

WesternWayne *Schools*

NURTURING POWERFUL LEARNERS



LINCOLN

Middle/High School

Course Titles and Description Guide Revised January 2020

Nurturing powerful LEARNERS to discover their paths
while *equipping* them to meet the demands of a
successful future.

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Indiana High School Credit Requirements

40 credits total



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

Course and Credit Requirements	
English/ Language Arts	8 credits Including a balance of literature, composition and speech.
Mathematics	6 credits (in grades 9-12) 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II <i>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 school.</i>
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 Studies	6 credits 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 Electives	5 credits World Languages Fine Arts Career and Technical Education
Physical Education	2 credits
Health and Wellness	1 credit
Electives*	6 credits (College and Career Pathway 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

CORE40 with Academic Honors

(minimum 47 credits)

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 transcribed college credits in dual credit courses from the approved dual credit list.
 - C. Earn two of the following:
 - 1. A minimum of 3 verifiable transcribed college credits from the approved dual credit list,
 - 2. 2 credits in AP courses and corresponding AP exams,
 - 3. 2 credits in IB standard level courses and corresponding IB exams.
 - D. Earn a 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.

CORE40 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
 - 2. Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits
- Earn a grade of “C” or better in courses that will count toward the diploma.
- Have a grade point average of a “B” or better.
- Complete one of the following,
 - A. Any one of the options (A - F) of the Core 40 with Academic Honors
 - B. Earn the following 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 General High School Diploma

The completion of Core 40 is an Indiana graduation requirement. Indiana's Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce.

To graduate with less than Core 40, the following formal opt-out process must be completed:

- The student, the student's parent/guardian, and the student's counselor (or another staff member who assists students in course selection) must meet to discuss the student's progress.
- The student's Graduation Plan (including four year course plan) is reviewed.
- The student's parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
- If the decision is made to opt-out of Core 40, the student is required to complete the course and credit requirements for a general diploma and the career/academic sequence the student will pursue is determined.

Course and Credit Requirements (Class of 2016 & Beyond)

English/Language Arts	8 credits Credits must include literature, composition and speech
Mathematics	4 credits (in grades 9-12) 2 credits: Algebra I or Integrated Mathematics I 2 credits: Any math course <i>General diploma students are required to earn 2 credits in a Math course or a Quantitative Reasoning (QR) course during their junior or senior year. QR courses do not count as math credits.</i>
Science	4 credits 2 credits: Biology I 2 credits: Any science course <i>At least one credit must be from a Physical Science or Earth and Space Science course</i>
Social Studies	4 credits 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Any social studies course
Physical Education	2 credits
Health and Wellness	1 credit
College and Career Pathway Courses Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities	6 credits
Flex Credit	5 credits Flex Credits must come from one of the following: <ul style="list-style-type: none"> • Additional elective courses in a College and Career Pathway • Courses involving workplace learning such as Cooperative Education or Internship courses • High school/college dual credit courses • Additional courses in Language Arts, Social Studies, Mathematics, Science, World Languages or Fine Arts
Electives	6 credits Specifies the minimum number of electives required by the state. High school schedules provide time for many more elective credits during the high school years.

40 Total Credits Required

Schools may have additional local graduation requirements that apply to all students

(Updated Dec., 2011)

Graduation Pathways Breakdown

In the State of Indiana there are now three (3) different parts to the graduation requirements for High School. Beginning with the Class of 2023, in order to be awarded a High School Diploma a student must meet one of the requirements in each of the following three areas.

#1 High School Diploma	
A student must meet all of the requirements to earn one of the following diplomas.	
Core 40 Diploma	40 credits
Academic Honors Diploma	47 credits
Technical Honors Diploma	47 credits
General Diploma	40 credits

AND

#2 Employability Skills	
Students must learn employability skills standards and demonstrate them through one of the following.	
Project Based Learning	See Department of Education Guidelines
Service Based Learning	See Department of Education Guidelines
Work Based Learning	See Department of Education Guidelines

AND

#3 Postsecondary-Ready Competencies		
A student must meet one of the following requirements.		
Academic Honors Diploma	47 credits	
Technical Honors Diploma	47 credits	
Meet the college ready benchmark score on the ACT	ELA=18 Reading=22 Math=22 Science=23	Students must meet the score in at least 2 of the 4 areas, one in ELA or reading and one in math or science
Meet the college ready benchmark score on the SAT	ERW=480 Math=530	
Earn a minimum AFQT score on the ASVAB	A score of 31	
Earn a state and industry credential or certification.		
Complete a federal recognized apprenticeship.		
Be a CTE Concentrator	Student must earn at least a "C" average	
Complete 3 AP/IB/Dual Credit course	Student must earn at least a "C" average and 1 of the classes must be in a core content area	
Complete a Locally Created Pathway	Student must earn at least six (6) credits in a particular course pathway and earn at least a "C" average.	



Eagle Learner Exemplars

Purpose- Eagle Learners intentionally engage in experiences that are relevant to their lives and their future.

Communication- Eagle Learners share and exchange information and ideas effectively.

Collaboration- Eagle Learners work together to generate ideas, create products, and solve problems in an effort to enhance learning.

Wonder- Eagle Learners ask questions about the world around them and persist to find explanations and solutions.

Contribution- Eagle Learners leave a positive impact on the world around them.

Ownership- Eagle Learners know their strengths and weaknesses and see themselves as the most important participant in a lifelong process of growth.

Students are expected to complete tasks to show evidence of progress towards mastering the Eagle Learner Exemplars each year during high school. In the next few pages you will see the expectations for each grade level. Students will collect and store their evidence in their learner profile.

9th Grade

Purpose-

- Visit a college campus and write a reflection
- Alumni project- complete a profile on a Lincoln graduate
- Naviance

Communication-

- Add 4 pieces to writing portfolio
- Create an oral and visual multimedia presentation for class/community
- Use of digital platform (e.g. blog, vlog, etc.) to share information with larger audience over a sustained period of time (10 entries)

Collaboration-

- Documented participation in one or more extra-curricular activities
- Participate in a Breakout EDU experience
- Participate in one Eagle Pride Activity

Wonder-

- Successfully complete a Google Applied Digital Skills (If Then Adventure Stories)
- Successful passion project participation

Contribution-

- Complete at least five hours of community service
- Completion of Service Learning Project

Ownership-

- Meet/Exceed NWEA growth goals for Math and Reading OR demonstrate proficiency in 80% of grade level learning targets for ELA and Math
- Participate in bi-weekly progress check with Champion Teacher
- Complete/update/maintain learner profile

Student led conference with parents to show learner profile, learning growth, and proficiency on exemplars.

10th Grade

Purpose-

- Visit a college campus and write a reflection
- Participate in checkpoint for graduate pathway benchmarks with Champion Teacher
- Naviance

Communication-

- Add 4 pieces to writing portfolio
- Create an oral and visual multimedia presentation for class/community
- Use of digital platform (e.g. blog, vlog, etc.) to share information with larger audience over a sustained period of time (10 entries)

Collaboration-

- Documented participation in one or more extra-curricular activities
- Participate in a Breakout EDU experience
- Participate in one Eagle Pride Activity

Wonder-

- Create a sales pitch for a school improvement idea
- Successful passion project participation

Contribution-

- Complete at least five hours of community service
- Completion of Service Learning Project

Ownership-

- Meet/Exceed NWEA growth goals for Math and Reading OR demonstrate proficiency in 80% of grade level learning targets for ELA and Math
- Participate in bi-weekly progress check with Champion Teacher
- Complete/update/maintain learner profile

Student led conference with parents to show learner profile, learning growth, and proficiency on exemplars.

11th Grade

Purpose-

- Complete two college visits/job shadows and reflections
- Participate in checkpoint for graduate pathway benchmarks with Champion Teacher
- Naviance

Communication-

- Add 4 pieces to writing portfolio
- Create an oral and visual multimedia presentation for class/community
- Use of digital platform (e.g. blog, vlog, etc.) to share information with larger audience over a sustained period of time (10 entries)

Collaboration-

- Documented participation in one or more extra-curricular activities
- Participate in a Breakout EDU experience
- Participate in one Eagle Pride Activity

Wonder-

- Successfully complete a Google Applied Digital Skills (Pick the next box office hit)
- Successful passion project participation

Contribution-

- Complete at least five hours of community service
- Completion of Service Learning Project

Ownership-

- Demonstrate proficiency in 80% of grade level priority standards for ELA and Math
- Participate in bi-weekly progress check with Champion Teacher
- Complete/update/maintain learner profile

Student led conference with parents to show learner profile, learning growth, and proficiency on exemplars.

12th Grade

Purpose-

- Participate in JA for a day and write a reflection
- Participate in senior college fair and write a reflection
- Complete FASFA
- Apply for college, job, or military
- Naviance

Communication-

- Add 4 pieces to writing portfolio
- Create an oral and visual multimedia presentation for class/community
- Use of digital platform (e.g. blog, vlog, etc.) to share information with larger audience over a sustained period of time (10 entries)

Collaboration-

- Documented participation in one or more extra-curricular activities
- Participate in a Breakout EDU experience
- Participate in one Eagle Pride Activity

Wonder-

- Completion of Community Legacy Exercise
- Complete an action research project
- Successful passion project participation

Contribution-

- Complete at least five hours of community service
- Completion of Service Learning Project
- Community Legacy Exercise

Ownership-

- Completion of Post-Lincoln Graduation Plan
- Demonstrate proficiency in 80% of grade level priority standards for ELA and Math
- Participate in bi-weekly progress check with Champion Teacher

-
- Complete/update/maintain learner profile

Student led conference with parents to show learner profile, learning growth, and proficiency on exemplars.

Panel review- Evidence of proficiency in all exemplars -30 min

Panel will consist of administrators, teachers, community members, board members, and alumni

English/Language Arts

ENGLISH 9

1002 (ENG 9)

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

Recommended Grade Level: 9

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

Fulfills an English/Language Arts requirement for all diplomas

ENGLISH 10

1004 (ENG 10)

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

Recommended Grade Level: 10

Recommended Prerequisites: English 9 or teacher recommendation

Credits: 2 semester course, 1 credit per semester

Fulfills an English/Language Arts requirement for all diplomas

ENGLISH 11
1006 (ENG 11)

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.

Recommended Grade Level: 11

Recommended Prerequisites: English 9 and English 10 or teacher recommendation

Credits: 2 semester course, 1 credit per semester

Fulfills an English/Language Arts requirement for all diplomas

ENGLISH 12
1008 (ENG 12)

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.

Recommended Grade Level: 12

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

Credits: 2 semester course, 1 credit per semester

Fulfills an English/Language Arts requirement for all diplomas

LANGUAGE ARTS LAB
1010 (LANG LAB)

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing course work aligned with the Indiana Academic Standards for English Language/Arts focusing on the writing standards. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 1 to 8 credits.

This course allows for successive semesters of instruction for students who need additional support in any or all aspects of the writing standard

Counts as an Elective for all diplomas

COMPOSITION

1090 (COMP) English 111 (Ivy Tech)

Composition, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies of narration, description, exposition, and persuasion. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. Students read classic and contemporary literature or articles and use appropriate works as models for writing. Students write a variety of types of compositions with a focus on fictional narratives, reflective compositions, academic essays, and responses to literature. 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. •

Recommended Grade Level: 11, 12

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

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

Fulfills an English/Language Arts requirement for all diplomas

Rhetoric and Argument (Honors) COURSE NUMBER: ENGL 215H

PREREQUISITES: A grade of “C” or better in: ENGL 111 English Composition

CATALOG DESCRIPTION: This advanced composition course emphasizes an inquiry-driven approach to research-based analytic and argumentative writing. Students will develop advanced analytical, researching, and writing skills by completing an extensive argumentative project.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Understand and apply the process of constructing rhetorical analysis and inquiry-based arguments.
2. Apply critical thinking skills and writing strategies to communicate effectively within appropriate rhetorical contexts.
3. Gather data, including primary and secondary sources, using a variety of research methods.
4. Analyze and synthesize evidence to write arguments using formal documentation.
5. Evaluate the validity of logic and reasoning in arguments.
6. Recognize and explain rhetorical choices and critical perspectives in arguments.

STUDENT MEDIA

1086 (STDNT MEDIA)

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, 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 staffs so that they may prepare themselves for career paths in journalism, communications, writing, or related fields.

Recommended Grade Level: 9, 10, 11, 12

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

Credits: 1 semester course, 1 credit per semester, 8 credits maximum.

The nature of this course allows for successive semesters of instruction at advanced levels. May be offered over three or four years by subtitling the course Beginning, Intermediate, or Advanced.

Counts as a Directed Elective or Elective for all diplomas

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

NOTE: This is the designated School Media course, including newspaper and yearbook.

Mathematics

ALGEBRA I 2520 (ALG I)

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of 5 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, and students 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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

Counts as a Mathematics Course for all diplomas

Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas

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

ALGEBRA I LAB (formerly Algebra Enrichment) 2516 (ALG I LAB)

Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently enrolled in Algebra 1. 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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

Counts as a Mathematics Course 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 designed as a support course for Algebra I. As such, a student taking Algebra I Lab must also be enrolled in Algebra I during the same academic year.

GEOMETRY 2532 (GEOM)

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. Geometry is made up of seven strands: 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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: Algebra I

Credits: 2 semester course, 1 credit per semester

Counts as a Mathematics Course 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 diplomas

ALGEBRA II 2522 (ALG II)

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. 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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisite: Algebra I Students who earn at least a C+ in Algebra 1 will be more successful.

Credits: 2 semester course, 1 credit per semester

Counts as a Mathematics Course for all diplomas

Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

MATHEMATICS LAB

2560 (MATH LAB)

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

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 1 semester course, 1 credit per semester, 8 credits maximum

Counts as an Elective for all diplomas Clarifying information can be appended to the end of the course title to denote the content covered in each course. Example: Mathematics Lab used to support students in Algebra II can be recorded on the transcript as Mathematics Lab – Algebra II.

PRE-CALCULUS

2564 (PRECAL)

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

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisite: Algebra II and Geometry or Integrated Mathematics III Students earning at least a C+ in the prerequisite classes are more successful.

Credits: 1 semester course, 1 credit per semester

S1 covers Pre-Cal standards

Counts as a Mathematics Course for all diplomas

Dual Credit from Ivy Tech: S1 - Math 136 and S2 - Math 137

2566 Trigonometry (TRIG)

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 seven strands: conics, unit circle, geometry, periodic functions, identities, polar coordinates, and vectors. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course.

Indiana Department of Education High School Course Titles and Descriptions

Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: 2564 Pre-Calculus
- Recommended Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- 1 semester course, 1 credit per semester
- Counts as a Mathematics course for all diplomas

CALCULUS 2527 (CALC)

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.

Recommended Grade Level: 11, 12

Recommended Prerequisite: Pre-Calculus and Trigonometry

Credits: 2 semester course, 1 credit per semester

Counts as a Mathematics Course for all diplomas

Dual Credit from Ivy Tech: + _____

PROBABILITY AND STATISTICS 2546 (PROB/STAT)

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 calculators 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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: Algebra II or Integrated Mathematics III

Credits: 1 semester course, 1 credit per semester

Counts as a Mathematics Course for all diplomas

BUSINESS MATH

4512 (BUS MATH)

Business Math is a course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics, and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

Recommended Grade Level: 11, 12

Prerequisites: Algebra I

Credits: 2 semester course, 1 credit per semester, 2 credits maximum Counts as an Elective or Directed Elective for all diplomas

Fulfills a Mathematics requirement for the General Diploma or Certificate of Completion only Qualifies as a quantitative reasoning course 4512A (recommended local course code)

Science

BIOLOGY I (L)

3024 (BIO I)

Biology I is a course based on the following core topics: cellular structure and function, matter cycles and energy transfer; interdependence; inheritance and variation in traits; evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

Recommended Grade Level: 9, 10. 9th Grade should have earned at least a C+ in 8th grade science

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

Fulfills the Biology requirement for all diplomas

EARTH AND SPACE SCIENCE I (L)

3044 (EAS SCI I)

Earth and Space Science I is a course focused on the following core topics: universe; solarsystem; Earth cycles and systems; atmosphere and hydrosphere; solid Earth; Earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

Recommended Grade Level: 9, 10, 11,12 9th grade who earned less than a C+ in 8th grade science

Credits: 2 semester course, 1 credit per semester

Counts as an Elective for all diplomas Fulfills a science course requirement for all diploma currently)

INTEGRATED CHEMISTRY-PHYSICS (L)

3108 (ICP)

Integrated Chemistry-Physics is a course focused on the following core topics: constant velocity; uniform acceleration, Newton's Laws of motion (one dimension); energy; particle theory of matter; describing substances; representing chemical change; electricity and magnetism; waves; nuclear energy. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures

Recommended Grade Level: 9

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

Credits: A two credit course

Counts as an Elective for all diplomas Fulfills a science (physical) course requirement for all diplomas

CHEMISTRY I (L)

3064 (CHEM I)

Chemistry I is a course based on the following core topics: properties and states of matter; atomic structure and the Periodic Table; bonding and molecular structure; reactions and stoichiometry; behavior of gases; thermochemistry; solutions; acids and bases. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.

Recommended Grade Level: 10, 11, 12

Recommended Prerequisite: ICP (If taken as a freshman) Algebra II (can be taken concurrently)

Credits: 2 semester course, 1 credit per semester

Counts as an Elective for all diplomas

Fulfills a science (physical) course requirement for all diplomas

Qualifies as a quantitative reasoning course

BIOLOGY II (L)

3026 (BIO II)

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.

Recommended Grade Level: 10, 11, 12 Students should have earned at least a C+ in Bio I.

Recommended Prerequisites: Biology I

Credits: 2 semester course, 1 credit per semester

Counts as an Elective for all diplomas

Fulfills a science course requirement for all diplomas

PHYSICS I (L)

3084 (PHYS I)

Physics I is a course focused on the following core topics: constant velocity; constant acceleration; forces; energy; linear momentum in one dimension; simple harmonic oscillating systems; mechanical waves and sound; simple circuit analysis. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided Indiana Department of Education 252 High School Course Titles and Descriptions by theory and by evaluating and communicating the results of those investigations according to accepted procedures. NOTE: Try not to schedule the same period as Algebra II or Pre-Calculus.

Recommended Grade Level: 10, 11, and 12

Recommended Prerequisites: Algebra I or II (Earned C+ or better)

Credits: 2 semester course, 1 credit per semester

Counts as an Elective for all diplomas

Fulfills a science (physical) course requirement for all diplomas

Qualifies as a quantitative reasoning course and two math credits

PHYSICS II (L)

3086 (PHYS II)

May be offered if there are enough students interested.

Physics II is an extended laboratory, field, and literature investigations-based course. Students enrolled in Physics II investigate physical phenomena and the theoretical models that are useful in understanding the interacting systems of the macro- and microcosms. Students extensively explore the unifying themes of physics, including such topics and applications of physics as: energy and momentum in two dimensions; temperature and thermal energy transfer; fluids; electricity; simple and complex circuits; magnetism; electromagnetic induction; geometric optics; particle and wave nature of light; modern physics. Use of laboratory activities aimed at investigating physics questions and problems concerning personal needs and community issues related to physics are embedded within the course.

Recommended Grade Level: 11, 12

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

Credits: 2 semester course, 1 credit per semester

Counts as an Elective for all diplomas

Fulfills a science (physical) course requirement for all diplomas

Qualifies as a quantitative reasoning course

AP CHEMISTRY (L)

3060 (CHEM AP)

AP Chemistry is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The content includes:

- (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry;
- (2) states of matter: gases, liquids and solids, solutions; and
- (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics.

AP Chemistry is designed to simulate the expectations and rigor of college level chemistry while simultaneously preparing for the AP exam.

Recommended Grade Level: 12

Recommended Prerequisite: ICP (If taken as freshman) Chemistry I, Algebra II, Pre-Calculus/Trigonometry (can be taken concurrently)

Credits: 2 semester course, 1 credit per semester

Counts as a Science Course for all diplomas

Qualifies as a quantitative reasoning course

Social Studies

UNITED STATES HISTORY

1542 (US HIST)

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.

Recommended Grade Level: 11

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

Fulfills the US History requirement for all diplomas

WORLD HISTORY AND CIVILIZATION

1548 (WLD HST/CVL)

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

Recommended Grade Level: 10

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

Counts as an Elective for all diplomas

Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas

AP WORLD HISTORY
1576 (WLD HST AP)

AP World History is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP World History focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, statebuilding, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.

Recommended Grade Level: 10th grader who have passed honors English 9 R

Recommended Prerequisites: Students should be able to read a college level textbook and write grammatically correct, complete sentences and have completed an application.

Credits: 2 semester course, 1 credit per semester

Fulfills a Social Studies requirement for all diplomas

ECONOMICS
1514 (ECON)

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.

Recommended Grade Level: 11, 12

Recommended Prerequisites: none Personal Finance helps with this course.

Credits: 1 semester course, 1 credit per semester

Fulfills the Economics requirement for all diplomas

Qualifies as a quantitative reasoning course

UNITED STATES GOVERNMENT
1540 (US GOVT)

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

Recommended Grade Level: 11, 12 11th grader who have passed AP World History will be successful.

Recommended Prerequisites: none

Credits: 1 semester course, 1 credit per semester

Fulfills the Government requirement for all diplomas

Physical Education and Wellness

HEALTH & WELLNESS EDUCATION

3506 (HLTH&WELL)

Health & Wellness, a course based on Indiana's Academic Standards for Health & Wellness, provides the foundational information needed 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; and 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 that addresses critical health knowledge and skills for successfully maintaining a healthy lifestyle during a child's school years and beyond. 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 important core concepts of health and wellness and the knowledge and skills needed to successfully access valid health information, analyze the influence of others on their health behaviors, demonstrate the ability to communicate in a way to enhance and avoid or reduce health risks, demonstrate the ability to use decision-making skills to enhance health, demonstrate the ability to practice health-enhancing behaviors, and demonstrate the ability to advocate for personal, family and community health.

Recommended Grade Level: 9, 10, 11,12

Recommended Prerequisites: 8th grade health education

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

Fulfills the Health & Wellness requirement for all diploma types

PHYSICAL EDUCATION I (L)

3542 (PHYS ED)

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum that provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans(e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9,7-27-11.

Recommended Grade Level: 9, 10, 11,12

Required Prerequisites: Grade 8 Physical Education

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

Fulfills part of the Physical Education requirement for all diplomas

PHYSICAL EDUCATION I 3542 (PHYS ED) CONT...

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

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

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

ELECTIVE PHYSICAL EDUCATION (L)

3560 (ELECT PE)

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 cardiorespiratory 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 opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

Recommended Grade Level: 10, 11, 12

Recommended Prerequisites: Physical Education I and II

Credits: 1 credit per semester, maximum of 8 credits

Counts as an Elective requirement for all diplomas The nature of this course allows for successive semesters of instruction provided defined proficiencies and content standards are utilized

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

NOTE: Students at Lincoln High School have the opportunity to apply for the 2 required Physical Education credits for graduation. To be eligible, students must participate in the equivalent of 18 weeks of athletics per credit. Students will need to see a counselor for an application.

Foreign Language

SPANISH I 2120 (SPAN I)

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

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 2 semester course, 1 credit per semester

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 2122 (SPAN II)

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

Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

Recommended Grade Level: 9, 10, 11, 12

Required Prerequisites: Spanish I

Credits: 2 semester course, 1 credit per semester

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

2124 (SPAN III)

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

Recommended Grade Level: 9, 10, 11, 12

Required Prerequisites: Spanish I and II

Credits: 2 semester course, 1 credit per semester

Counts as a Directed Elective or Elective for all diplomas

Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

SPANISH IV

2126 (SPAN IV)

Spanish IV, a course based on Indiana's Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of Spanish-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student's own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Spanish language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Spanish speakers.

Recommended Grade Level: 9, 10, 11, 12

Required Prerequisites: Spanish I, II and III

Credits: 2 semester course, 1 credit per semester

Counts as a Directed Elective or Elective for all diplomas

Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

Career and Technical Education (CTE)

Introduction Career and Technical Education (CTE) course titles and descriptions are included in this document under the primary CTE subject area headings of: Career and Technical Education (CTE) CTE: Agriculture CTE: Business, Marketing and IT CTE: Engineering/Technology CTE: Family and Consumer Sciences CTE: Health Science CTE: Trade and Industry CTE: Work Based Learning In addition, there are course titles and descriptions in the International Baccalaureate subject area that may also considered to be Indiana CTE courses.

Agriculture

INTRODUCTION TO AGRICULTURE, FOOD AND NATURAL RESOURCES 5056 (INT AGFNR)

Introduction to Agriculture, Food and Natural Resources is highly recommended as a prerequisite to and a foundation for all other agricultural classes. The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics to be covered include: animal science, plant and soil science, food science, horticultural science, agricultural business management, landscape management, natural resources, agriculture power, structure and technology, leadership development, supervised agricultural experience and career opportunities in the area of agriculture, food and natural resources.

Recommended Grade Level: 9

Recommended Prerequisites: none

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Counts as a Directed Elective or Elective for all diplomas

5088 Agriculture Power, Structure, and Technology (AG POW)

Agriculture Power, Structure and Technology is a two semester, up to six credits, lab intensive course in which students develop an understanding of basic principles of tool selection, operation, maintenance, and management of agricultural equipment in concert with the utilization of technology. Topics covered include: safety, problem solving/troubleshooting, electricity, plumbing, concrete, carpentry, metal technology, engines, emerging technologies, leadership development, supervised agricultural experience, and career opportunities in the area of agriculture power, structure, and technology.

Recommended Grade: 10, 11, 12

Required Prerequisites: none

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

CTSO LEADERSHIP DEVELOPMENT IN ACTION

5237 (LEAD DEV)

Leadership Development in Action is a project-based course in which students integrate higher order thinking, communication, leadership, and management processes to conduct Career and Technical Student Organization (CTSO) leadership projects at the local, state, or national level. Each student will create a vision statement, establish standards and goals, design and implement an action plan and timeline, reflect on accomplishments, and evaluate results. Authentic, independent application through CTSO student-directed programs or projects, Indiana Department of Education 52 High School Course Titles and Descriptions internship, community based study, or in-depth laboratory experience is required. Research and development, interdisciplinary projects, and/or collaboration with postsecondary faculty, community agencies, or organizations are appropriate approaches. Instructor must be a current chapter advisor of an Indiana-recognized CTSO. State and national membership in an Indiana recognized CTSO is required of any student enrolled in this course. Service learning experiences are highly recommended. Achievement of applicable Career and Technical Education (CTE), academic, and employability standards will be documented through a required student portfolio.

Recommended Grade Level: 10, 11, 12

Recommended Prerequisites: Must be an FFA or a BPA member, Preparing for College and Careers and a sequence of courses relevant to the student's CTSO, depending on area of concentration; or permission of instructor through an application process.

Credits: 1 credit per semester, up to 6 semesters, 6 credits maximum

Counts as a Directed Elective or Elective for all diplomas

Note: Can only be offered at schools with officially registered CTSO chapters and must be taught by the registered Advisor of that CTSO Chapter. Students MUST be members of the state and national CTSO.

ADVANCED LIFE SCIENCE: ANIMALS (L)

5070 (ALS ANIML)

Advanced Life Science: Animals is a two-semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to history and trends in animal agriculture as related to animal welfare, husbandry, diseases and parasites, laws and practices relating to handling, housing, environmental impact, global sustainable practices of animal agriculture, genetics, breeding practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture.

Recommended Grade Level: 11, 12

Required Prerequisite: Introduction to Agriculture and Animal Science

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources, Biology, Chemistry, Integrated Chemistry Physics

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

Counts as an Elective or Directed Elective for all diplomas

Fulfills a Core 40 Science requirement for all diplomas

Qualifies as a quantitative reasoning course

AGRIBUSINESS MANAGEMENT

5002 (AG BUS MGMT)

Agribusiness Management provides foundational concepts in agribusiness. This course introduces students to the principles of business organization and management from a local and global perspective while incorporating technology. Concepts covered in the course include food and fiber, forms of business, finance, marketing, management, sales, leadership development, supervised agricultural experience career opportunities in the area of agribusiness management.

Recommended Grade Level: 11, 12

Recommended Prerequisites: Introduction to Agriculture with at least a C+, Food and Natural Resources

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Counts as an Elective or Directed Elective for all diplomas

Qualifies as a quantitative reasoning course

5102 Food Science (FOOD SCI)

Food Science is a two semester course that provides students with an overview of food science and the role it plays in the securing of a safe, nutritious, and adequate food supply. A project-based approach is utilized in this course, along with laboratory, team building, and problem solving activities to enhance student learning. Students are introduced to the following areas of horticulture science: food processing, food chemistry and physics, nutrition, food microbiology, preservation, packaging and labeling, food commodities, food regulations, issues and careers in the food science industry.

Recommended Grade: 10, 11

Required Prerequisites: none

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

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

Counts as a Directed Elective or Elective for all diplomas.

Fulfills a Life Science or Physical Science requirement for the General Diploma

Dual Credit - Ivy Tech AGRI 104

HORTICULTURE SCIENCE 5132 (HORT SCI)

Horticulture Science is designed to give students a background in the field of horticulture and its many career opportunities. It addresses the biology and technology involved in the production, processing and marketing of plants and its products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest and pest management. Students participate in a variety of activities to include extensive laboratory work usually in a school greenhouse, leadership development, supervised agricultural experience and learning about career opportunities in the area of horticulture science.

Recommended Grade Level: 10, 11

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Life Science or Physical Science requirement for the General Diploma

5136 Landscape Management I (LAND MGMT I)

Landscape Management is a two semester course that provides the student with an overview of the many career opportunities in the diverse field of landscape management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures involved with landscape construction, the determination of maintenance schedules, communications and management skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers. Upon completion of the program, students have the opportunity to become Indiana Landscape Industry Certified through a state approved program.

Recommended Grade: 11, 12

Required Prerequisites: none

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum

Counts as an Elective or Directed Elective for all diplomas.

Qualifies as a quantitative reasoning course

Dual Credit - Ivy Tech AGRI 164

NATURAL RESOURCES

5180 (NAT RSS)

Natural Resources provides students with a foundation in natural resources. Hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife and safety.

Recommended Grade Level: 10, 11

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Counts as a Directed Elective or Elective for all diplomas

Dual Credit - Ivy Tech AGRI 115

5170 Plant and Soil Science

(PLT SL SCI)

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 81 Indiana Department of Education High School Course Titles and Descriptions 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.

Recommended Grade: 10, 11

Required Prerequisites: none

Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

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

Counts as a Directed Elective or Elective for all diplomas.

Fulfills a science course requirement for all diplomas.

Fulfills a Life Science or Physical Science requirement for the General Diploma only

Dual Credit - IvyTech AGRI 105

SUPERVISED AGRICULTURAL EXPERIENCE

5228 (SAE)

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards-based plan for learning. Students

work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

Recommended Grade Levels: 10, 11, 12

Recommended Prerequisite: Must be an FFA member and must apply, Introduction to Agriculture, Food and Natural Resources

Credits: 1 semester course, 1 credit per semester, 8 credits maximum

Curriculum content and standards-based plan for learning should not be duplicated when this course is taken for multiple semesters.

5974 Work-based Learning Capstone (WBL)

Work-based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work-based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student's work-based experiences and assist in evaluating achievement and performance. Related Instruction, shall be organized and planned around the activities associated with the student's individual job and career objectives in a pathway; and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- Recommended Grade: 12
- Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Student's worksite placement must align to the student pathway.
- Recommended Prerequisites: none
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
- A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- Counts as a Directed Elective or Elective for all diplomas

Business

Business Department			
Scheduling Recommendations			
Freshmen	Sophomore	Junior	Seniors
Digital Applications & Responsibilities 1 (1 Semester)	Personal Financial Responsibility (1 Semester)	Personal Financial Responsibility (1 Semester)	Personal Financial Responsibility (1 Semester)
Preparing for College & Careers (1 Semester)	Computer Science III: Database/Digital Application & Responsibilities 2 (DC-3)	Computer Science III: Database/Digital Application & Responsibilities 2 (DC-3)	Computer Science III: Database/Digital Application & Responsibilities 2 (DC-3)
	Introduction to Accounting (DC-3)	Introduction to Accounting (DC-3)	Introduction to Accounting (DC-3)
		Advanced Accounting (DC-3)	Advanced Accounting (DC-3)
		Principles of Marketing (Sports & Entertainment Marketing)	Administrative & Office Management (DC-3)
		Entrepreneurship & New Ventures	Principles of Marketing (Sports & Entertainment Marketing)
			Entrepreneurship & New Ventures

DC = Dual Credit course

Business Pathway Accounting, Finance, Marketing, Management Recommended Course Sequence

9th Grade

- *Digital Applications and Responsibilities 1 (Introductory Level)

10th Grade

- *Personal Financial Responsibility

11th Grade

- *Computer Science III: Database/Digital Applications and Responsibilities 2 (Advanced Level)
- *Introduction to Accounting

12th Grade

- *Administrative Office Management
- Advanced Accounting
- Principles of Marketing (Sports Entertainment and Marketing)
- or Entrepreneurship and New Ventures

*Indicates priority

Business Pathway PC Support / IT Technology Support Recommended Course Sequence

9th Grade

- *Digital Applications and Responsibilities 1 (Introductory Level)

10th Grade

- *Computer Science III: Database/Digital Applications and Responsibilities 2 (Advanced Level)
- Personal Financial Responsibility

11th Grade

- *Networking I
- Introduction to Accounting

12th Grade

- *Information Technology Support *Indicates priority

DIGITAL APPLICATIONS AND RESPONSIBILITY

4528 (DIG APPS RESP DAR) INTRO

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

Recommended Grade Level: 9, 10, 11, 12 Strongly recommended for grade 9.

Recommended Prerequisites: None

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

DAR S1 = Intro and DAR S2 is Advanced and recommended for grade 11 or 12

DAR S2 is taught with Computer Science

Counts as a Directed Elective or Elective for all diplomas 4528A (recommended local course code)

DIGITAL APPLICATIONS AND RESPONSIBILITY

4528 (DIG APPS RESP DAR2) Advanced

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

Recommended Grade Level: 9, 10, 11, 12 Strongly recommended for grade 9.

Recommended Prerequisites: None

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

DAR S1 = Intro and DAR S2 is Advanced and recommended for grade 11 or 12

DAR S2 is taught with Computer Science

Counts as a Directed Elective or Elective for all diplomas 4528A (recommended local course code)

Dual Credit Course

INTRODUCTION TO ACCOUNTING

4524 (INTO ACC)

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

Recommended Grade Level: 11 or 12

Recommended Prerequisites: Personal Finance and Responsibility

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Counts as a Directed Elective or Elective for the all diplomas

Dual Credit course through Vincennes

ADVANCED ACCOUNTING 4522 (ADV ACC)

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

Recommended Grade Level: 11, 12

Required Prerequisites: Introduction to Accounting

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Counts as a Directed Elective or Elective for all diplomas

Qualifies as a quantitative reasoning course

Dual Credit only if the dual credit was not received in Intro to Accounting

ADMINISTRATIVE AND OFFICE MANAGEMENT 5268 (ADV BUS)

Administrative and Office Management prepares students to plan, organize, direct, and control the functions and processes of a firm or organization and to perform business-related functions. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance. Individual experiences will be based upon the student's career and educational goals.

Recommended Grade Level: 12

Required Prerequisites: Digital Apps and Responsibility S2 with at least a C+

Credits: 2 semester course, 2 semesters required, 1-2 credits per semester, 4 credits maximum Counts as a Directed Elective or Elective for all diplomas

Dual credit through Ivy Tech

COMPUTER SCIENCE III: DATABASES 5250 (CS II DATA)

Computer Science III: Databases introduces students to the basic concepts of databases including types of databases, general database environments, and the importance of data to the business world. Discussion with hands-on activities will include database design, normalization of tables, and development of tables, queries, reports, and applications. Students will be familiarized with the use of ANSI standard Structured Query Language. Discussions will include database administration and data maintenance. Students will be introduced to data concepts such as data warehousing, data mining, and BIG Data. Students will develop a business application using database software such as Microsoft Access. Students will be required to demonstrate skills such as team building, work ethic, communications, documentation, and adaptability.

Recommended Grade Level: 11, 12

Required Prerequisites: Digital Apps and Responsibilities S1 with at least a C+

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

Qualifies as a quantitative reasoning course

Dual Credit if taken with DAR 2

INFORMATION TECHNOLOGY SUPPORT 5230 (IN TECHSUPP)

Information Technology Support (formerly computer tech support) allows students to explore how computers work. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.

Recommended Grade Level: 10, 11

Required Prerequisites: Digital Applications and Responsibility

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

ENTREPRENEURSHIP AND NEW VENTURES CAPSTONE 5966 (ENT VENT CAP)

Entrepreneurship and New Ventures Capstone introduces entrepreneurship, and develop skills and tools critical for starting and succeeding in a new venture. The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and “go to” market strategies will be explored through mini-case studies of successful and unsuccessful entrepreneurial start-ups. Additionally, topics of government and legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting, and business plan development will be presented through extensive use of word processing, spreadsheet and presentation software.

Recommended Grade Level: 12

Recommended Prerequisites: Principles of Business Management or Principles of Marketing, Intro to Accounting and DAR 1 & 2

Required Prerequisites: Introduction to Entrepreneurship and Digital Applications and Responsibility

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

NETWORKING I 5234 (NET I)

Networking I introduces students to local and wide area networks, home networking, networking standards using the IEEE/OSI Model, network protocols, transmission media and network architecture/ topologies. Security and data integrity are introduced and emphasized throughout this course, which offers students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered will include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs, as well as creating a wireless LAN.

Recommended Grade Level: 11, 12

Recommended Prerequisites: Computer Tech Support

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

PERSONAL FINANCIAL RESPONSIBILITY

4540 (PRS FIN RSP)

Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt. A project based approach and applications through authentic settings such as work based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

Recommended Grade Level: 11, 12 (10 could take)

Recommended Prerequisites: DAR 1

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

Counts as a Directed Elective or Elective for all diplomas

PREPARING FOR COLLEGE AND CAREERS

5394 (PREP CC)

Taught in 8th grade

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

Recommended Grade Level: 9

Recommended Prerequisites: None

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

Counts as a Directed Elective or Elective for all diplomas

PRINCIPLES OF MARKETING

5914 (PRN MRKT)

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

Recommended Grade Level: 11, 12

Recommended Prerequisites: Intro to Accounting and DAR 1 & 2

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

Counts as a Directed Elective or Elective for all diplomas

Trades

INTRODUCTION TO ADVANCED MANUFACTURING AND LOGISTICS 4796 (INT ADV MFTG)

Introduction to Advanced Manufacturing and Logistics focuses on manufacturing systems and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students investigate the properties of engineered materials and study major types of material processes. After gaining a working knowledge of these materials, students are introduced to advanced manufacturing, logistics, and business principles that are utilized in today's advanced manufacturing industry. Students gain a basic understanding of tooling, electrical skills, operation skills, inventory principles, chart and graph reading, and MSSC concepts. There is also an emphasis placed on the flow process principles, material movement, safety, and related business operations. Students have the opportunity to develop the employability skills employers seek.

Recommended Grade Level: 10, 11, 12

Recommended Prerequisites: none

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Counts as a Directed Elective or Elective for all diplomas

ADVANCED MANUFACTURING I 5608 (ADV MFTG I)

Advanced Manufacturing I is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Domains include safety and impact, electricity, manufacturing essentials, fluid power principles, mechanical principles, lean manufacturing, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Students take this course with the goal of being a skilled machine operator, repair technician, or working in management at any company that produces goods and services using advanced manufacturing techniques. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

Recommended Grade Level: 11, 12

Recommended Prerequisites: Introduction to Advanced Manufacturing

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

ADVANCED MANUFACTURING II

5606 (ADV MFTG II)

Advanced Manufacturing II builds on classroom and lab experiences students experienced in Advanced Manufacturing I. Domains include safety and impact, drafting principles, manufacturing programming, CAD/CAM and CNC technologies, automation and robotics, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Students continue this course with the goal of being a skilled machine operator, repair technician, or management at any company that produces goods and services using advanced manufacturing techniques. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

Recommended Grade Level: 12

Required Prerequisites: Advanced Manufacturing I

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

Qualifies as a quantitative reasoning course

AUTOMOTIVE SERVICES TECHNOLOGY I

5510 (AUTO TECH I)

Automotive Services Technology I is a one year course that encompasses the sub topics of the NATEF/ ASE identified areas of Steering & Suspension and Braking Systems. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or year long instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one year offering must meet the NATEF program certifications for the two primary areas offered in this course. This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Mathematical skills will be reinforced through precision measuring activities as well as cost estimation and calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: Introduction to Transportation

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

AUTOMOTIVE SERVICES TECHNOLOGY II

5546 (AUTO TECH II)

Automotive Services Technology II is a one year course that encompasses the sub topics of the NATEF/ASE identified areas of Electrical Systems and Engine Performance. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions/differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one-year offering must meet the NATEF program certifications for the two primary areas offered in this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

Recommended Grade Level: 10, 11, 12

Required Prerequisites: Automotive Services Technology I

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas

FIRE AND RESCUE I

5820 (FIRE RSCU I)

Fire and Rescue I; Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. The Fire and Rescue curriculum may include five Indiana state fire certifications: (1) Mandatory, (2) Firefighter I, (3) Firefighter II, (4) Hazardous Materials Awareness, and (5) Hazardous Materials Operations. An additional two industry certifications may be earned by adding (6) First Responder, and (7) Emergency Medical Technician-Basic to the curriculum.

Recommended Grade Level: 11, 12

Recommended Prerequisites: Interpersonal Relationships

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum

Counts as a Directed Elective or Elective for all diplomas

FIRE AND RESCUE II

5826 (FIRE RSCU II)

Fire and Rescue II builds on skills learned in Fire and Rescue I. The Fire and Rescue curriculum may include five Indiana state fire certifications: (1) Mandatory, (2) Firefighter I, (3) Firefighter II, (4) Hazardous Materials Awareness, and (5) Hazardous Materials Operations. An additional two industry certifications may be earned by adding (6) First Responder, and (7) Emergency Medical Technician-Basic to the curriculum.

Recommended Grade Level: 12

Required Prerequisites: Fire and Rescue I

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum

Counts as a Directed Elective or Elective for all diplomas

Music

CHORAL CHAMBER ENSEMBLE (L) **4180 (CHRL ENSEM)**

Choral Chamber Ensemble is based on the Indiana Academic Standards for High School Choral Music. Student musicianship and specific performance skills in this course are enhanced through specialized small group instruction. The activities expand the repertoire of a specific genre. Chamber ensemble classes provide instruction in creating, performing, listening to, and analyzing music in addition to focusing on specific subject matter. 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.

Recommended Grade Level: 10, 11, 12 or teacher recommendation

Recommended Prerequisites: Intermediate Chorus

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory course

INTERMEDIATE CHORUS (L) **4186 (INT CHOR)**

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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: None

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

ADVANCED CHORUS (L)

4188 (ADV CHOR)

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.

Recommended Grade Level: 10, 11, 12 or teacher recommendation

Recommended Prerequisites: Intermediate Chorus

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory course

BEGINNING CONCERT BAND (L)

4160 (BEG BAND)

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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma Laboratory course

ADVANCED CONCERT BAND (L)

4170 (ADV BAND)

Indiana Department of Education 167 High School Course Titles and Descriptions 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.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: Beginning Band, Middle School band, or teacher recommendation

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory course

JAZZ ENSEMBLE (L)

4164 (JAZZ ENS)

Jazz Ensemble is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course develop musicianship and specific performance skills through group and individual settings for the study and performance of varied styles of instrumental jazz. Instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. A limited amount of time outside of the school day may be scheduled for rehearsals and performances. In addition, a limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students must participate in performance opportunities outside of the school day that support and extend the learning in the classroom. Student participants must also be receiving instruction in another band or orchestra class offering at the discretion of the director.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: Middle School Band, Beginning Band or teacher recommendation

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills requirement for 1 of 2 Fine Arts credits for the Core 40 with Academic Honors diploma if students are enrolled in another band or orchestra course

Laboratory Course

MUSIC THEORY AND COMPOSITION (L)

4208 (MUS THEORY)

Music Theory and Composition is based on the Indiana Academic Standards for Music and standards for this specific course. Students develop skills in the analysis of music and theoretical concepts. Students develop ear training and dictation skills, compose works that illustrate mastered concepts, understand harmonic structures and analysis, understand modes and scales, study a wide variety of musical styles, study traditional and nontraditional music notation and sound sources as tools for musical composition, and receive detailed instruction in other basic elements of music.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: none

Credits: 1 or 2 semester course, 1 credit per semester. The nature of this course allows for two successive semesters of instruction, provided that defined standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills requirement for 1 to 2 Fine Arts credits for Core 40 with Academic Honors Diploma

Laboratory Course

Art

INTRODUCTION TO THREE-DIMENSIONAL ART (L)

4002 (3D ART)

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

Recommended Grade Level: 9, 10, 11,12

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

Credits: 1 semester course, 1 credit per semester

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

INTRODUCTION TO TWO-DIMENSIONAL ART (L)

4000 (2D ART)

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

Recommended Grade Level: 9, 10, 11,12

Recommended Prerequisites: none

Credits: 1 semester course, 1 credit per semester

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

ADVANCED THREE-DIMENSIONAL ART (L)

4006 (ADV 3D ART)

Advanced Three-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Three-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and

make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

Recommended Grade Level: 9, 10, 11, 12

Recommended Prerequisites: Introduction to Two-Dimensional Art(L), Introduction to 3-Dimensional Art (L)

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

ADVANCED TWO-DIMENSIONAL ART (L)

4004 (ADV 2D ART)

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

Recommended Grade Level: 9, 10, 11, 12

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

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

DRAWING (L)

4060 (DRAWING)

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.

Recommended Grade Level: 10, 11, 12

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

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

PAINTING (L)
4064 (PAINTING)

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.

Recommended Grade Level: 10, 11, 12

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

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

SCULPTURE
4044 (SCULPTURE)

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 and lead to the creation of portfolio quality works. Students create Sculptures utilizing processes such as sketching, rendering, carving, constructing, finishing, and presenting. Students will utilize a variety of materials to create works of art, such as: clay, wood, foamcore, cardboard, found materials, etc. 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.

Recommended Grade Level: 11, 12

Recommended Prerequisites: Introduction to Three-Dimensional Art, Advanced Three-Dimensional Art

Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Counts as a Directed Elective or Elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Laboratory Course

Multidisciplinary

BASIC SKILLS DEVELOPMENT

0500 (BAS SKLS)

Called Study Skills at LHS

Basic Skills Development is a multidisciplinary course that provides students continuing opportunities to develop 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, which are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on Indiana's standards, individual school corporation general curriculum plans, and the student's Individualized Education Programs (IEP) or other individualized plans. Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

Recommended Grade Level: 9, 10, 11,12

Recommended Prerequisites: None

Credits: 1 credit per semester up to 8 semesters, 8 credits maximum

Counts as an Elective for all diplomas

COMMUNITY SERVICE

0524 (COMM SERV)

Community Service is a course created by public law IC 20-30-14, allowing juniors and seniors the opportunity to earn up to two high school credits for completion of approved community service projects or volunteer service that "relates to a course in which the student is enrolled or intends to enroll." For each student who wishes to earn credit for community service or volunteer service under this law, the student, a teacher of the student, or a community or volunteer service organization must submit an application to the high school principal including:

1. Name of the community service organization or volunteer service organization the student intends to assist.
2. Name, address, and telephone number of the director or supervisor of the community service organization or volunteer service organization and, if different from the director or supervisor, the name, address, and telephone number of the individual assigned by the community or volunteer service organization to supervise the student at the activity site.
3. Nature of the community service or volunteer service performed by the student with a certification that the service performed by the student is voluntary.
4. Total number of hours the student intends to serve the community service organization or volunteer service organization during the school year.
5. Written statement by the director or the supervisor of the community service organization or volunteer service organization certifying that the information included in the application is an accurate reflection of:
 - a. the student's expectations with regard to the number of hours of service contemplated to be performed; and
 - b. the community service organization's or the volunteer service organization's need to acquire the student's service.

6. Description of: a. the educational or career exploration benefits the student and the school should expect to gain, including the student learning standards to be achieved, from the student's community or volunteer service participation; and b. the service and benefit the community service organization or volunteer service organization expects to gain from the student's participation.
7. Description of how the community or volunteer service activity relates to a course in which the student is enrolled or intends to enroll.
8. Manner and frequency in which the student and the community or volunteer service activity will be evaluated.
9. Name of the certificated school employee who will be responsible for monitoring and evaluating the student's activity and performance and assigning the student a grade for participation under this section.
10. Any other information required by the principal.

Grade Levels: 11, 12

Recommended Prerequisites: None

Credits: 1 to 2 semester course, 1 credit per semester, up to 2 semesters, 2 credits maximum Counts as a Directed Elective or Elective for all diplomas

Students must submit an application for this course by November 1st Go to www.iga.in.gov and search for Code IC 20-30-14 for more information