

## Course Titles and Description Guide Revised March 2023

## Mission Statement

Western Wayne Schools provides students with "opportunities to soar" within a disciplined educational environment that produces community-minded learners who are confident, productive, and prepared for a successful future.

## Vision

Western Wayne Schools is an engaging, competitive district that maximizes student potential through quality academic and occupational experiences.

## Motta

"Opportunities to Soar"

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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/ <br> Language <br> Arts | 8 credits |
|  | Including a balance of literature, composition and speech. |
| Mathematics | 6 credits (in grades 9-12) |
|  | 2 credits: Algebra I <br> 2 credits: Geometry <br> 2 credits: Algebra II <br> Or complete ist <br> school |
| Science | 6 credits |
|  | 2 credits: Biology I <br> 2 credits: <br> Chemistry I or Physics I or <br> Integrated Chemistry-Physics <br> 2 credits: any Core 40 science course |
| Social Studies | 6 credits |
|  | 2 credits: U.S. History <br> 1 credit: U.S. Government <br> 1 credit: Economics <br> 2 credits: World History/Civilization or <br>  Geography/History of the World |
| Directed Electives | 5 credits |
|  | World Languages <br> Fine Arts Career and Technical Education |
| Physical Education | 2 credits |
| Health and Wellness | 1 credit |
| Electives* | 6 credits |
|  | 40 Total State Credits Required |

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## C-RE4O with Academic Honors

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

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits
( 6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of a "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following:
A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
B. Earn 6 verifiable transcripted college credits in dual credit courses from the approved dual credit list.
C. Earn two of the following:

1. A minimum of 3 verifiable transcripted 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.

## C-RE4O 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 transcripted college credits

- Earn a grade of "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following,
A. Any one of the options (A - F) of the Core 40 with Academic Honors
B. Earn the following minimum scores on WorkKeys: Workplace Documents, Level 6; Applied Math, Level 6; and Graphic Literacy, Level 5.***
C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.
D. Earn the following minimum score(s) on Compass: Algebra 66 Writing 70, Reading 80.


## Indiana General High School Diploma

The completion of Core 40 is an Indiana graduation requirement. Indiana's Core $\mathbf{4 0}$ 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)

| 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 <br> 2 credits: Any math course <br> 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. |
| Science | 4 credits |
|  | 2 credits: Biology I <br> 2 credits: Any science course <br> At least one credit must be from a Physical Science or Earth and Space Science course |
| Social Studies | 4 credits |
|  | 2 credits: U.S. History <br> 1 credit: U.S. Government <br> 1 credit: Any social studies course |
| Physical Education | 2 credits |
| Health and Wellness | 1 credit |
| College and Career Pathway Courses <br> 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: <br> - Additional elective courses in a College and Career Pathway <br> - Courses involving workplace learning such as Cooperative Education or Internship courses <br> - High school/college dual credit courses <br> - Additional courses in Language Arts, Social Studies, Mathematics, Science, World Languages or Fine Arts |
| Electives | 6 credits <br> 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 |  |

## 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 <br> Math=22 Science=23 | Students must meet the score in at least 2 <br> of the 4 areas, one in ELA or reading and <br> one in math or science |
| Meet the college ready benchmark score on the SAT |  |  |
| 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 (Starting with Class of 2026 <br> the NLPS are required) | 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 <br> must be in a core content area |  |
| Complete a Locally Created Pathway | Students must earn at least six (6) credits in a particular course <br> pathway and earn at least a "C" average. |  |



## English/Language Arts

ENGLISH 9<br>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: 9
- Required Prerequisites: none
- 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: 10, 11
- Required Prerequisites: none
- 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: 11
- Required Prerequisites: none
- 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: 12
- Required Prerequisites: none
- 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


## ENGLISH 11 Honors/English Composition English 111 Ivy Tech 1006H (ENG 11H)

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: 11, 12
- Required Prerequisites: none
- 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

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course, students will be expected to:

1. Compose texts that exhibit appropriate rhetorical choices, including attention to audience, purpose, context, genre, culture, and convention.
2. Develop and apply strategies for critical reading, critical thinking, and information literacy.
3. Demonstrate a proficiency in locating, evaluating, and analyzing academically appropriate research material.
4. Analyze and synthesize researched information to develop and support original claims.
5. Develop and advance thesis-driven compositions in an organized progression with appropriate supporting information.
6. Engage in writing as a process through invention, multiple drafts, collaboration, reflection, revision, and editing.
7. Employ correct techniques of style, formatting, and documentation when incorporating quotes, paraphrases, and summaries from sources into compositions.
8. Produce texts that demonstrate control over style and writing conventions, including sentence variety and complexity, word choice, tone, punctuation, grammar, usage, and spelling.

## IVY TECH REQUIREMENTS

PREREQUISITES: A grade of "C" or better in: ENGL 111 English Composition
CATALOG DESCRIPTION:English Composition is designed to develop students' abilities to craft, organize, and express ideas clearly and effectively in their own writing. This course incorporates critical reading, critical thinking, and the writing process, as well as research and the ethical use of sources in writing for the academic community. Extended essays, including a researched argument, are required.

## ADVANCED COMPOSITION/Rhetoric and Argument ENGL 215 Ivy Tech 1098 (ADV COMP)

Advanced Composition, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies of exposition and persuasion. Students write expository critiques of nonfiction selections, literary criticism of fiction selections, persuasive compositions, and research reports in addition to other appropriate writing tasks. Courses 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: 11, 12
-Required Prerequisites: Composition, English 111
-Recommended Prerequisites: English 9, English 10, Composition, or teacher recommendation

- Credits: 1 or 2 semester course, 1 credit per semester
-Fulfills an English/Language Arts requirement for all diplomas

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.
4. Evaluate the validity of logic and reasoning in arguments.
5. Recognize and explain rhetorical choices and critical perspectives in arguments.

IVY TECH REQUIREMENTS
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.

## LANGUAGE ARTS LAB <br> 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 coursework 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.
$\bullet$ 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


## Mathematics


#### Abstract

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
$\bullet$ 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 <br> 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

## PRE-CALCULUS: ALGEBRA 2564 (PRECAL AL)

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
- Counts as a Mathematics Course for all diplomas


## PRE-CALCULUS: TRIGONOMETRY <br> 2566 (PRE-CAL 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. 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


## AP CALCULUS AB

2562 (CALC AB AP)
AP Calculus $A B$ 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 Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

- Recommended Grade: 11,12
- Required Prerequisites: Pre-Calculus: Algebra
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a mathematics course for all diplomas
- Qualifies as a quantitative reasoning course

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


## FINITE MATHEMATICS Not offered 23-24 <br> 2530 (FINITE)

Finite Mathematics is a collection of mathematical topics, frequently used in business or public policy contexts. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Math is made up of five strands: Sets; Matrices; Networks; Optimization; and Probability. The skills listed in these strands indicate what students should know and be able to do in Finite Math. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 11, 12 (students who cannot handle the rigor of Pre-Cal and Trig)
- Required Prerequisites: None, Co-requisite with Quan Reas
- Recommended Prerequisites: Algebra II or Integrated Mathematics III or Analytical Algebra II
- Credits: 1 semester course, 1 credit per semester,
- Fulfills a Mathematics course requirement for all diplomas


## QUANTITATIVE REASONING Not offered 23-24 <br> 2550 (QUANT REAS)

Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real-world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. 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: 11, 12 (students who cannot handle the rigor of Pre-Cal and Trig)
- Required Prerequisites: None, Co-requisite with Finite
- Recommended Prerequisites: Algebra II or Integrated Mathematics III or Analytical Algebra II
- 1 semester course, 1 credit per semester.
- Fulfills a Mathematics course requirement 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)


## 2560 MATHEMATICS LAB <br> (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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 1 semester course, 1 credit per semester, 8 credits maximum
- Fulfills an elective course requirement 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.


## Science

BIOLOGY I (L)<br>3024 (BIO I)

Biology I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Biology topics. Disciplinary Core Ideas for this course include From Molecules to Organisms, Ecosystems, Heredity and Biological Evolution. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.
$\bullet$ Recommended Grade Level: 9, 10. 9th Grade should have earned at least a C+ in 8th grade science
-Recommended Prerequisites: none
$\bullet$ Credits: 2 semester course, 1 credit per semester
-Fulfills the Biology requirement for all diplomas

## EARTH AND SPACE SCIENCE I (L) Not offered 23-24 3044 (EAS SCI I)

Earth and Space Science incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Earth and Space Science topics. Disciplinary Core Ideas for this course include Earth's Place in the Universe, Earth's Systems, and Human Interaction with Earth's Systems. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.
$\bullet$ Recommended Grade Level: 9, 10, 11,12 9th grade who earned less than a C+ in 8th grade science $\bullet$ Credits: 2 semester course, 1 credit per semester

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


## INTEGRATED CHEMISTRY-PHYSICS (L) 3108 (ICP)

Integrated Chemistry and Physics incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry and Physics topics. Disciplinary Core Ideas for this course include Matter and its Interactions, Forces, Energy, and Waves and their Applications in Technologies for Information Transfer. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.
-Recommended Grade Level: 9
-Recommended Prerequisite: Algebra I (may be taken concurrently with this course)

- Credits: A two credit course
$\bullet$ Counts as an Elective for all diplomas Fulfills a science (physical) course requirement for all diplomas


## CHEMISTRY I (L)

3064 (CHEM I)
Chemistry I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Chemistry topics. Disciplinary Core Ideas for this course include Matter and its Interactions and Energy. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.
-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
$\bullet$ Qualifies as a quantitative reasoning course

## BIOLOGY II (L) <br> 3026 (BIO II)

Biology II is an advanced laboratory, field, and literature investigations-based course. Students enrolled in Biology II examines 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.
$\bullet$ Recommended Grade Level: 10, 11, 12 Students should have earned at least a C+ in Bio I.
-Recommended Prerequisites: Biology I
$\bullet$ 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 incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Physics topics. Disciplinary Core Ideas for this course include Forces and Interactions, Energy, Wave Properties, and Electromagnetic Radiation. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.
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)
$\bullet$ Credits: 2 semester course, 1 credit per semester
-Counts as an Elective for all diplomas
$\bullet$ Fulfills a science (physical) course requirement for all diplomas
$\bullet$ Qualifies as a quantitative reasoning course and two math credits

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)
$\bullet$ Credits: 2 semester course, 1 credit per semester
-Counts as an Elective for all diplomas
-Fulfills a science (physical) course requirement for all diplomas
$\bullet$ 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: gasses, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics.
-Recommended Grade Level: 12
-Recommended Prerequisite: ICP (If taken as freshman) Chemistry I, Algebra II,Pre-Calculus/Trigonometry (can be taken concurrently)
$\bullet$ Credits: 2 semester course, 1 credit per semester
$\bullet$ Counts as a Science Course for all diplomas
-Qualifies as a quantitative reasoning course

## Social Studies

## 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
$\bullet$ 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 MODERN 1612 (WLD HST M AP)

AP World History Modern students investigate significant events, individuals, developments, and processes in historical periods from approximately 1200 CE to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, economic systems, social interactions and organization, and technology and innovation.
-Recommended Grade: none
-Required Prerequisites: none
$\bullet$ Recommended Prerequisites: none. Students should be able to read a college level textbook and write grammatically correct, complete sentences.
-Credits: 2 semester course, 1 credit per semester
$\bullet$ Fulfills the Geography History of the World/World History and Civilization graduation requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

## 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
$\bullet$ Credits: 2 semester course, 1 credit per semester
-Fulfills the US History requirement for all diplomas

## 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
$\bullet$ Credits: 1 semester course, 1 credit per semester
-Fulfills the Government 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.
$\bullet$ Credits: 1 semester course, 1 credit per semester
-Fulfills the Economics requirement for all diplomas
$\bullet$ Qualifies as a quantitative reasoning course

## ETHNIC STUDIES <br> 1516 (ETH STUDIES)

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.
$\bullet$ Recommended Grade: none
-Required Prerequisites: none
-Credits: 1 semester course, 1 credit
-Counts as an elective for all diplomas

- Must be offered at least once per school year


## INDIANA STUDIES

## 1518 (IN STUDIES)

Indiana Studies is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included, and students will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

- Recommended Grade: none
-Required Prerequisites: none
$\bullet$ Credits: 1 semester course, 1 credit per semester
-Counts as an elective for all diplomas
-Fulfills course requirement for General Diploma
- Must be offered at least once per school year


## 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
$\bullet$ Recommended Prerequisites: 8th grade health education
-Credits: 1 semester course, 1 credit per semester, 1 credit maximum
$\bullet$ Fulfills the Health \& Wellness requirement for all diploma types

## PHYSICAL EDUCATION I (L) <br> 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


## PHYSICAL EDUCATION II (L)

3544 (PHYS ED II)
Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following areas that were not included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11. • -Recommended Grade: 9, 10, 11, 12
-Required Prerequisites: Physical Education I
-Recommended Prerequisites: none
-Credits: 1 semester course, 1 credit per semester, 1 credit maximum
-Fulfills part of the Physical Education requirement for all diplomas

- 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
$\bullet$ 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.

IDOE Language:
Flexibility in Physical Education March 2013
In 2009, the State Board of Education made several rule changes, including the definition of credit, the intent was to allow schools more flexibility in working with students and engaging them in challenging content. Students using the credit flexibility option must still meet the academic standards of the courses Physical Education I and II.

Standards: https://www.in.gov/doe/students/indiana-academic-standards/physical-education-2017/ Course Descriptions: https://www.in.gov/doe/students/indiana-academic-standards/course-titles-anddescriptions/

For physical education, the teacher could develop an independent learning course that would encompass standards met through participation in marching band, athletics, as well as other extracurricular experiences. The PE teacher must still grant the credit.

Keep in mind that course descriptions for PE I and II state that the course should 'provide students with opportunities to actively participate in at least four of the following: team sports; dual sport activities, individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance' so opportunities to gain experience in multiple areas would need to be provided. If credit for participation in one sport is granted for PE I, the same sport activity could not be used for PE II. However, it could be used for Elective PE which provides for more in-depth study in one or more areas, and the refinement of skills that promote lifetime fitness.

The waiver related to the definition of credit is "immediately available to Indiana schools with no need to submit an application or waiver request". This is the flexibility that allows schools to award credit based on meeting the standards. Local school boards may adopt credit flexibility policies but are not required to do so. If the board adopts a credit flexibility policy, the school needs to develop guidelines, establish the process, and identify ways to communicate the options to parents and students.

The actual curriculum and how to measure if standards are being adequately met is a local decision just as the curriculum is locally determined. However, credit must be granted by a licensed physical education teacher. They would be the teacher of record responsible for ensuring that PE standards were addressed and for assessment. The coach/band director would implement the course requirements identified by the PE teacher, collect documentation and recommend to the PE teacher a grade and credit be awarded.

## Foreign Language

## SPANISH I <br> 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
$\bullet$ 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 <br> 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 <br> 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 <br> 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
$\bullet$ 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 CTE: Engineering CTE: Manufacturing CTE: Automotive Services CTE: Work Based Learning.

CTE-Advanced Manufacturing

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :--- | :--- | :--- | :--- | :--- |
| Digital <br> Manufacturing <br> Industry 4.0 | 7220 <br> Principles of Industry <br> 4.0 and Digital <br> Manufacturing | 4728 <br> Robotics Design <br> and Innovation | 7100 <br> Smart Manufacturing <br> Systems | 7222 <br> Industry 4.0 - Smart <br> Manufacturing <br> Capstone |

## PRINCIPLES OF INDUSTRY 4.0 \& DIGITAL MANUFACTURING 7220 (PRIN DIG MANF)

Principles of Industry 4.0 introduces students to the Industrial Internet of Things (IIoT). Students will explore Industry 4.0 technologies such as artificial intelligence (AI), human to robot collaboration, big data, safety, electrical, sensors, digital integration, fluid power, robot operation, measurement, CAD, CNC, additive manufacturing, print reading, and technical mathematics. Students will complete hands-on labs, virtual simulations, projects, and critical thinking assignments to help prepare for SACA C-101 Certified Industry 4.0
Associate I-Basic Operations certification exam.
-Recommended Grade(s): 9, 10, 11
-Required Prerequisites: none
-Recommended Prerequisites: Introduction to Advanced Manufacturing
-Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
-Counts as a Directed Elective or Elective for all diplomas

## ROBOTICS DESIGN AND INNOVATION 4728 (RDI)

The Robotics Design and Innovation course is designed to introduce students to technology that is revolutionizing modern manufacturing and logistic centers across global markets. Students will explore careers that are related to the fourth industrial revolution and be introduced to the emerging technologies that make the manufacturing world ever changing. These technologies include; mechatronics, CAD/CAM, robots, programmable automation, cloud technologies, networking, big data and analytics. Students will design a part to be mass produced using processes such as additive and subtractive manufacturing, while utilizing lean manufacturing concepts. The course will prepare students for the SACA, C-102 Certified Industry 4.0
Associate
$\bullet$ Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Industry 4.0-Smart Manufacturing
-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

## SMART MANUFACTURING SYSTEMS

7100 (DIG MAN SYS)
Smart Manufacturing Systems will deepen students' technical skills by studying the electrical system required to support an Industry 4.0 manufacturing system and building on skills learned in Principles of Industry 4.0 and Robotics Design and Innovation. Topics include Industry 4.0 technologies such as data analytics, cyber security, and smart sensors. Students will work on a 4-6 student team to build a working prototype of an Industry 4.0 system. Highlights include: Variable Frequency Drives, PLC troubleshooting, Cyber Security, Smart Sensors, and Smart network communications.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Industry 4.0 - Smart Manufacturing; Robotics Design and Innovation -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

## Industry 4.0-Smart Manufacturing Capstone 7222 (DIG MANF CAP)

Industry 4.0-Smart Manufacturing Capstone introduces the basic theory, operation, and programming of industrial robots and their applications through simulations and hands-on laboratory activities. Basic theory, operation, and programming of Programmable Logic Controllers (PLC) will be emphasized in this course along with how automation devices may be integrated with other machines. Multiple industry standard certifications in the field of robotics and automation will be available depending on the length of the course. As a capstone course, students are encouraged to participate in an intensive, embedded work-based learning experience.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Industry 4.0 - Smart Manufacturing; Robotics Design and Innovation;

Smart Manufacturing Systems

- Recommended Prerequisites: none
- 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
- Counts as a quantitative reasoning course

Lincoln High School Course Titles and Descriptions

## 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
$\bullet$ 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
$\bullet$ Qualifies as a quantitative reasoning course

## CTE-Agriculture, Food \& Natural Resources

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :--- | :--- | :--- | :--- | :--- |
| Landscaping <br> Phasing out 23-24 | 7117 <br> Principles of Ag | 5132 <br> Horticultural Science | 7115 <br> Landscape and <br> Turf Management | 5974 <br> Work Based <br> Learning |
| Ag Mechanical and <br> Engineering | 7117 <br> Principles of Ag | 5088 <br> Ag Power and Structures | 7112 <br> Ag Structures <br> Fabrications and <br> Design | 5974 <br> Work Based <br> Learning |
| Agri-Science - <br> Plants or Animals | 7117 <br> Principles of Ag | 5008 <br> Animal Science <br> 5170 <br> Plant and Soil Science | 5070 <br> Adv Animal Life <br> Science, Animals <br> 5102 <br> Food Science | 5974 <br> Work Based <br> Learning |

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

## Taught in 8th grade

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: 8
-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

## PRINCIPLES OF AGRICULTURE <br> 7117 (PRIN AG)

Principles of Agriculture is a two-semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.
-Recommended Grade(s): 9, 10, 11
$\bullet$ 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 credits for all diplomas

## Landscaping Phasing out 23-24

## HORTICULTURE SCIENCE Not offered 23-24

## 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

Lincoln High School Course Titles and Descriptions

## LANDSCAPE AND TURF MANAGEMENT Last year offered 23-24 <br> 7115 (LAND TUR MAN)

Landscape and Turf Management is a two-semester course that provides the student with an overview of the many career opportunities in the diverse field of landscape and turf 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(s): 10, 11, 12
-Required Prerequisites: Principles of Agriculture
-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 credits for all diplomas

## Ag Mechanical \& Engineering

## AGRICULTURE POWER, STRUCTURE AND TECHNOLOGY 5088 (AG POW)

Agriculture Power, Structure and Technology is a two semester, 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(s): 10, 11, 12
- Required Prerequisites: Principles of Agriculture*
- 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
- *Principles course is not required until the 2024-2025 school year because this course is included in Perkins $V$ pathways. Students in the class of 2025 and beyond must complete the course to earn concentrator status.


## AGRICULTURE STRUCTURES FABRICATION AND DESIGN 7112 (AG ST FAB DES)

Agricultural Structures Fabrication and Design is a two-semester course that focuses on metal work, and agricultural structures. This course will allow students to develop skills in welding and metalworking, construction, fabrication, machine components and design while incorporating the engineering design process. Students will also cover safety topics for each area while demonstrating appropriate health and safety standards.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Agriculture*
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum Lincoln High School Course Titles and Descriptions
- Counts as a directed elective or elective credits for all diplomas
- Counts as a quantitative reasoning course
- *The Principles course is not required until the 2024-2025 school year because this course is included in Perkins V pathways. Students in the class of 2025 and beyond must complete the course to earn concentrator status


## Agriscience New for 23-24

## ANIMAL SCIENCE First offered 23-24 <br> 5008 (ANML SCI)

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

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Agriculture*
- 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 physical science requirement for General Diploma
- *Principles course is not required until the 2024-2025 school year because this course is included in Perkins V pathways. Students in the Class of 2025 and beyond must complete the course to earn concentrator status.

PLANT AND SOIL SCIENCE First offered 24-25
5170 (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 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(s): 10, 11, 12
- Required Prerequisites: Principles of Agriculture*
- 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 Physical Science requirement for the general diploma
- *Principles course is not required until the 2024-2025 school year because this course is included in Perkins V pathways. Students in the Class of 2025 and beyond must complete the course to earn concentrator status.


## ADVANCED LIFE SCIENCE, ANIMALS (L) <br> 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(s): 11, 12
- Required Prerequisites: Principles of Agriculture*; or Principles of Veterinary Science*
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources; Animal Science; Biology; Chemistry; Integrated Chemistry Physics
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Fulfills a science requirement for all diplomas
- Counts as a quantitative reasoning course
- Counts as an elective or directed elective for all diplomas.
- *Principles course is not required until the 2024-2025 school year because this course is included in Perkins V pathways. Students in the Class of 2025 and beyond must complete the course to earn concentrator status.


## FOOD SCIENCE First offered 24-25

## 5102 (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 food 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(s): 10, 11, 12
- Required Prerequisites: Principles of Agriculture*
- 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
- *Principles course is not required until the 2024-2025 school year because this course is included in Perkins V pathways. Students in the Class of 2025 and beyond must complete the course to earn concentrator status.


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


## CTE-Business Management \& Administration

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :--- | :--- | :--- | :--- | :--- |
| Business <br> Administration | 4562 <br> Principles of Business <br> Management | 7143 Management <br> Fundamentals | 4524 <br> Accounting Fundamentals | 5974 <br> Work Based Learning |
| Accounting | 4562 <br> Principles of Business <br> Management | 4524 <br> Accounting <br> Fundamentals | 4522 <br> Advanced Accounting | 5974 <br> Work Based Learning |
| Business <br> Operations and <br> Technology | 7153 <br> Principles of Business <br> Operations and <br> Technology | 7144 <br> Business Office <br> Communication | 7146 <br> Digital Data Applications | 5974 <br> Work Based Learning |

## PRINCIPLES OF BUSINESS MANAGEMENT 4562 (PRIN BUS)

Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources are emphasized.
-Recommended Grade Level: 11, 12
-Recommended Prerequisite: Digital Apps and Responsibilities
$\bullet$ Credits: 2 semester course, 1 credit per semester, 2 credits maximum

## Business Administration

Lincoln High School Course Titles and Descriptions

## MANAGEMENT FUNDAMENTALS

7143 (MGMT FUND)
Management Fundamentals describes the functions of managers, including the management of activities and personnel. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Business Management
-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

## Business Administration \& Accounting

## ACCOUNTING FUNDAMENTALS <br> 4524 (INTO ACCT)

Accounting Fundamentals introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting.
Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Business Management
-Recommended Prerequisites: none
-Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

- Counts as a directed elective or elective all diplomas
-Principles course is not required until the 24-25 school year because this course is included in Perkins $V$ pathways.
-Formerly Introduction to Accounting


## Accounting

## 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


## Business Operations \& Technology

## PRINCIPLES OF BUSINESS OPERATIONS AND TECHNOLOGY 7153 (PRIN BUS OP TECH)

The Principles of Business Operations and Technology course will prepare students to plan, organize, direct, and control the functions and processes of a firm or organization and be successful in a work environment. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business, management, Microsoft office, and finance. Individual experiences will be based upon the student's career and educational goals.
-Recommended Grade(s): 9, 10, 11
-Required Prerequisites: none 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

## BUSINESS OFFICE COMMUNICATIONS 7144 (BUS OFF COMM)

The Business Office Communications course emphasizes the analysis of communication to direct the choice of oral and written methods and techniques. It includes practice in writing a variety of messages used to communicate in business and industry with an emphasis on the potential impact of the message on the receiver as a basis for planning and delivering effective business communications. Through projects and the development of messages students will develop their knowledge and skills for the use of Microsoft Word and Microsoft PowerPoint.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Business Operations and Technology
-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

## DIGITAL DATA APPLICATIONS <br> 7146 (DGTL REC KEEP)

Students will use Microsoft Excel to sort and search records, combine files, produce reports, and to extract data from a file. This course is designed to include creating and formatting worksheets, using formulas and basic functions, creating charts, and printing professional-looking reports. Additionally students will use Microsoft Access to create a database and to manage a database through the creation and modification of a query. Students will also be expected to produce reports from the information.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Business Operations and Technology

- 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


## CTE-STEM

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :---: | :--- | :--- | :--- | :--- |
| Engineering <br> Phasing out <br> $23-24$ | 4802 <br> Intro to Engineering <br> Design | 5644 <br> Principles of <br> Engineering | 5534 <br> Computer Integrated <br> Manufacturing | 5974 <br> Work Based Learning |

## INTRODUCTION TO ENGINEERING DESIGN Not offered 23-24 4802 (INT ENG DES)

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

- Recommended Grade(s): 9, 10, 11
- Required Prerequisites: none
- 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
- NOTE: Schools that have agreed to be part of the Project Lead the Way network must follow all training and data collection requirements.


## PRINCIPLES OF ENGINEERING Not offered 23-24 5644 (PRNC ENG)

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and
systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. Schools may use the PLTW curriculum to meet the standards for this course. NOTE: This course aligns with the PLTW Principles of Engineering curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.
-Recommended Grade(s): 10, 11
-Required Prerequisites: Introduction to Engineering Design

- 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
-Fulfills a science course requirement for all diplomas
$\bullet$ Qualifies as a quantitative reasoning course


## COMPUTER INTEGRATED MANUFACTURING Last year offered 23-24 5534 (COMP INT MFG)

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes. NOTE: This course aligns with the PLTW Computer Integrated Manufacturing curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.
-Recommended Grade(s): 11, 12
$\bullet$ Required Prerequisites: Introduction to Engineering Design
-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
$\bullet$ Qualifies as a quantitative reasoning course

## CTE-Transportation

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :--- | :--- | :--- | :--- | :--- |
| Automotive <br> Services | 7213 <br> Principles of Automotive <br> Services | 7205 <br> Brake Systems | 7212 <br> Steering and <br> Suspensions | 7375 <br> Automotive Service <br> Capstone |

## PRINCIPLES OF AUTOMOTIVE SERVICES

## 7213 (PRIN AUTO SER)

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.
-Recommended Grade(s): 9, 10, 11
-Required Prerequisites: none
-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

## BRAKE SYSTEMS <br> 7205(AUTO BRK ELE)

This course gives students an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in various automotive systems. Additionally it teaches theory, service and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today's automobiles. This course will emphasize professional diagnosis and repair methods for brake systems.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Automotive Services
-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

## STEERING AND SUSPENSIONS 7212 (ENG PERF)

This course takes an in-depth look at engine performance, including concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. This course also takes an in-depth look at engine performance, including advanced concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. Hybrid/Alternative fuel technology will also be introduced.
-Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Automotive Services
-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

## AUTOMOTIVE SERVICE CAPSTONE 7375 (AUTO SRV CAP)

This course further explores important skills and competencies within the Automotive Service Technology Pathway. Students will be exposed to an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in Lincoln High School Course Titles and Descriptions
various automotive systems. Students will understand other topics such as Engine Repair, Climate Control, and Driveline Service. Additionally, co-op, and internship opportunities will be available for students.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Automotive Services; Brake Systems; Steering and Suspensions
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas


## CTE \& Work Based Learning

## PERSONAL FINANCIAL RESPONSIBILITY <br> 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) <br> 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

## WORK-BASED LEARNING CAPSTONE 5974 (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


## CTE-Law \& Public Safety

This pathway is taught at the Richmond Area Career Center (RACC)

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :--- | :--- | :--- | :--- | :--- |
| Fire and |  |  |  |  |
| Rescue | 7195 <br> Principles of Fire and <br> Rescue | 7189 <br> Fire Fighting <br> Fundamentals | 7186 <br> Advanced Fire <br> Fighting | 7229 <br> Fire and Rescue <br> Capstone |

## PRINCIPLES OF FIRE AND RESCUE 7195 (PRIN PS HAZ AWR)

Principles of Fire and Rescue introduces students to the various roles that firefighters and emergency services workers play to protect the public from the loss of life and property. 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. This course will introduce students to the history, terminology, and basic firefighting skills needed for a beginning firefighter. Additionally, students will develop a career plan for a career in public safety; including areas of Fire Science, Homeland Security, and Emergency Medical Services.
-Recommended Grade(s): 9, 10, 11
-Required Prerequisites: none
-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

## FIRE FIGHTING FUNDAMENTALS <br> 7189 (FIRE FGHT FUN)

Fire Fighting Fundamentals is for those students who are seeking certification as a firefighter. This course will prepare students for the Hazardous Materials Awareness and Operations certifications and will introduce students to NFPA 1001 which serves as the standard of measurement for all firefighters in North America. Students will learn the knowledge and hands on practical skills for managing and controlling a hazardous materials incident required for the certifications. Furthermore, students will study how a fire behaves and will learn the basic firefighting skills needed to extinguish a fire while protecting themselves and other firefighters. -Recommended Grade(s): 10, 11, 12
-Required Prerequisites: Principles of Fire and Rescue
$\bullet$ 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 FIRE FIGHTING <br> 7186 (ADV FIRE FGHT)

Advanced Fire Fighting expands upon the principles and techniques of firefighting learned in Fire Fighting Fundamentals. Students will study fire protection systems, firefighter safety and survival. Students will also learn what fire is, the chemical hazards of combustion, and related by-products of fire. Additionally, students will gain a better understanding of fire department organization, administration, operations, and basic strategies and tactics.
-Recommended Grade(s): 10, 11, 12
$\bullet$ Required Prerequisites: Principles of Fire and Rescue; Fire Fighting Fundamentals
-Recommended Prerequisites: none
$\bullet$ Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum $\bullet$ Counts as a directed elective or elective for all diplomas

## FIRE AND RESCUE CAPSTONE 7229 (FIRE RES CAP)

Fire and Rescue Capstone will prepare students to earn the EMT certification.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Fire and Rescue; Fire Fighting Fundamentals,


## Advanced Fire Fighting

- Recommended Prerequisites: none
- 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


## CTE-Whitewater Career Center

## WHITEWATER CAREER CENTER (WCC) - CONNERSVILLE

These programs are available at the Whitewater Career Center in Connersville. Each course is a two-year program (4 semesters) with three (3) credits earned per semester for grades 11-12. -Grade(s): 11 \& 12
-Required Prerequisites: MUST PASS first year requirements to continue on for the second year in the program
-1st year students must be in good credit standing for graduation
-Credits: 2 semester course, 2 semesters required, 3 credit per semester
-Counts as a directed elective or elective for all diplomas

These pathways are taught at the Whitewater Career Center (WCC) in Connersville

| Pathway | Principles | Concentrator A | Concentrator B | Capstone |
| :---: | :---: | :---: | :---: | :---: |
| Automotive Collision Technology | 7215 <br> Principles of Collision Repair | 7204 <br> Automotive Body Repair | 7206 <br> Plastic Body Repair and Painting Fundamentals | 7380 <br> Collision Repair Capstone |
| Automotive <br> Technology <br> Early College <br> Career Program | 7213 <br> Principles of Automotive Service | 7205 <br> Brake Systems | 7212 <br> Steering \& Suspensions | 7375 <br> Automotive Service Capstone |
| Construction Technology | 7130 <br> Principles of Construction Trades | 7123 <br> Construction Trades -General Carpentry | 7122 <br> Construction Trades: <br> Framing and Finishing | 7242 <br> Construction Trades Capstone |
| Cosmetology | 7330 <br> Principles of Barbering and Cosmetology | 7331 <br> Barbering and <br> Cosmetology <br> Fundamentals | 7332 <br> Advanced Cosmetology | 7334 <br>  <br> Cosmetology <br> Capstone |


| Criminal <br> Justice <br> Early College <br> Career Program | 7193 <br> Principles of Criminal Justice | 7191 Law Enforcement Fundamentals | 7188 Corrections and Cultural Awareness | 7231 Criminal Justice Capstone |
| :---: | :---: | :---: | :---: | :---: |
| Culinary Arts | 7173 <br> Principles of Culinary and Hospitality | $\left\lvert\, \begin{aligned} & 7171 \\ & \text { Nutrition } \end{aligned}\right.$ | 7169 <br> Culinary Arts | 7233 <br> Culinary Capstone |
| Diesel Technology | 7216 <br> Principles of Diesel Technology | 7210 <br>  <br> Brakes | 7211 <br> Diesel Transmission | 7221 <br> Diesel Services Capstone |
| Education <br> Careers <br> Early College <br> Career Program | 7161 <br> Principles of Teaching | 7157 <br> Child \& Adolescent Development | 7162 <br> Teaching \& Learning | 7267 <br> Education <br> Professions Capstone |
| Electricity | 7130 <br> Principles of Construction Trades | 7124 <br> Electrical <br> Fundamentals | 7119 <br> Advanced Electrical | 7263 <br> Construction Trades Electrical Capstone |
| Graphic Design | $7140$ <br> Principles of Digital Design | 7141 <br> Digital Design Graphics | 7138 <br> Interactive Media Design | 7246 <br> Digital Design Capstone |
| Health Science <br> Early College <br> Career Program | 7168 <br> Principles of Healthcare | 5274 <br> Medical Terminology | 7156 <br> Technical Skills Development | 7166 <br> Healthcare Specialist: <br> CNA (1 Credit) <br> 7255 <br> Healthcare Specialist <br> Capstone (2 Credits) |
| Precision Machining Early College Career Program | 7109 <br> Principles of Precision Machining | 7105 <br> Precision Machining Fundamentals | 7107 <br> Advanced Precision <br> Machining | 7219 <br> Precision Machining Capstone |
| Welding Technology Early College Career Program | 7110 <br> Principles of Welding | 7111 <br> Shielded Metal Arc Welding | 7101 <br> Gas Welding | 7226 <br> Welding Technology II |

## Music

## CHORAL CHAMBER ENSEMBLE (L) <br> 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
$\bullet$ 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
$\bullet$ 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
$\bullet$ 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)
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
$\bullet$ 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) <br> 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 (8th grade by director permission)
-Recommended Prerequisites: Middle School Band, Beginning Band or teacher recommendation
$\bullet$ 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
$\bullet$ 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)
$\bullet$ 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
$\bullet$ Recommended Prerequisites: Introduction to Two-Dimensional Art(L), Introduction to 3-Dimensional Art (L) $\bullet$ 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.
$\bullet$ Recommended Grade Level: 9, 10, 11,12
-Recommended Prerequisites: Introduction to Two-Dimensional Art(L)
$\bullet$ 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
-Prerequisites: Introduction to Two-Dimensional Art(L)
$\bullet$ 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
-Prerequisites: Introduction to Three-Dimensional Art, Advanced Three-Dimensional Art
$\bullet$ 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<br>0500 (BAS SKLS)

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


[^0]:    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

