State Credits Required, 41 in EVSC**

\*may have additional local graduation requirements that apply to all students  
As the number of electives required by the state, high school schedules provide time for many activities during the high school years. All students are strongly encouraged to complete a College Career Pathway (selecting electives in a deliberate manner) to take full advantage of career and exploration and preparation opportunities.

**Core 40, Academic Honors, and Technical Honors Requirements**  
**Class of 2016 and beyond (note: changes are planned for class of 2020)**

**CORE40 with Academic Honors** (minimum 47 credits)

For the Core 40 with Academic Honors diploma, students must:

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits (6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of a "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following:
  - A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
  - B. Earn 6 verifiable transcribed college credits in dual credit courses from the approved dual credit list.
  - C. Earn two of the following:
    - 1. A minimum of 3 verifiable transcribed college credits from the approved dual credit list.
    - 2. 2 credits in AP courses and corresponding AP exams.
    - 3. 2 credits in IB standard level courses and corresponding IB exams.
  - D. Earn a combined score of 1750 or higher on the SAT critical reading, mathematics and writing sections and a minimum score of 530 on each mathematics and writing sections and a minimum score of 530 on each
  - E. Earn an ACT composite score of 26 or higher and complete written section
  - F. Earn 4 credits in IB courses and take corresponding IB exams.

**CORE40 with Technical Honors** (minimum 47 credits)

For the Core 40 with Technical Honors diploma, students must:

- Complete all requirements for Core 40.
- Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
  - 1. State approved, industry recognized certification or credential, or
  - 2. Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits
- Earn a grade of "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following.
  - A. Any one of the options (A - F) of the Core 40 with Academic Honors
  - B. Earn the following scores or higher on WorkKeys: Reading for Information - Level 6, Applied Mathematics - Level 6, and Locating Information-Level 5.
  - C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.
  - D. Earn the following minimum score(s) on Compass: Algebra 66 Writing 70, Reading 80.