# Tri-Township Jr/Sr High School



# Course Catalog 2025-2026





The staff and faculty of Tri-Township Schools is pleased to present the 2025-26 "Course Catalogue". This guide is a tool to provide assistance to you in planning your academic course of study for next year and for your remaining time at Tri-Township Consolidated School Corporation. Please take the time to read through the guide carefully, noting specific course descriptions and recommended background/grade levels.

We encourage students and your parents/guardians to discuss your course selections thoroughly. Parents/guardians are always encouraged to take an active role in helping their students select the right courses that match their goals and aspirations. Parents/guardians should feel welcome to contact the School Counselor - Mrs. Urban at: kristinaurban@tritownship.k12.in.us should any questions arise regarding the different curriculums, their student's placement in courses, or their student's Graduation Plan of courses they need/want to take.

It is our hope that this guide will help students and parents understand the courses we offer at Tri-Township Schools.

Yours in Education

-Kristina L. Urban M.S.

Interim School Counselor



#### **Graduation Requirements**

- Indiana's diploma curriculum provides the academic foundation all students need to succeed in college and the workforce. Students wishing to earn advanced diplomas, may discuss those requirements with their parents and school counselor.
- The minimum number of credits to graduate from Tri-Township is 40 for cohorts 26'-28' and 42 for cohort 2029 and beyond.
- All Seniors must complete the FAFSA (Free Application for Federal Student Aid) at: studentaid.gov and provide proof of submission to their counselor, or complete the FAFSA waiver if they are not college bound.
- All Juniors and Seniors must have 2 Career Discovery Meetings (CDMs) per year. These can be 30
  minute meetings with local unions and business partners, or college campus visits with
  documentation. All requirements must be completed before a student may participate in the
  Commencement Program and receive a diploma. Whenever a student fails a required course, the
  failed class should be repeated as soon as possible.



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

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

Schools may have additional local graduation requirements that apply to all students (not required for students with an IEP).

\* Specifies the number of electives required by the state. High school schedules provide time for many more electives during the high school years. All students are strongly encouraged to complete a College and Career Pathway (selecting electives in a deliberate manner) to take full advantage of career and college exploration and preparation opportunities.

\*\*SAT scores updated September, 2017

\*\*\*WorkKeys assessment titles updated, 2018

#### C•RE40 with Academic Honors

For the Core 40 with Academic Honors designation, 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 transcripted college credits in dual credit courses from the approved dual credit list.

(minimum 47 credits)

- C. Earn two of the following:
  - A minimum of 3 verifiable transcripted college credits from the approved dual credit list,
  - 2. 2 credits in AP courses and corresponding AP exams,
- 2 credits in IB standard level courses and corresponding IB exams.
   D. Earn a composite score of 1250 or higher on the SAT and a minimum of
- 560 on math and 590 on the evidence based reading and writing section.\*\*
- 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.

C•RE40 with Technical Honors (minimum 47 credits)

For the Core 40 with Technical Honors designation, 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. Pathway designated industry-based certification or credential, or
- Pathway dual credits from the approved dual credit list resulting in 6 transcripted 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 minimum scores on WorkKeys: Workplace Documents,
  - Level 6; Applied Math, Level 6; and Graphic Literacy, 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.

# Indiana New Diploma Requirements

#### Beginning with the class of 2029

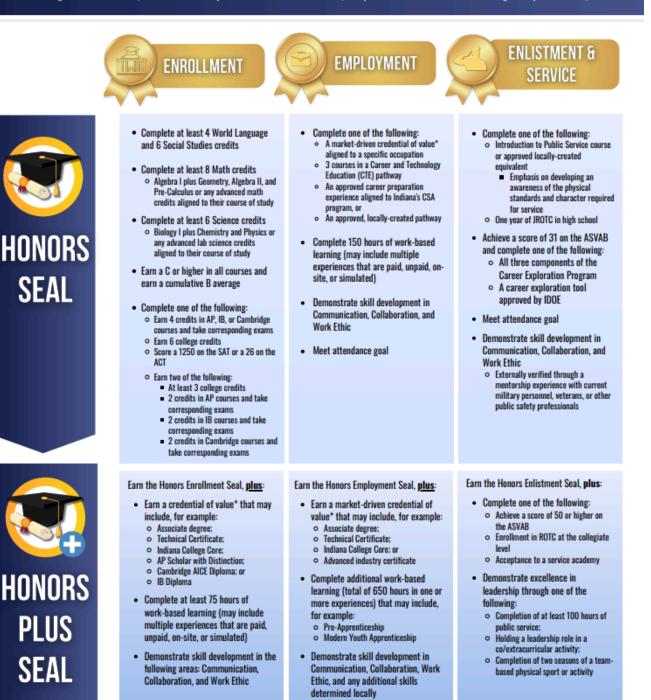
English	<ul> <li>2 credits: English 9</li> <li>1 credit: Communications-focused course</li> <li>5 additional English credits</li> </ul>				
Math	<ul> <li>2 credits: Algebra I</li> <li>1 credit: Personal Finance</li> <li>4 additional math credits</li> </ul>				
Science, Technology, & Engineering	<ul> <li>2 credits: Biology I</li> <li>1 credit: Computer Science</li> <li>2 additional science credits</li> <li>2 STEM-focused credits</li> </ul>				
Social Studies	<ul> <li>2 credits: U.S. History</li> <li>1 credit: U.S. Government</li> <li>2 credits: World Perspectives (Flexible options, including advanced world language or world-focused social studies courses)</li> </ul>				
PE/Health	<ul> <li>1 credit: Physical Education</li> <li>1 credit: Health &amp; Wellness</li> </ul>				
Personalized Electives	<ul> <li>12 credits: Students are encouraged to utilize the new readiness-seals to align these personalized electives with their unique goals. Personalized electives can include a variety of courses, such as CTE, Performing or Fine Arts, and World Languages.</li> </ul>				
College & Careers	<ul> <li>1 credit: Preparing for College &amp; Careers</li> </ul>				



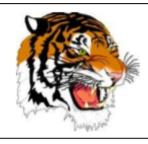
INDIANA DEPARTMENT of EDUCATION

# **BLUEPRINT FOR SUCCESS: READINESS-SEALS**

Readiness seals are designed to be permeable, allowing students to update their graduation plan and pivot, if their original interests and goals change. Although seals are optional, students are encouraged to utilize the blueprints below to focus their flexible credits into a connected pathway that aligns with their future goals. Students may earn one or multiple seals. Graduation Pathways requirements will be satisfied through completion of any seal.



\*Note: the credential of value levels are currently being determined by business and industry.



Tri-Township High School Graduation Pathway Checklist

Student Name: \_\_\_\_\_ Cohort: \_\_\_\_\_

0	Meet the State of Indiana requirements for a high school diploma:
High School Diploma	□General □Core 40 □Academic Honors □Technical Honors
2 Learn and Demonstrate Employability Skills (Students must complete <u>at</u> <u>least one</u> of the following:)	Project-Based Learning: Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or any other experience as approved by the State Board of Education. Description: Verification Product: Verification Product: Output: The state meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. This can include participation in a meaningful volunteer or civic engagement experience, engagement in a school-based activity, such as a co-curricular or extra-curricular activity or sport for at least one academic year, or another experience as approved by the State Board of Education. Description: Verification Product:
Bostsecondary-Ready Competencies (Students must complete at least one of the following:)	Honors Diploma:       AHD       THD         ACT College Ready Benchmarks (18 in English or 22 in Reading and 22 in Math or 23 in Science)       English or Reading: and Math or Science:         SAT College Ready Benchmarks (480 in EBRW, 530 in Math)       EBRW Math         ASVAB (minimum score of 31)       AFQT score         State and Industry Recognized Credential or Certification       Certification:

## Free Application for Federal Student Aid (FAFSA)

All Seniors are required by the State of Indiana to file their FAFSA or a FAFSA waiver as a graduation requirement. It takes about 30 minutes to complete. FAFSA applications open October 1st and close April 15th. Proof of submission must be submitted to the school counselor to be kept in the student's cumulative file for auditing purposes. Students and parents/guardians first must apply for a FSA ID which can take 3-4 working days to approve. Please review the steps below to start and complete your FAFSA application.

- Visit studentaid.gov
- Create a username and password. Keep record of your login information in a secure location.
  - You will need your Social Security Number
  - Personal email address
  - Address
  - Phone number for login information recovery
- One parent/guardian will need to create a FSA ID as well (see above for the steps)
- That parent guardian needs to be the one who has been providing for you from 2024 and prior
- Once your FSA IDs are approved you will visit studentaid.gov and complete the FAFSA
  - You will need your social security number and parent social security numbers
  - Parent/Guardian 2023 Tax records
  - Student 2023 tax records (if applicable)

### Table of Contents

Englis	h	11
	1002 English 9	11
	1004 English 10	11
	1006 English 11	11
	1006 English 11 – College	12
	1008 English 12	12
	1008 English 12 – College	13
	1084 Digital Media	13
	1092 Creative Writing	13
	1076 Speech	14
Math		14
	2516 Algebra I Lab	
	2520 Algebra I	
	2532 Geometry	
	2522 Algebra II	
	2564 Pre-Calculus: Algebra	
	2566 Pre-Calculus: Trigonometry	17
	2527 Calculus	
	2546 Probability and Statistics	
Scienc	:e	
	3024 Biology I	
	3108 Integrated Chemistry-Physics	
	3026 Biology II (Dual Credit)	
	5276 Anatomy and Physiology	
	3064 Chemistry I	
	3066 Chemistry II	
	3084 Physics I	
	3010 Environmental Science	
	3044 Earth and Space Science I	
	7351 Topics in Computer Science.	
Social	Studies	
	1570 Geography and History of the World	
	1548 World History	
	1512 Current Problems, Issues and Events	
	1542 United States History	
	1540 United States Government	
	1514 Economics	
Physic	al Education & Health	
	3542 Physical Education I	
	3544 Physical Education II	26

3560 Elective Physical Education	26
3506 Health and Wellness Education	26
5394 Preparing for College and Careers	27
Foreign Language	
2120 Spanish I	28
2122 Spanish II	28
Spanish III	29
Spanish IV	
Directed Electives	30
0502 Cadet Teaching Experience	30
4540 Personal Financial Responsibility	
Fine Arts (Directed Electives)	
1086 Student Media	
4040 Ceramics (L)	
4044 Sculpture (L)	
4060 Drawing (L)	
4064 Painting (L)	33
4160 Beginning Concert Band	
4168 Intermediate Concert Band	
4170 Advanced Concert Band	34
4182 Beginning Chorus	
4186 Intermediate Chorus	
4188 Advanced Chorus	
Electives	
0500 Basic Skills Development	
1516 Ethnic Studies	
1532 Psychology	
1534 Sociology	
Career and Technical Education	
Advanced Manufacturing	38
4802 Introduction to Engineering Design PLTW	38
5644 Principles of Engineering PLTW	
5534 Computer Integrated Manufacturing PLTW	
5698 Engineering Design and Development PLTW	40
Agriculture, Food, & Natural Resources	
7117 Principles of Agriculture	
5008 Animal Science	40
5170 Plant and Soil Science	
5072 Advanced Life Science: Foods	
Business Management/Financial Services	42
4518 Introduction to Business	

4562 Principles of Business Management	42
5914 Marketing Fundamentals	43
7143 Management Fundamentals (online)	43
4524 Accounting Fundamentals	43
4522 Advanced Accounting	44
Cybersecurity	44
7183 Principles of Computing	44
7179 Cybersecurity Fundamentals	45
7178 Advanced Cybersecurity	45
Education Careers	45
7161 Principles of Teaching	45
7157 Child and Adolescent Development	46
7162 Teaching and Learning	46
Health & Human Services	47
5218 Principles of Biomedical Science PLTW	
5216 Human Body Systems PLTW	47
5217 Medical Interventions PLTW	48
5219 Biomedical Innovations PLTW	
Dual Credit Courses	
iCAP Courses	49
Vocational Courses	49
On-Line Courses (Edmentum)	50



# English

#### 1002 English 9

ENG 9

Length of Course: 2 semesters; 2 semesters required Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 9 Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of grammar, usage, composition, and literature. The basic principles of grammar and usage are reviewed, including parts of speech, parts of a sentence, and structure. Composition instruction includes prewriting, drafting, revising, and editing skills as well as paragraph development. Narrative, expository, and persuasive writing are explored. Instruction in literature includes the short story, drama, poetry, and the epic.

1004 English 10
ENG 10
Length of Course: 2 semesters; 2 semesters required Prerequisites: None
Credit: 1 credit per semester, 2 credits maximum
Offered to Grades: 10
Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of speech, composition, grammar and usage, and literature. Speech instruction focuses on voice training, language and presentation, as well as the preparation of speeches to inform, demonstrate, persuade, introduce, and critique. Grammar instruction includes frequent mini-lessons in traditional grammar and usage. Instruction in composition centers on the writing process and effective revision strategies and includes the study of persuasive, narrative, and critical writing techniques. The study of literature includes the short story, drama, poem, and novel, with special emphasis on contemporary novels. Vocabulary development through the study of etymology is stressed.

#### 1006 English 11

ENG 11

Length of Course: 2 semesters; 2 semesters required Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 11 Fulfills and English/Language Arts requirement for all diplomas.

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.

1006 English 11 – College	
ENG 11	
Length of Course: 2 semesters; 2 semesters required	
Prerequisites: None	
Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 11	
Fulfills and English/Language Arts requirement for all diplomas.	

This course includes the study of composition, grammar and usage, and literature, emphasizing those skills needed to prepare for college work. Composition instruction centers on essay writing, especially persuasive essays and researched essays using the basics of MLA style. Literature instruction consists of a survey of American literature from the colonial period to the present. Special emphasis is placed on the study of classic and contemporary American novels, biography, and drama.

1	0	0	8	Er	۱g	lis	h	12	
---	---	---	---	----	----	-----	---	----	--

ENG 12



Length of Course: 2 semesters; 2 semesters required Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 12 Fulfills and English/Language Arts requirement for all diplomas.

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.

#### 1008 English 12 - College

ENG 12

Length of Course: 2 semesters; 2 semesters required Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 12 Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of composition, grammar and usage, and literature, emphasizing those skills needed to prepare for college work. Composition instruction centers on writing expository essays of various types, composing a lengthy research paper, and responding to literature. Clear, concise style and Standard English usage are emphasized. Readings in literature include a study of classics. Critical thinking skills in reading and writing are emphasized.

#### **1084 Digital Media**

(Digital Media)

Length of Course: 1 or 2 semester course, 1 credit per semester Prerequisites: None

Credit: 1 per semester; Second credit may be subtitled Advanced to allow for a successive semester of instruction at an advanced level.

Offered to Grades: 9, 10, 11, 12

English/Language Arts credit (1084): Digital Media course work addresses the Indiana Academic Standards for English/Language Arts, credits accrued can be counted as part of the eight (8) required English/Language Arts credits for all diplomas.

Counts as an elective for all diplomas.

Digital Media, a course based on the Indiana Academic Standards for English/Language Arts and Media Literacy Standards, is a study of media literacy and production skills. This course examines the impact of informational, narrative, and persuasive media on everyday life. This course will focus on changes in media and includes practice in broadcast journalism, audio/visual storytelling, multimedia storytelling, as well as different platforms such as online and social media. Students will analyze local, national, and global media through the lens of law, ethics, and social responsibility. Students use course content to become knowledgeable consumers and producers of media. For the second credit: Students continue to develop media production skills in addition to continuing critical media analysis. By the end of the semester, students write and produce media projects.

#### **1092 Creative Writing**

CREAT WRIT

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Fulfills an English/Language Arts requirement for all diplomas.

Creative Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, students demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, the purposes for writing, and the style of their own writing. Course can be offered in conjunction with a literature course, or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum.

1076 Speech	_
SPEECH	
Length of Course: 1 semester	
Prerequisites: None	
Credit: 1 per semester	
Offered to Grades: 9, 10, 11, 12	
Fulfills an English/Language Arts requirement for all diplomas.	

Speech, a course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multimedia presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same standard English conventions for oral speech that they use in their writing.



## Math

#### 2516 Algebra I Lab

ALG I LAB

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Fulfills a Mathematics course requirement for the General Diploma only or as an elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas. Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently enrolled in Algebra I. This course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades. *Algebra I Lab is designed as a support course for Algebra. As such, a student taking Algebra I Lab must also be enrolled in Algebra 1 during the same academic year.* 

#### 2520 Algebra I

ALG I

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Fulfills a Mathematics course requirement for all diplomas. Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas.

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of six strands: Real Numbers 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.

#### 2532 Geometry

GEOM

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 10, 11, 12 Fulfills a Mathematics course requirement for all diplomas. Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma.

15

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; 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.

#### 2522 Algebra II

ALG II

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Fulfills a Mathematics course requirement for all diplomas. Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas.

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. Algebra II is made up of seven strands: Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential & Logarithmic Equations and Functions; Polynomial, Rational, and Other Equations and Functions; and Data Analysis, Statistics, and Probability. 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.

#### 2564 Pre-Calculus: Algebra

PRECAL AL

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 12 Fulfills a Mathematics course requirement for all diplomas.

Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions;

Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. 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.

#### 2566 Pre-Calculus: Trigonometry

PRECAL TRIG

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 12 Fulfills a Mathematics course requirement for all diplomas.

Pre-Calculus: 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 in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will 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. 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.

2527 Calculus

CALC (Online Only)

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Fulfills a Mathematics course requirement for all diplomas.

Calculus expands a student's knowledge of topics like functions, graphs, limits, derivatives, and integrals. Additionally, students will review algebra and functions, modeling, trigonometry, etc. Calculus is made up of five strands: Limits and Continuity; Differentiation; Applications of Derivatives; Integrals; and Applications of Integrals. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience



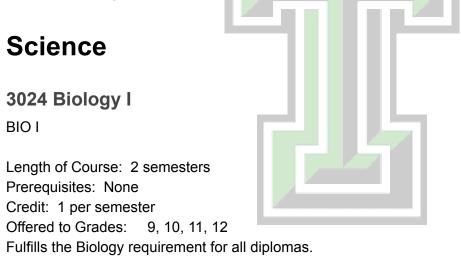
mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

#### **2546 Probability and Statistics**

PROB/STAT (Online Only)

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Fulfills a Mathematics course requirement for all diplomas.

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Probability and Statistics are made up of three strands: Data Analysis; Experimental Design; and Probability. 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 technology and computer programs is encouraged. 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.



Biology I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Biology topics. Disciplinary Core Ideas for this course include From Molecules to Organisms, Ecosystems, Heredity and Biological Evolution. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

#### **3108 Integrated Chemistry-Physics**

ICP

Length of Course: 2 semesters

Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as an elective for all diplomas. Fulfills a science (physical) course requirement for all diplomas. Qualifies as a Quantitative Reasoning course.

Integrated Chemistry and Physics incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry and Physics topics. Disciplinary Core Ideas for this course include Matter and its Interactions, Forces, Energy, and Waves and their Applications in Technologies for Information Transfer. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

<b>3026 Biology II (Dual Credit)</b> BIO II	
Length of Course: 2 semesters Prerequisites: None	
Credit: 1 per semester Offered to Grades: 10, 11, 12 Counts as an elective for all diplomas. Fulfills a science course requirement for all diplomas.	

Biology II is an advanced laboratory, field, and literature investigations-based course. Students enrolled in Biology II examine in greater depth the structures, functions, and processes of living organisms. Students also analyze and describe the relationship of Earth's living organisms to each other and to the environment in which they live. In this course, students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of the unifying themes of biology to biological questions and problems related to personal and community issues in the life sciences.

#### 5276 Anatomy and Physiology

A & P (Online iCap Only)

Length of Course: 1 to 2 semester course Prerequisites: None Credit: 1 per semester; 2 credits maximum Offered to Grades: 11, 12 Counts as a directed elective or elective for all diplomas.

Fulfills a science course requirement for all diplomas.

Anatomy & Physiology is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of

a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integumentary, skeletal, muscular, and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields.

#### 3064 Chemistry I

CHEM I

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 10, 11, 12 Fulfills a science (physical) course requirement for all diplomas. Qualifies as a quantitative reasoning course.

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

# **3066 Chemistry II** CHEM II (Online iCap Only) Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 10, 11, 12 Counts as an elective for all diplomas. Fulfills a science course requirement for all diplomas. Qualifies as a quantitative reasoning course.

Chemistry II is an extended laboratory, field, and literature investigations-based course. Students enrolled in Chemistry II examine the chemical reactions of matter in living and nonliving materials. Based on the unifying themes of chemistry and the application of physical and mathematical models of the interactions of matter, students use the methods of scientific inquiry to answer chemical questions and solve problems concerning personal needs and community issues related to chemistry.

3084 Physics I PHYS I

Length of Course: 2 semesters

Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Fulfills a science (physical) course requirement for all diplomas. Qualifies as a Quantitative Reasoning course. Counts as an elective for all diplomas.

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 Electromagnetic Radiation. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

3010 Environmental S	cience	
ENVSCI (Online Only)		
Length of Course: 2 semeste Prerequisites: None	ers	
Credit: 1 per semester		
Offered to Grades: 11, 12		
Counts as an elective for all d		
Fulfills a science (life) course	requirement for all diplomas.	

Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students enrolled in this course integrate Science and Engineering Practices and Crosscutting Concepts to conduct in-depth scientific studies of environmental systems, flow of matter and energy, natural disasters, environmental policies, biodiversity, population, pollution, and natural and anthropogenic resource cycles. 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.

#### 3044 Earth and Space Science I

EAS SCI I Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester, 2 semester course Offered to Grades: 9, 10, 11, 12 Counts as an elective for all diplomas. Fulfills a science course requirement for all diplomas.

Earth and Space Science incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Earth and Space Science topics. Disciplinary Core Ideas for this course include Earth's Place in the Universe,

Earth's Systems, and Human Interaction with Earth's Systems. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

#### 7351 Topics in Computer Science

TOP COMP SCI (Online Only)

Length of Course: 2 semesters; 2 semesters required Prerequisites: Principles of Computing Credit: 1 per semester, 2 credits maximum Offered to Grades: 10,11, 12 Counts as a directed elective or elective for all diplomas. Counts as a quantitative reasoning course. Counts as a science credit.

Topics in Computer Science is designed for students to investigate emerging disciplines within the field of computer science. Students will use foundational knowledge from 7183 Principles of Computing to study the areas of data science, artificial intelligence, app/game development, and security. Students will utilize knowledge related to these areas and programming skills to develop solutions to authentic problems.

# **Social Studies**

#### 1570 Geography and History of the World

GEO-HST WLD

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12

Counts as a Social Studies requirement for the General Diploma.

Counts as an elective for all diplomas.

Fulfills the Geography History of the World/World History and Civilization graduation requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

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 Century.

#### **1548 World History**

WLD HST/CVL

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as an elective for all diplomas. Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas.

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.

#### 1512 Current Problems, Issues and Events

CPIE

Length of Course: 1 semester; course may be repeated for credit if the content of the course changes. Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as an elective for all diplomas. Fulfills social studies requirement for General Diploma.

Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems or issues selected will have contemporary historical

significance and will be studied from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

#### **1542 United States History**

**US HIST** 

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 10, 11, 12 Fulfills the US History requirement for all diplomas.

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.

#### 1540 United States Government

US GOVT

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Fulfills Government requirements for all diplomas.

The 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. Analysis of how the United States interacts with other nations and the government's role in world affairs is included in this course. 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.

#### **1514 Economics**

ECON

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Counts as an elective for all diplomas. Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas. Fulfills a Social Studies requirement for the General Diploma only. Qualifies as a quantitative reasoning course.

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.

# **Physical Education & Health**

3542 Physical Education I

PHYS ED I

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester; maximum 1 credit Offered to Grades: 9, 10, 11, 12 Fulfills part of the Physical Education requirement for all diplomas.

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.

#### **3544 Physical Education II**

PHYS ED II

Length of Course: 1 semester Prerequisites: Physical Education I Credit: 1 per semester; maximum 1 credit Offered to Grades: 9, 10, 11, 12 Fulfills part of the Physical Education requirement for all diplomas.

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.

3560 Elective Physical Edu	cation
ELECT PE	
Length of Course: 1 semester	
Prerequisites: None	
Credit: 1 per semester; maximum of	f 8 credits
Offered to Grades: 10, 11, 12	
Counts as an elective for all diploma	S

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. This course includes the study of physical development concepts and principles of sport and exercise as well as 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.

#### **3506 Health and Wellness Education**

HLTH & WELL

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester; 1 credit maximum Offered to Grades: 9, 10, 11, 12

Fulfills the Health and Wellness requirement for all diploma types.

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

#### 5394 Preparing for College and Careers

PREP CC

Length of Course: 1 to 2 semester course Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas.

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.

# Foreign Language

#### 2120 Spanish I

SPAN I

Length of Course: 2 semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma.

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.

#### 2122 Spanish II

SPAN II

Length of Course: 2 semesters Prerequisites: Spanish I Credit: 1 per semester Offered to Grades: 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma.

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.

#### Spanish III

SPAN III

Length of Course: 2 semesters Prerequisites: Spanish I and II Credit: 1 per semester Offered to Grades: 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma.

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 Spanishspeaking culture through recognition 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.

#### Spanish IV

SPAN IV

Length of Course: 2 semesters Prerequisites: Spanish I, II, and III Credit: 1 per semester Offered to Grades: 12 Counts as a directed elective or elective for all diplomas. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma. Spanish V, a course based on Indiana's Academic Standards for World Languages, provides opportunities for students to interact and exchange information in culturally and socially authentic and/or simulated situations to demonstrate integration of language skills with understanding of Spanish-speaking culture. This course emphasizes the use of appropriate formats, varied vocabulary and complex language structures within student communication, both oral and written, as well as the opportunity to produce and present creative material using the language. Additionally, students will continue to develop understanding of Spanish-speaking culture through investigating the origin and impact of significant events and contributions unique to the target culture, comparing and contrasting elements that shape cultural identity in the target culture and the student's own culture, and explaining how the target language and culture have impacted other communities. This course further emphasizes the integration of concepts and skills from other content areas with the target language and cultural understanding, as well as the exploration of community resources intended for native Spanish speakers.



This elective course provides students in grades eleven (11) or twelve (12) organized exploratory teaching experiences in grades kindergarten (K) through grade nine (9). All teaching experiences should be preplanned by the high school Cadet Teaching Experience teacher-trainer and the cooperating teacher(s) who are supervising prospective teachers and providing them with pre-training experiences in one or more classes. This course provides a balance of class work relating to: (1) classroom organization, (2) classroom management, (3) the curriculum and instructional process, (4) observations of teaching, and (5) instructional experiences. Study topics and background reading provide the cadets with information concerning the teaching profession and the nature of the cadet teachers' assignments. Evaluation is based upon the cadet teachers' cooperation, day-to-day practical performance, and class work including the cadets' potential ability to teach. The total workload of the Cadet Teaching course is comparable to those for other subjects in the high school curriculum.

#### 4540 Personal Financial Responsibility

#### PRSFINRSP

Length of Course: 1 semester Prerequisites: None Credit: 1 Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas and qualifies as a quantitative reasoning course.

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

Fine Arts (Directed Electives)
1086 Student Media
STDNT MEDIA
Length of Course: 1 to 2 semester course Prerequisites: None
Credit: 1 per semester
Offered to Grades: 9, 10, 11, 12
Counts as a directed elective or elective for all diplomas. Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma.

Student Media, a course based on the High School Journalism Standards and the Student Media Standards, is the continuation of the study of journalism. Students demonstrate their ability to do journalistic writing and design for high school media, including school newspapers and yearbooks, and a variety of other media formats. Students follow the ethical principles and legal boundaries that guide scholastic journalism. Students express themselves publicly with meaning and clarity for the purpose of informing, entertaining, or persuading. Students work on high school media staff so that they may prepare themselves for career paths in journalism, communications, writing, or related fields.

#### 4040 Ceramics (L)

#### (CERAMICS)

Length of Course: 2 semester course Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma. Ceramics is a course based on the Indiana Academic Standards for Visual Art. Students in ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and the firing processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

#### 4044 Sculpture (L)

(SCULTP)

Length of Course: 2 semester course Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma.

Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students in sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials such as plaster, clay, metal, paper, wax, and plastic, students create portfolio quality works. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

#### 4060 Drawing (L)

(DRAWING)

Length of Course: 2 semester course Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma.

Drawing is a course based on the Indiana Academic Standards for Visual Art. Students in drawing engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create drawings utilizing

processes such as sketching, rendering, contour, gesture, and perspective drawing and use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

#### 4064 Painting (L)

(PAINTING)

Length of Course: 2 semester course Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma.

Painting is a course based on the Indiana Academic Standards for Visual Art. Students taking painting engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. Students create abstract and realistic paintings, using a variety of materials such as mixed media, watercolor, oil, and acrylics as well as techniques such as stippling, gouache, wash, and impasto. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art- related careers.

#### 4160 Beginning Concert Band

**BEG BAND** 

Length of Course: 1 semester; can be taken for successive semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Beginning Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand

and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

#### 4168 Intermediate Concert Band

INT BAND

Length of Course: 1 semester; can be taken for successive semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Intermediate Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. This course includes a balanced comprehensive study of music that develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Students study a varied repertoire of developmentally appropriate concert band literature and develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

#### 4170 Advanced Concert Band

ADV BAND

Length of Course: 1 semester; can be taken for successive semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Advanced Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. This course provides students with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand

and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

#### 4182 Beginning Chorus

BEG CHOR

Length of Course: 1 semester; can be taken for successive semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Beginning Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

#### 4186 Intermediate Chorus

INT CHOR

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

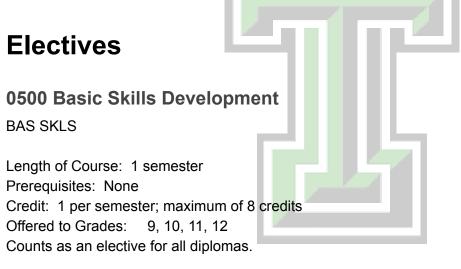
*Intermediate Chorus* is based on the Indiana Academic Standards for High School Choral Music. Students taking Intermediate Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

#### 4188 Advanced Chorus

ADV CHOR

Length of Course: 1 semester; can be taken for successive semesters Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Advanced Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.



Basic Skills Development is a multidisciplinary course which provides students continuing opportunities to develop the basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note-taking, (7) study and organizational skills, and (8) problem-solving skills that are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on the Indiana State proficiencies, individual school corporation general curriculum plans, and student Individualized Education Programs (IEP). Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

# 1516 Ethnic Studies

(Online Only)

Length of Course: 1 semester Prerequisites: None Credit: 1 per semester Offered to Grades: 9, 10, 11, 12 Counts as an elective for all diplomas.

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

1532 Psychology		
PSYCH		
(Online Only)		
Length of Course: 1 to 2 semester	r course	
Prerequisites: None		
Credit: 1 per semester		
Offered to Grades: 10, 11, 12		
Counts as an elective for all diplon	nas.	

Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas: History and Scientific Method, Biological Basis for Behavior, Development, Cognition, Personality and Assessment, Abnormal Psychology, Socio-Cultural Dimensions of Behavior, and Psychological Thinking. History and 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 analyzes the changes through one's life including the physical, cognitive, emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment explains 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.

#### 1534 Sociology

SOCIOLOGY (Online Only)

Length of Course: 1 semester

Prerequisites: None Credit: 1 per semester Offered to Grades: 11, 12 Counts as an elective for all diplomas. Fulfills course requirement for General Diploma.

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.

# **Career and Technical Education**

### **Advanced Manufacturing**

#### 4802 Introduction to Engineering Design PLTW

INT ENG DES

Length of Course: 2 semesters; 2 semesters required Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 9, 10, 11, 12 A directed elective or elective for all diplomas.

Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students begin with completing structured activities and move to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented. NOTE: This course aligns with the PLTW Introduction to Engineering Design curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

### 5644 Principles of Engineering PLTW

PRNC ENG

Length of Course: 2 semesters; 2 semesters required Prerequisites: Introduction to Engineering Design Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 10, 11, 12 A directed elective or elective for all diplomas. Fulfills a science course requirement for all diplomas.

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. Schools may use the PLTW curriculum to meet the standards for this course. This course aligns with the PLTW Principles of Engineering curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

### 5534 Computer Integrated Manufacturing PLTW

COMP INT MFG

Length of Course: 2 semesters; 2 semesters required Prerequisites: Introduction to Engineering Design Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 10, 11, 12 A directed elective or elective for all diplomas. Counts as a quantitative reasoning course.

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes. NOTE: This course aligns with the PLTW Computer Integrated Manufacturing curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

### 5698 Engineering Design and Development PLTW

ENG DES DEV

Length of Course: 2 semesters; 2 semesters required Prerequisites: Introduction to Engineering Design Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 12 A directed elective or elective for all diplomas. Counts as a quantitative reasoning course.

Engineering Design and Development (EDD) is an engineering research course in which students work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide the team to reach a solution to the problem. The team and/or individual(s)communicates their solution to a panel of stakeholders at the conclusion of the course. As a capstone course in the Engineering Pathway, EDD engages students in critical thinking, problem-solving, time management, and teamwork skills. NOTE: This course aligns with the PLTW Engineering Design and Development curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

### Agriculture, Food, & Natural Resources

### 7117 Principles of Agriculture

PRIN AG (Located @ Westville HS)

Length of Course: 2 semester course, 2 semesters required Prerequisites: None Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 9, 10, 11, 12 Counts as a directed elective for all diplomas.

Principles of Agriculture is a two-semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.

#### **5008 Animal Science**

ANML SCI

(Located @ Westville HS)

Length of Course: 2 semester course, 2 semesters required Prerequisites: Principles of Agriculture Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 10, 11, 12 Counts as a directed elective for all diplomas. Fulfills a science course requirement for all diplomas Fulfills a physical science requirement for general diploma

Animal Science provides students with an overview of the animal agriculture industry. Students participate in a variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study may be applied to both large and small animals. Topics to be covered in the course include: history and trends in animal agriculture, laws and practices relating to animal agriculture, comparative anatomy and physiology of animals, biosecurity threats and interventions relating to animal and human safety, nutrition, reproduction, careers, leadership, and supervised agricultural experiences relating to animal agriculture.

5170 Plant and Soil Science	
PLT SL SCI	
(Located @ Westville HS)	
Length of Course: 2 semester course, 2 semesters require	d
Prerequisites: Principles of Agriculture	
Credit: 1 credit per semester, 2 credits maximum	
Offered to Grades: 10, 11, 12	
Counts as a directed elective for all diplomas.	
Fulfills a science course requirement for all diplomas	1
Fulfills a physical science requirement for general diploma	

Plant and Soil Science a two semester course that provides students with opportunities to participate in a variety of activities including laboratory and field work. Coursework includes hands-on learning activities that encourage students to investigate areas of plant and soil science. Students are introduced to the following areas of plant and soil science: plant growth, reproduction and propagation, photosynthesis and respiration, diseases and pests of plants and their management, biotechnology, the basic components and types of soil, soil tillage, and conservation.

#### 5072 Advanced Life Science: Foods

ALS FOODS (Located @ Westville HS)

Length of Course: 2 semester course, 2 semesters required Prerequisites: Principles of Agriculture Credit: 1 credit per semester, 2 credits maximum Offered to Grades: 11, 12 Counts as a directed elective for all diplomas. Fulfills a science course requirement for all diplomas Fulfills a physical science requirement for general diploma

Advanced Life Science: Foods provides students with opportunities to participate in a variety of activities including laboratory work. This is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in the context of foods and the global food industry. Students enrolled in this course formulate, design, and carry out food-base laboratory and field investigations as an essential course component. Students understand how biology, chemistry, and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging, and food storage. Students completing this course will be able to apply the principles of scientific inquiry to solve problems related to biology, physics, and chemistry in the context of highly advanced industry applications of foods.

### **Business Management/Financial Services**

4518 Introduction to B	usiness
INTO BUSS	
Length of Course: 1 to 2 seme	ester course
Prerequisites: None	
Credit: 1 credit per semester, 2	2 credits maximum
Offered to Grades: 9, 10, 11,	12
Counts as a directed elective of	or elective for all diplomas .

Introduction to Business introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating 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.

### **4562 Principles of Business Management**

PRIN BUS

Length of Course: 2 semester course; 2 semesters required Prerequisites: None Credit: 1 per semester, 2 credits maximum Offered to Grades: 9, 10, 11, 12 Counts as a directed elective or elective for all diplomas. Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free-enterprise system. Students will attain an understanding of management, team building, leadership, problem-solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized.

### 5914 Marketing Fundamentals

MRKT FUND

Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Business Management Credits: 1 credit per semester, 2 credits maximum Offered to Grades: 10,11,12 A directed elective or elective for all diplomas.

Marketing Fundamentals provides a basic introduction to the scope and importance of marketing in the global economy. Course topics 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.

### 7143 Management Fundamentals (online)

MGMT FUND

Length of Course: 2 semester course; 2 semesters required
Prerequisites: Principles of Business Management
Credits: 1 credit per semester, 2 credits maximum
Offered to Grades: 10,11,12
A directed elective or elective for all diplomas.

Management Fundamentals describes the functions of managers, including the management of activities and personnel. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.

### **4524 Accounting Fundamentals**

ACCT FUND

Length of Course: 2 semester course; 2 semesters required Prerequisite: Principles of Business Management Credit: 1 per semester, 2 credits maximum Offered to Grades: 10, 11, 12 A directed elective or elective for all diplomas.

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.

### 4522 Advanced Accounting

ADV ACC

Length of Course: 2 semesters; 2 semesters required Prerequisites: Beginning Accounting Credit: 1 per semester, 2 credits maximum Offered to Grades: 11, 12 A directed elective or elective for all diplomas and qualifies as a quantitative reasoning course.

This course is a continuation of Beginning Accounting with emphasis placed more on departmental and payroll accounting, partnership and corporate accounting, control systems and cost accounting. Advanced accounting will also expose the student to more career possibilities and additional computerized accounting opportunities. This course is also recommended for students who are planning a business major in college.

### Cybersecurity

#### 7183 Principles of Computing

PRIN COMP INFO (Located @ Westville HS)

Length of Course: 2 semester course; 2 semesters required Prerequisites: None Credit: 1 per semester, 2 credits maximum Offered to Grades: 9, 10, 11 Counts as a directed elective or elective for all diplomas. Counts as a quantitative reasoning course. Fulfills a science requirement for all diploma types.

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize

basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

### 7179 Cybersecurity Fundamentals

CYBSEC FUN (Located @ Westville HS)

Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Computing Credit: 1 per semester, 2 credits maximum Offered to Grades: 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a science requirement for all diploma types.

This course introduces fundamental networking protocols and their hierarchical relationship in the context of conceptual Information Communication Technology (ICT) frameworks. Students will learn how networked hosts and applications communicate across networks. Emphasis is placed on security throughout the entire SDLC (Systems Development Life Cycle).

7178 Advanced Cybersecurity	
ADV CYBSEC (Located @ Westville HS)	
Length of Course: 2 semester course: 2 semesters required	

Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Computing, Cybersecurity Fundamentals Credit: 1 per semester, 2 credits maximum Offered to Grades: 10, 11,12 Counts as a directed elective or elective for all diplomas.

Students will acquire the fundamentals of information and data security and understand the vulnerability most organizations have in their security systems with an emphasis on firewalls, security plans and Virtual Private Networks (VPNs). Discussions will include data security methods, authentication, network attacks, malicious code and viruses, wireless security, e-mail and web security and disaster recovery. This course will also focus on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts, such as security planning and contingencies, security policies, security management models and practices and ethics.

### **Education Careers**

### 7161 Principles of Teaching PRIN TEACH

Length of Course: 2 semester course; 2 semesters required Prerequisites: None Credit: 1 per semester, 2 credits maximum Offered to Grades: 9, 10, 11,12 Counts as a directed elective or elective for all diplomas.

This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A minimum 20 hour classroom observation experience is required for successful completion of this course.

### 7157 Child and Adolescent Development

CHLD ADL DEV Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Teaching Credit: 1 per semester, 2 credits maximum Offered to Grades: 10, 11,12 Counts as a directed elective or elective for all diplomas.

Child and Adolescent Development examines the physical, social, emotional, cognitive, and moral development of the child from birth through adolescence with a focus on the middle years through adolescence. Basic theories of child development, biological and environmental foundations of development, and the study of children through observation and interviewing techniques are explored. The influence of parents, peers, the school environment, culture, and the media are discussed. An observation experience up to 20 hours may be required for completion of this course. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are still required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.

### 7162 Teaching and Learning

TEACH LRN

Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Teaching Credit: 1 per semester, 2 credits maximum Offered to Grades: 10, 11,12 Counts as a directed elective or elective for all diplomas.

Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through

hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.

## **Health & Human Services**

### 5218 Principles of Biomedical Science PLTW

PRIN BIOMED (Located @ Westville HS)

Length of Course: 2 semester course; 2 semester required Prerequisites: Biology I or concurrent enrollment in Biology I Credit: 1 per semester, 2 credits maximum Offered to Grades: 9, 10, 11, 12 Fulfills a science requirement for all diplomas Counts as a directed elective or elective for all diplomas

Principles of the Biomedical Sciences provides an introduction to this field through "hands-on" projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

### 5216 Human Body Systems PLTW

HUMAN SYST (Located @ Westville HS)

Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Biomedical Sciences Credit: 1 per semester, 2 credits maximum Offered to Grades: 10, 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a science requirement for all diplomas.

Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human

health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions. NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

### **5217 Medical Interventions PLTW**

MED INTERV (Located @ Westville HS)

Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Biomedical Sciences Credit: 1 per semester, 2 credits maximum Offered to Grades: 11, 12 Counts as a directed elective or elective for all diplomas. Fulfills a science requirement for all diplomas.

Medical Interventions is a course that studies medical practices, including interventions, to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, 274 Indiana Department of Education High School Course Titles and Descriptions: 2024-2025 pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. NOTE: This course aligns with the PLTW Medical Interventions curriculum

### 5219 Biomedical Innovations PLTW

BIO INN (Located @ Westville HS)



Length of Course: 2 semester course; 2 semesters required Prerequisites: Principles of Biomedical Sciences, Human Body Systems or Anatomy & Physiology; Medical Interventions Credit: 1 per semester, 2 credits maximum Offered to Grades: 12 Counts as a directive elective or elective for all diplomas.

Biomedical Innovations is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. Students have the opportunity to work on an independent project and may work with a mentor or advisor from a healthcare or postsecondary industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. NOTE: This course aligns with the PLTW Biomedical Innovations curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

# **Dual Credit Courses**

Some advanced level courses are taught as dual credits at Tri-Township High School. Through an articulation agreement with Ivy Tech, students may take the class for college and high school credit. Any advanced level courses not offered at Tri-Township High School may be taken at Purdue Northwest and Ivy Tech for college and high school credit. Inquire with the school counselor for further details. Current classes offered at Westville for dual credit include:

-Biology II -Introduction to Engineering & Design -Principles of Engineering

# **iCAP** Courses

Through an articulation agreement with Ivy Tech, students may take several classes for college credit during their high school years as Juniors and Seniors. These courses are offered online through IvyTech and are referred to as iCAP courses. These classes are governed by IvyTech and students are beholden to the collegiate standards when opting to take these courses. Students interested in taking these courses will need to complete the application process through Ivy Tech. Inquire with the School Counselor for further details. Current iCAP courses offered to Tri-Township students include:

-English 111 -English 206 -English 202 -English 213 - Anatomy & Physiology

-Chemistry II



A variety of vocational courses are offered through the A.K. Smith Career Center in Michigan City. These courses are available to Tri-Township Juniors and Seniors. Students must complete an online application process along with a parental consent confirmation form the fall of their Sophomore year to be considered for their Junior year. Sophomores will have the opportunity to tour the facility, view the programs available, and ask questions of current students and staff.

Attendance, GPA, credits, and discipline are all taken into consideration when the Career Center is reviewing applicants. Please note that participation in vocational courses takes up three (3) class periods. Students interested in learning more can visit the LaPorte County Career and Technical Education Center's website at: https://cte.educatemc.net/ The following is a list of the programs offered:

Automotive Technology -

Cosmetology

\_

\_

- Career Skills - Criminal Justice
- - Fire Science
- Energy Academy Modern Machine Technology -
- Education Professions
- Emergency Medical Technician (EMT, 2nd year only course)

# **On-Line Courses (Edmentum)**

Some courses not offered in the daily schedule at Tri-Township High School may be offered through Edmentum, an on-line program. This program enables the students to take courses not available in the daily schedule or repeat a class the individual was not successful in the first time around. This is provided to the students at no cost unless a student were to drop, then a \$25 fee will occur.

- Construction Technology

- Culinary Academy

- Welding Technology

- SMART Manufacturing

- Health Academy

