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NOTE: All course descriptions in this guide are taken from the Indiana State Approved Course Titles and Descriptions: 2023-2024.

INTRODUCTION

Dear Adams Central Community Schools students, staff, and parents,

We are pleased to present the 2023-2024 Adams Central Community Schools High School Course Handbook. This guide has been developed to inform students and parents about the requirements for earning a high school diploma and outlines courses and procedures to support students in meeting those requirements.

Students should make a thoughtful review of course selections. It is important to take into consideration interests, abilities, and future goals. It is also advisable to discuss plans with parents, teachers, and the counselor so that the final decision reflects their combined judgment.

During the second semester a counselor will meet with all students in grades 8-11 to select courses for the next school year. Eighth graders receive an information packet during their eighth grade student/parent orientation containing information pertaining to course selection for their freshman year. All final course selections must include at least six classes or a minimum of 12 credits per year (6 credits per semester).

At Adams Central MS/HS, we know that all of our students can learn and grow at high levels. We have multiple pathways for students to achieve either college or career success.

We look forward to partnering with families to ensure the best education possible for your Adams Central student.

Respectfully yours,

Katie Isch
Principal of Adams Central MS/HS

GLOSSARY OF TERMS

Advanced Placement (AP) – Advanced Placement is a research-backed method to facilitate student participation and success through delivery of college-level courses and corresponding exams in the high school to qualified high school students. AP classes are weighted one full GPA point.

Career/Technical Education (CTE) Pathways – This is a sequence of CTE courses in a specific program of study. Students in Indiana's secondary CTE programs will gain the knowledge, skills and abilities needed for success in postsecondary education and economically viable career opportunities.

- Perkins V Requirement for the 2023 & 2024 Cohorts: Must earn a C average in at least two non-duplicative advanced courses (courses beyond an introductory course) within a particular program of study.
- NLPS Requirement for the Cohort 2025 & Beyond: Must earn a C average in Principles, Concentrator A, and Concentrator B courses within the outlined NLPS program of study.

Credit - A credit represents the successful completion of study in any subject for one semester. A minimum of forty-four (44) credits is required for graduation. A semester letter grade of a D- or better is required for a student to earn credit. Students typically earn one credit per semester, per course. Students must earn at least 10 credits per semester to remain on track.

Dual Credit – Dual credit courses provide opportunities for qualified students to earn college credit from a regionally accredited institution while attending high school. Dual Credit courses can be taken at your high school or at a college facility.

Dual Enrollment – Dual enrollment allows high school students the opportunity to earn secondary and/or postsecondary credit before graduating from high school. Courses are taught by a university professor. These courses are usually taken on students' own time. They may or may not be included on students' high school transcripts. They can be taken online or live on campus.

Elective Course - An elective course is one which students are not required to take but are generally free to select.

Graduation Pathway Model – The purpose of Graduation Pathways is to ensure that every Hoosier student graduates from high school with: 1) A broad awareness of and engagement with individual career interests and associated career options; 2) A strong foundation of academic and technical skills; 3) Demonstrable employability skills that lead directly to meaningful opportunities for postsecondary education, training, and gainful employment. Beginning with the graduating class of 2023, Indiana high schools' students must satisfy all three of the following Graduating Requirements: 1. Earn a High School Diploma; 2. Learn and Demonstrate Employability Skills; AND 3. Demonstrate Postsecondary-Ready Competencies.

Prerequisite - A prerequisite is a standard required before a student may take a course. Prerequisites are established to ensure that students may get the maximum benefit from a course.

Quantitative Reasoning Course - A quantitative reasoning course is a high school course that "advances a student's ability to apply mathematics in real world situations and contexts" and that "deepens a student's understanding of high school mathematics standards."

Required Course - A required course is one which all students must take in order to graduate as determined by the State Board of Education and local school officials.

EXTRACURRICULAR PARTICIPATION ELIGIBILITY

Students who wish to participate in extracurricular activities must schedule and pass at least six (6) classes-or credits-in order to be eligible for participation for the following grading periods: first and third nine weeks and first and second semester.

DUAL CREDIT OPPORTUNITIES

Ivy Tech Community College

Adams Central High School currently has a dual credit agreement with Ivy Tech Community College which will allow our high school students to receive free college credit. To receive Ivy Tech Community College credit in some courses, the following criteria must be satisfied:

1. Complete the necessary application and course request form for Ivy Tech Community College.
2. Meet any assessment qualifications, if applicable.
   Applicable Scores:
   PSAT = 25 Reading 25, 26 Writing 25, and 27 Math 27
   ACT = 18 Reading, 17 Writing, and 24 Math
   KNOWLEDGE ASSESSMENT (KA) = 70 Reading & Writing, and 70 STEM
   SAT = Reading 25, Writing 27, Math 550, ERW 460
3. Earn a qualifying semester grade in the course.

*****PARTICIPATING ADAMS CENTRAL CLASSES & IVY TECH COURSE EQUIVALENCIES ARE LISTED ON THE ADJOINING PAGE.**

Indiana Tech

Adams Central High School currently has a dual enrollment agreement with Indiana Tech. The cost of the course is $225 ($75 per credit hour). Students work on the following Indiana Tech courses independently (online) to receive the college credit:

Intro to Psychology (PSY 1700)
Intro to Sociology (SS 2800)

Trine University

Adams Central High School currently has a dual enrollment agreement with Trine University. The cost of the course is $300 ($150 per credit hour). Please note, this is a condensed college course. High school students will take a semester dual credit course and receive two high school world language credits. Students work on the following Trine University courses independently (online) to receive the college credit:

Spanish II or III (SPN 113)
Spanish III or IV (SPN 123)

- Spanish II students will earn two HS credits for Spanish II in S1 and two HS credits for Spanish III in S2. These are in addition to the six college credits earned.
- Spanish III students will earn two HS credits for Spanish III in S1 and two HS credits for Spanish IV in S2. These are in addition to the six college credits earned.

Advanced Placement (AP) Opportunities

1. AP Biology
2. AP Pre-Calculus
3. AP Calculus
4. AP Chemistry
5. AP Computer Science Principles
6. AP English Language and Composition
7. AP Physics 1: Algebra-Based
8. AP Statistics
9. AP United States Government and Politics
10. AP United States History
11. AP World History: Modern

PURDUE UNIVERSITY FORT WAYNE | Collegiate Connection

EARN DUAL CREDIT

EARN COLLEGE CREDIT AT ADAMS CENTRAL HIGH SCHOOL Make a smart move. Get dual college credit while taking courses in your high school. Actually, get credit for **both college *and* high school**. You can save time and money and gain confidence when you **jump start** your college career.

WHY TAKE COLLEGIATE CONNECTION DUAL CREDIT COURSES

- Earn college credit during **high school**—without leaving your school
- Finish your **college degree** in four years (or less)—save by paying about **60–90% less** than on-campus tuition
- Satisfy the Indiana high school **Academic Honors or Technical Honors diploma** requirements
- Take advantage of **campus amenities** with a student ID

ADMISSION CRITERIA

- Maintain a high school GPA of
  - Seniors and juniors: 2.8 on a 4.0 scale or 7.4 on a 12.0 scale
  - Sophomores and second semester freshmen: 3.0 on a 4.0 scale or 8.0 on a 12.0 scale
- Meet the course prerequisites
- Work toward meeting the CORE 40, Academic Honors, or Technical Honors graduation requirements
- Receive parent/guardian approval

FINANCIAL ASSISTANCE If you qualify for the national free or reduced textbook/lunch program, Purdue Fort Wayne will provide a scholarship to pay your tuition. You are still responsible for purchasing any additional textbooks or materials.

TRANSFER OPTIONS Most courses are transferrable to other public institutions in Indiana; many private or out-of-state colleges also accept transfer credit. You can request an official transcript be submitted to the college of your choice. Check with your prospective college advisor regarding specific degree requirements and transfer questions.

APPLICATION AND REGISTRATION DEADLINES Admission materials are due August 19, 2022 at PFW. Admission materials consist of a completed Collegiate Connection Application form (online only), an official high school transcript, Parent/Guardian Permission form, and an electronic course request form. Admission materials for the second semester are due January 6, 2023.

LEARN MORE Talk to your guidance counselor, visit **pfw.edu/connection**, email **connection@pfw.edu**, or call **260-481-5478.**

Collegiate Connection courses offered at Adams Central High School for 2021-22

School Course Title	Teacher	Purdue Fort Wayne Course Title	Schedule	Crs	CC Cost	at PFW Cost**
COM 11400 PFW	Jauregui	COM 11400 Speech Communications	2nd Semester	3	$75.00*	$885.66
Examining Self as Teacher	Jauregui	EDU 20000 Examining Self as Teacher	1st Semester	3	$75.00*	$885.66
English 13100 PFW	Jauregui	ENGL 13100 Reading, Writing, & Inquiry I	1st Semester	3	$75.00*	$885.66
Pre-Cal/MA 15300	Hildebrand	MA 15300 College Algebra	1st Semester	3	$75.00*	$885.66
Pre-Cal/MA 15400	Hildebrand	MA 15400 Trigonometry	2nd Semester	3	$75.00*	$885.66
Cal-AP/MA 16500 PFW	Gerber	MA 16500 Analytic Geometry & Calculus I	All year	4	$100.00*	$1,164.00
Stat-AP/ST 12500 PFW	Gerber	STAT 12500 Communicating with Statistics	All year	3	$315.30	$873.00

*Indiana Commission for Higher Education Priority Course rate EA/EOU
#2021-2022 academic year. Fees for 2022-2023 have not been determined yet.

TAKE CLASSES: You may take classes at the PFW campus or online as long as you have met the course prerequisites. Ask for more information regarding fees and courses.

High School	Ivy Tech Course, Course Name, & College Credits	HS Class Name, IDOE # *(Subject to be Updated - Based on 2021-22 DC Crosswalk Titles, DOE #'s)*	Term
Adams Central HS	AGRI 102, Agribusiness & Farm Mgt, 3 credits,	Agribusiness Management, 5002	Full Yr
Adams Central HS	AGRI 103, Animal Science, 3 credits,	Animal Science, 5008	Full Yr
Adams Central HS	AGRI 106, Agriculture Mechanization, 3 credits,	Agriculture Power, Structure and Technology, 5088	Full Yr
Adams Central HS	AGRI 100, Introduction to Agriculture, 3 credits	Principles of Ag 3117	Full Yr
Adams Central HS	AGRI 116, Survey of Horticulture, 3 credits,	Horticulture Science, 5132	Full Yr
Adams Central HS	AGRI 164, Landscape Design I, 3 credits,	Landscape Management I, 5136	Full Yr
Adams Central HS	DESN 101, Intro to Design Technology, 3 credits,	Intro to Engineering Design (IED) PLTW, 4802	Full Yr
Adams Central HS	DESN 105, Architectural Design I, 3 credits,	Civil Engineering & Architecture (CEA) PLTW, 5650	Full Yr
Adams Central HS	DESN 104, Mechanical Graphics, 3 credits,	Principles of Engineering (POE) PLTW, 5644	Full Yr
Adams Central HS	MATH 135, Finite Math, 3 credits,	Finite Mathematics, 2530	Full Yr
Adams Central HS	PSYC 101, Introduction to Psychology, 3 credits,	Psychology (Adv or Honors), 1532 or AP Psychology, 1558	Fall or Spring
Bellmont HS	BCTI 100, Intro to Construction Technology, 3 credits,	Construction Trades I, 5580	Full Yr
Bellmont HS	BCTI 101, Intro to Carpentry, Part 1, 3 credits,	Construction Trades I, 5580	Full Yr
Bellmont HS	BCTI 102, Intro to Carpentry, Part 2, 3 credits,	Construction Trades I, 5580	Full Yr
Bellmont HS	CRIM 101, Introduction to Criminal Justice Systems, 3 credits,	Criminal Justice I, 5822	Full Yr
Bellmont HS	CRIM 105, Introduction to Criminology, 3 credits,	Criminal Justice I, 5822	Full Yr
Bellmont HS	CRIM 103, Cultural Awareness, 3 credits,	Criminal Justice II, 5824	Full Yr
Bellmont HS	CRIM 110, Introduction to Law Enforcement, 3 credits,	Criminal Justice II, 5824	Full Yr
Bellmont HS	CRIM 111, Introduction to Traffic Enforcement & Investigation, 3 credits,	Criminal Justice II, 5824	Full Yr
Bellmont HS	CRIM 113, Criminal Investigation, 3 credits,	Criminal Justice II, 5824	Full Yr
Bellmont HS	HLHS 100, Introduction to Health Careers, 3 credits,	Health Science Education I, 5282	Fall
Bellmont HS	HLHS 101, Medical Terminology, 3 credits,	Health Science Education II	
Bellmont HS	HLHS 107, CNA Preparation, 5 credits,	Health Science Education I, 5282	Full Yr
Bellmont HS	HLHS 113, Dementia Care, 3 credits,	Health Science Education I, 5282	Spring
Bellmont HS	INDT 114, Introductory Welding, 3 credits,	Welding Technology I, 5776	Fall
Bellmont HS	WELD 207, Gas Metal Arc (MIG) Welding, 3 credits,	Welding Technology II, 5778	Spring
South Adams HS	AGRI 107, Advanced Animal Science, 3 credits,	Advanced Life Science, Animals, 5070	Full Yr
South Adams HS	AUTI 111, Electrical Systems I, 3 credits,	Auto Tech I	
South Adams HS	AUTI 121, Brake Systems, 3 credits,	Auto Tech I	
South Adams HS	AUTI 122, Steering and Suspension Systems, 3 credits,	Auto Tech II	
South Adams HS	AUTI 131, Engine Performance Systems I, 3 credits,	Auto Tech II	
South Adams HS	HSPS 106, Fire Suppression, 3 credits,	Fire and Rescue I, 5820	Fall
South Adams HS	HSPS 121, Hazmat Awareness, 3 credits,	Fire and Rescue I, 5820	Fall
South Adams HS	HSPS 165, Fire Fighter I, 3 credits,	Fire and Rescue I, 5820	Fall
South Adams HS	HSPS 167, Fire Fighter II, 3 credits,	Fire and Rescue II, 5820	Full Yr
South Adams HS	MTTC 101, Intro to Machining, 3 credits,	Precision Machining I, 5782	Full Yr
South Adams HS	MTTC 110, Turning & Milling Processes, 3 credits,	Precision Machining I, 5782	Full Yr
South Adams HS	MTTC 105, Abrasive Processes I, 3 credits,	Precision Machining II, 5784	Full Yr
South Adams HS	MTTC 107, CNC Setup & Operations I, 3 credits,	Precision Machining II, 5784	Full Yr
South Adams HS	SDEV 120, Computing Logic, 3 credits,	Computer Science I, 4801	Fall
South Adams HS	SDEV 140, Into to Software Development, 3 credits,	Computer Science II: Programming II, 5236	Spring
Bluffton HS	HOSP 101 Sanitation & First Aid	Culinary Arts & Hospitality I	Fall
Bluffton HS	HOSP 102 Basic Food Theory & Skill	Culinary Arts & Hospitality I	Fall

Bluffton HS	HOSP 104 Nutrition	Culinary Arts & Hospitality II	Spring
Bluffton HS	HOSP 105 Intro to Baking	Culinary Arts & Hospitality II	Spring

with Academic Honors Requirements

For the Core 40 with Academic Honors designation, students must complete 47 credits according to the following guidelines:

Complete all requirements for Core 40, as outlined on the previous page; Earn two additional Core 40 math credits;
Earn six to eight Core 40 world language credits, including six credits in one language or four credits each in two languages;
Earn two Core 40 fine arts credits;
Earn a grade of "C" or better in courses that count towards the diploma;
Have a grade point average of "B" or better; and
Complete one of the following:

A. Earn four credits in two or more courses within the following programs and take the corresponding exams:
   Advanced Placement (AP);
   International Baccalaureate (IB);
   Cambridge International courses;
B. Earn six verifiable transcripted college credits in dual credit courses from the approved dual credit list;
C. Earn two of the following:
   A minimum of three verifiable transcripted college credits from the approved dual credit list;
   Two credits in AP courses and take the corresponding exams;
   Two credits in IB standard level courses and take the corresponding exams;
   Two credits in Cambridge International courses and take the corresponding exams;
D. Earn a composite score of 1250 or higher on the SAT and a minimum on 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 the written section; or
F. Complete a work-based learning experience/program or career and technology education experience/ program approved by the Indiana State Board of Education to replace the coursework above.

with Technical Honors Requirements

For the Core 40 with Technical Honors designation, students must complete 47 credits according to the following guidelines:

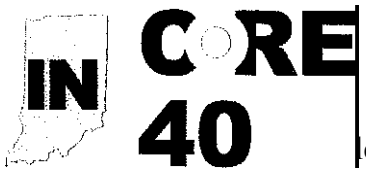
Complete all requirements for Core 40, as outlined on the previous page;
Earn six credits in the college and career preparation courses in a state-approved College and Career Pathway and one of the following:
   Pathway designated industry-based certification or credential; or
   Pathway dual credits from the approved dual credit list resulting in six transcripted college credits.
Earn a grade of "C" or better in courses that count toward the diploma;
Earn a grade point average of "B" or better;
Complete one of the following:

A. Any one of the options {A-F) for the Core 40 with Academic Honors;
B. Earn the following minimum score on WorkKeys:
   Workplace Documents:
   Level 6 Applied Math:
   Level 6

Graphic Literacy: Level 5

C. Earn the following minimum scores on Accuplacer: Writing: 80
Reading: 90
Math: 75

D. Earn the following minimum scores on Compass: Algebra: 66
Writing: 70
Reading: 80



Course and Credit Requirements

lete 40 total Indiana credits, as defined in the table below, to qualify for high school graduation. Schools may have additional graduation requirements that apply to all students. Exceptions to additional graduation requirements would apply to students with Individualized Education Programs.

Subject	Credits	Course Requirements
English/Language Arts	8 credits	Includes a balance of literature, composition, and speech.
Mathematics	6 credits	Algebra I, Geometry, Algebra II (Analytical Algebra II) **OR** Integrated I, Integrated II, Integrated III **AND** Ensure students complete six credits in grades 9-12 *
Science	6 credits	2 credits: Biology 2 credits: Chemistry, Physics, or Integrated Chemistry-Physics 2 credits: Any Core 40 science course
Social Studies	6 credits	2 credits: World History/Civilization or Geography/History of the World 2 credits: U.S. History 1 credit: Economics 1 credit: U.S. Government
Directed Electives	5 credits	Career and Technical Education Fine Arts World Languages
Physical Education	2 credits	1 credit: PE I 1 credit: PE II
Health and Wellness	1 credit	Students may earn health and wellness credit from the health education area of study or alternate options.
Electives	Minimum of 6 credits	All students are strongly encouraged to complete a College and Career pathway by selecting electives in a deliberate manner.

- Students must take a math or quantitative reasoning course each year in high school, regardless of credit completion.

QUANTITATIVE REASONING COURSES

- For the Core 40, Academic Honors (AHD), and Technical Honors (THD) diplomas, students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.

- A quantitative reasoning course is a high school course that "advances a student's ability to apply mathematics in real world situations and contexts" and that "deepens a student's understanding of high school mathematics standards."

- The Indiana Department of Education will provide an annual review to determine the high school courses that meet these criteria.

CTE	Agribusiness Management Landscape Management I & II Advanced Accounting Computer Science I & II Advanced Life Science: Animals Personal Financial Responsibility Aerospace Engineering Principles of Engineering (POE) Civil Engineering and Architecture Construction Trades II Precision Machining I & II Welding I & II Advanced Manufacturing II
Math	Finite Math Pre-Calculus AP Calculus AP Statistics
Science	Physics Integrated Chemistry/Physics Chemistry I AP Biology AP Chemistry AP Physics 1: Algebra Based AP Computer Science Principles
Social Studies	Economics

FOUR YEAR PLAN

Adams Central High School

Name _____ **Graduation Year** _____

Diploma Type:
_____ C40
_____ AHD
_____Technical
_____General

Post Secondary Plans:
_____ Work
_____ Military
_____2 year/Tech School
_____4 year college

Grad Pathway:
Choice #1 _____
Choice #2 _____

	FRESHMAN YEAR
1.	Honors English or English 9
2.	Honors Geometry or Algebra I
3.	Biology or Environmental Science
4.	Physical Education & Health
5.	Career Planning (sem)/_____
6.	Elective, Foreign Language, Band, Choir, Study Hall
7.	Elective:
	SOPHOMORE YEAR
1.	Honors English or English 10
2.	Honors Algebra II or Geometry or Algebra I
3.	Biology or ICP or Chemistry
4.	AP World History or Geography
5.	Elective:
6.	Elective, Foreign Language, Band, Choir, Study Hall
7.	Pathway Courses:

	JUNIOR YEAR
1.	AP English or English 11
2.	Algebra II, Finite Math, Pre Calculus, AP Stats
3.	_____ (Adv Science) or ICP/Chemistry
4.	US History or AP US History
5.	Elective, Foreign Language, Band, Choir, Study Hall
6.	Pathway Courses:
7.	Elective:

	SENIOR YEAR
1.	DC English 12 or English 12
2.	Finite Math, Pre Calculus, AP Calculus, AP Stats
3.	Government/Economics
4.	Personal Finance/Elective:_____
5.	Elective, Foreign Language, Band, Choir, Study Hall
6.	Pathway Courses:
7.	Elective:

Parent Signature _____ **Date** _____

Adams Central High School
Graduation Checklist

Name _____ Year of Graduation _____

Quantitative Reasoning Course Requirement for all diplomas (2)

Core 40
Minimum 44 credits

English (8)
- English 9
- English 10
- English 11
- English 12

Math (6)
- Algebra I
- Geometry (reg or honors)
- Algebra II (reg or honor
- _____
- _____
- _____

Science (6)
- Env Sci or Animal Sci
- Biology I
- ICP or Chemistry I
- _____
- _____

Social Studies (6)
- Geo/Hist World or AP World Hist
- U.S. History (reg or AP)
- U.S. Government (reg or AP)
- Economics

Directed Credits (5)
Courses taken in World Languages, Fine Arts, or Career/Technical
1. _____
2. _____
3. _____
4. _____
5. _____

Electives (8)
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

- P.E. 9
- Health & Wellness
- Preparing for College/Careers (1)
- Personal Financial Responsibility (1)

Academic Honors Diploma
Minimum 47 credits and 3.0 GPA

Both Honors Diplomas: No Grade lower than "C-"

English (8)
- English 9 (reg or honors)
- English 10 (reg or honors)
- English 11 (reg or AP)
- English 12 (reg or dual)

Math (8)
- Algebra I (8th grade or 9th grade)
- Geometry (reg or honors)
- Algebra II (reg or honors)
- Finite Math (reg or dual)
- Pre-Calculus (reg or dual)
- AP Statistics (reg or dual)
- AP Calculus (reg or dual)

Science (6)
- Env Sci or Animal Sci
- Biology I
- ICP or Chemistry I
- AP Physics I or AP Physics
- AP Biology
- AP Chemistry
- AP Computer Science
- _____

Social Studies (6)
- Geo/Hist World or AP World Hist
- U.S. History (reg or AP)
- U.S. Government (reg or AP)
- Economics

World Languages (6)
- Spanish I or German I
- Spanish II or German II
- Spanish III or German III

Fine Arts (2)
- Art/Band/Choir

Electives (6)
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

- P.E. 9
- Health & Wellness
- Preparing for College/Careers (1)
- Personal Financial Responsibility(1)

Additional Requirements
(Satisfy one of the following.)
- 2 AP Courses
- Dual Credit (6 College)
- 1 AP Course/DC (3 College)

Technical Honors Diploma
Minimum 47 credits and 3.0 GPA

Both Honors Diplomas: No Grade lower than "C-"

English (8)
- English 9 (reg or honors)
- English 10 (reg or honors)
- English 11 (reg or AP)
- English 12 (reg or dual)

Math (6 Required / 8 Recommended)
- Algebra I (8th grade or 9th grade)
- Geometry (reg or honors)
- Algebra II (reg or honors)
- Finite Math (Reg or dual)
- Pre-Calculus (reg or dual)
- AP Statistics (reg or dual)
- AP Calculus (reg or dual)

Science (6)
- Env Sci or Animal Sci
- Biology I
- ICP or Chemistry I
- Physics I or AP Physics
- AP Biology
- AP Chemistry
- AP Computer Science
- _____

Social Studies (6)
- Geo/History of the World or AP World History
- U.S. History (reg or AP)
- U.S. Government (reg or dual)
- Economics

Electives Career Pathways (6)
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

State Certification OR
- Dual Credits from the Pathways (6)

Electives Additional (10)
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

Following courses can be counted as Additional Electives:
- *World Languages / Encouraged - Not Required
- Spanish I or German I
- Spanish II or German II
- Spanish III or German III

- P.E. 9
- Health & Wellness
- Preparing for College/Careers (1)
- Personal Financial Responsibility(1)

Additional Requirements
(Satisfy one of the following)
- 2 AP Courses
- Dual Credit (6 College)
- 1 AP Course/DC (3 College)

Graduation Pathways Checklist
Adams Central High School
Class of 2024 & Beyond

Name _____ **Year of Graduation**_____

1) Indiana Diploma Designation

_____ **Academic Honors (47 Credits)**

_____ **Technical Honors (47 Credits)**

_____ **Core 40 (44 Credits)**

_____ **Basic (44 Credits)**

2) Employability Skills

Validation: English 9 Project _____

Service-Based Learning

Additional Project-Based Learning Courses

_____

Additional Service-Based Learning Courses

_____ **Community Service Course**

_____ **Peer Tutoring**

Additional Work-Based Learning Courses

_____ **Cadet Teaching**

_____ **Supervised Ag Experience**

_____ **WBL**

_____ **ICE**

3) Postsecondary-Ready Competencies

_____ **Academic or Tech Honors Diploma**

_____ **CTE Concentrator**

Pathway: _____

_____ **Locally Created Pathway (Civic Arts)**

Pathway: _____

_____ **State & Industry Recognized Certification**

_____

_____ **3 AP or Dual Credit Courses**

Course _____ **Grade** _____

Course _____ **Grade** _____

Course _____ **Grade** _____

Average Grade _____

_____ **SAT or ACT Benchmark**

ACT_____ **Eng** _____ **Reading**

_____ **Math** _____ **Science**

SAT _____ **ERW** _____ **Math**

_____ **ASVAB (Military Entrance Exam)**

AFQT Score _____

Perkins V CTE Career Pathways
Adams Central High School
Class of 2023 & 2024

Name _____ Year of Graduation _____

Ag Power (AC)

	Intro to Ag Food & Natural Resources	DC		Cert
	Agribusiness Management	DC		Cert
	Ag Power Structure & Tech	DC		Cert
	Adv Ag Power Structure & Tech	DC		Cert

Animal Systems (Course 1-AC, Course 2- SA)

	Animal Science (AC)	DC		Cert
	Adv Life Science: Animals (SA)	DC		Cert
	Agribusiness Management (AC)	DC		Cert

Landscape (AC)

	Intro to Ag Food & Natural Resources	DC		Cert
	Landscape Management	DC		Cert
	Landscape Management II	DC		Cert

Accounting (AC)

	Intro to Business (required)	DC		Cert
	Principles of Bus Management	DC		Cert
	Accounting I (required)	DC		Cert
	Advanced Accounting	DC		Cert

Advanced Manufacturing (AC)

	Advanced Manufacturing I			Cert
	Advanced Manufacturing II	DC		Cert

Engineering (AC)

	Intro to Engineer Design PLTW (Required)	DC		Cert
	Principles of Engineering PLTW	DC		Cert
	Pick one of the following			
	Aerospace Engineering PLTW	DC		Cert
	Civil Eng & Architecture PLTW	DC		Cert

Biomedical (AC)

	Principles of Biomed Sci (PLTW) (Required)	DC		Cert
	Human Body Systems (PLTW)	DC		Cert
	Medical Interventions (PLTW)	DC		Cert

Nursing (NA)

	Health Science Education I	DC		Cert
	Health Science Education II	DC		Cert

Construction (NA)

	Intro to Construction (AC)	DC		Cert
	Construction Technology I	DC		Cert
	Construction Technology II	DC		Cert

Radio & Television (NA)

	Radio Television I	DC		Cert
	Radio Television II	DC		Cert

Early Childhood (NA)

	Child Development (AC)	DC		Cert
	Adv Child Development (AC)	DC		Cert
	Early Childhood Education I	DC		Cert
	Early Childhood Education II	DC		Cert

Education Careers (NA)

	Child Development (AC)	DC		Cert
	Adv Child Development (AC)	DC		Cert
	Education Careers I	DC		Cert
	Education Careers II	DC		Cert

Welding (NA)

	Welding Technology I	DC		Cert
	Welding Technology II	DC		Cert

Criminal Justice (NA)

	Interpersonal Relationships (AC)	DC		Cert
	Criminal Justice I	DC		Cert
	Criminal Justice II	DC		Cert

Human Services (NA)

	Interpersonal Relationships (AC)	DC		Cert
	Human Services I	DC		Cert
	Human Services II	DC		Cert

*PSY & SOC are non CTE related courses

Computer Science (SA)

	Intro to Computer Science PLTW (AC)	DC		Cert
	Computer Science I	DC		Cert
	Computer Science II	DC		Cert

Machine Technology (SA)

	Precision Machining I	DC		Cert
	Precision Machining II	DC		Cert

Fire and Rescue (SA)

	Interpersonal Relationships (AC)	DC		Cert
	Fire and Rescue I	DC		Cert
	Fire and Rescue II	DC		Cert

Automotive Technology (SA)

	Automotive Services Tech I	DC		Cert
	Automotive Services Tech II	DC		Cert

Culinary Arts (Bluffton)

	Nutrition & Wellness (AC)	DC		Cert
	Adv Nutrition/Wellness (AC)	DC		Cert
	Culinary Arts & Hospitality I	DC		Cert
	Culinary Arts & Hospitality II	DC		Cert

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Next Level Program of Study (NLPS) CTE Career Pathways
Adams Central High School
Class of 2025 & Beyond

Name _____ Year of Graduation _____

Ag Power (AC)
- ____ Principles of Agriculture ____ DC
- ____ Ag Power Structure & Tech ____ DC
- ____ Ag Structures Fabrication & Design ____ DC

Animal Systems (AC & SA)
- ____ Principles of Agriculture (AC) ____ DC
- ____ Animal Science (AC) ____ DC
- ____ Adv Life Science: Animals (SA) ____ DC

Landscape Management (AC)
- ____ Principles of Agriculture ____ DC
- ____ Horticultural Science ____ DC
- ____ Landscape & Turf Management ____ DC

Accounting (AC)
- ____ Principles of Business ____
- ____ Accounting Fundamentals ____
- ____ Advanced Accounting ____

Biomedical (AC)
- ____ Principles of Biomedical Science ____ DC
- ____ Human Body Systems ____ DC
- ____ Medical Interventions ____ DC

Advanced Manufacturing (AC)
- ____ Principles of Adv Manufacturing ____ DC
- ____ Adv Manufacturing Technology ____ DC
- ____ Industrial Maintenance Fundamentals ____ DC

Engineering (AC)
- ____ Intro to Engineering Design ____ DC
- ____ Principles of Engineering ____ DC
- ____ Aerospace Engineering **OR** ____ DC
- ____ Civil Eng. & Architecture ____ DC

Radio & Television (NA)
- ____ Principles of Broadcasting ____
- ____ Audio & Video Production Essentials ____
- ____ Mass Media Production ____

Health Sciences: Nursing (NA)
- ____ Principles of Healthcare ____ DC
- ____ Medical Terminology ____ DC
- ____ Healthcare Specialist: C.N.A. ____ DC ____ Cert

Construction Trades: Carpentry (NA)
- ____ Principles of Construction Trades ____ DC
- ____ Construction Trades: General Carpentry ____ DC
- ____ Construction Trades: Framing & Finishing ____ DC

Graphic Design (Norwell)
- ____ Principles of Digital Design ____ DC
- ____ Digital Design Graphics ____ DC
- ____ Graphic Design & Layout ____ DC

Early Childhood (NA)
- ____ Principles of Early Childhood Education ____
- ____ Early Childhood Education Curriculum ____
- ____ Early Childhood Education Guidance ____

Education Careers (NA)
- ____ Principles of Teaching (also @ AC) ____
- ____ Child & Adolescent Development (also @ AC) ____
- ____ Teaching & Learning ____

Welding Technology (NA)
- ____ Principles of Welding Technology ____ DC ____ Cert
- ____ Shield Metal Arc Welding ____ DC ____ Cert
- ____ Gas Welding Processes ____ DC ____ Cert

Criminal Justice (NA)
- ____ Principles of Criminal Justice ____ DC
- ____ Law Enforcement Fundamentals ____ DC
- ____ Corrections & Cultural Awareness ____ DC

Human Services (NA)
- ____ Principles of Human Service ____
- ____ Understanding Diversity ____
- ____ Relationships & Emotions ____

Computer Science (SA)
- ____ Principles of Computing ____ DC
- ____ opics in Computer Scienc ____ DC
- ____ Computer Science ____ DC

Computer Development (SA)
- ____ Principles of Computing ____ DC
- ____ Website & Database Development ____ DC
- ____ Software Development ____ DC

Fire and Rescue (SA)
- ____ Principles of Fire & Rescue ____ DC ____ Cert
- ____ Fire Fighting Fundamentals ____ DC ____ Cert
- ____ Advanced Fire Fighting ____ DC ____ Cert

Automotive Technology (SA)
- ____ Principles of Automotive Services ____ DC ____ Cert
- ____ Brake Systems ____ DC ____ Cert
- ____ Steering & Suspensions ____ DC ____ Cert

Precision Machining (SA)
- ____ Principles of Precision Machining ____ DC ____ Cert
- ____ Precision Machining Fundamentals ____ DC ____ Cert
- ____ Advanced Precision Machining ____ DC ____ Cert

Culinary Arts (Bluffton)
- ____ Principles of Culinary & Hospitality ____ DC ____ Cert
- ____ Nutrition (AC & Bluffton) ____ DC ____ Cert
- ____ Culinary Arts ____ DC ____ Cert

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English/Language Arts

3001-3002 English 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.

- **IDOE Course #1002**
- 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

3004-3005 Honors English 9

English 9, an integrated and accelerated 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. Since this is an honors course, students should expect a rigorous, challenging, and active experience.

- **IDOE Course #1002**
- Recommended Grade: 9
- Required Prerequisites: Students must earn a “B” or better in Honors English 8 or “A-” or better in English 8. Instructor approval.
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

Applied English 9

Applied English 9 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

•**IDOE Course #1002**
•Recommended Grade: 9, 10
•Required Prerequisites: none
•Applied Units: 4 units maximum
•Counts as an English/Language Arts Requirement for the Certificate of Completion

3101-3102 English 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.

•**IDOE Course #1004**
•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

3103-3104 Honors English 10

English 10, an integrated and accelerated 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. Since this is an honors course, students should expect a rigorous, challenging, and active experience.

•**IDOE Course #1004**
•Recommended Grade: 10, 11
•Required Prerequisites: none
•Recommended Prerequisites: Students must earn a “B” or better in Honors English 9 or “A-” or better in English 9. Instructor approval.
•Credits: 2 semester course, 1 credit per semester
•Fulfills an English/Language Arts requirement for all diplomas

Applied English 10

Applied English 10 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive

compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- **IDOE Course #1004**
- Recommended Grade: 9, 10
- Required Prerequisites: none
- Applied Units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

3301-3302 English 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.

- **IDOE Course #1006**
- 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

Applied English 11

Applied English 11 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- **IDOE Course #1006**
- Recommended Grade: 11,12
- Required Prerequisites: none
- Applied Units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

3401-3402 English 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.

- **IDOE Course #1008**
- 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

Applied English 12

Applied English 12 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- **IDOE Course #1006**
- Recommended Grade: 11,12
- Required Prerequisites: none
- Applied Units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion
- Course may be used for students in 18-22 year-old programming.

3116 Novels

Novels, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the distinct features of the novel, such as narrative and fictional elements of setting, conflict, climax, and resolution, and may be organized by historical periods, themes, or authors. Students examine novels of a given period, such as Victorian, the Modern Period, or Contemporary Literature, and what distinguishes novels from short stories, epics, romances, biographies, science fiction, and others. Students analyze novels by various important authors from the past and present or sets of novels from a specific era or across several eras. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- **IDOE Course #1042**
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

3117 Creative Writing

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

•**IDOE Course #1092**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: English 9, English 10, or teacher recommendation
•Credits: 1 semester course, 1 credit per semester
•Fulfills an English/Language Arts requirement for all diplomas

3701-3702 AP English Language and Composition

AP English Language and Composition 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 course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts. The course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. There is no prescribed sequence of study.

•**IDOE Course #1056**
•Recommended Grade: 11, 12 (College Board does not designate when this course should be offered).
•Required Prerequisites: none
•Recommended Prerequisites: English 9 and English 10 or teacher recommendation
•Students should be able to read and comprehend college-level texts and apply the conventions of standard written English in their writing.
•Credits: 2 semester course, 1 credit per semester. Max 2 credits
•Fulfills an English/language arts requirement for grades 11 or 12 for all diplomas

Dual Credit/Literary Interpretation

Advanced English/Language Arts, College Credit (ADV ENG CC) Advanced English/Language Arts, College Credit, is an advanced course based on the Indiana Academic Standards for English/Language Arts in grades 11 and 12. This course title covers any English language and composition advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school. ● Recommended Grade: 11, 12 ● Required Prerequisites: none ● Recommended Prerequisites: English 9 and English 10 or other literature, language, composition, and speech courses or teacher recommendation ● Credits: 1 semester course, 1 credit per semester. May be offered for successive semesters ● Fulfills an English/Language Arts requirement for all diplomas ● Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and/or taught by higher education faculty. ● Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school.

3404-3405 Dual Credit Composition/Communication

These courses are offered through Purdue University Fort Wayne. During the first semester, we will focus on ENG 13100 *Reading, Writing, and Inquiry I.* The second semester will focus on COM *114 Fundamentals of Speech Communication*. Using a workshop approach, these courses will focus on improving students as

communicators by emphasizing composition, verbal and nonverbal communication, listening, critical reading,and reflection. Students should check with their prospective universities for transferability of credits. Each course costs $75.

•Recommended Grade: 12
•Required Prerequisites: English 11
•Credits: 2 Semesters, 1 credit per semester
Course descriptions from the PFW Undergraduate Bulletin:

ENG W131 Reading, Writing, & Inquiry I

Practice in writing organized, well-developed, researched papers for a variety of purposes and audiences. Some analysis of prose style and structure.

COM 114 Fundamentals of Speech Communication

A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small-group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations.

FINE ARTS – ART & MUSIC

The Academic Honors Diploma requires two Fine Arts credits to graduate.

1450 Introduction to Two-Dimensional Art

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

•**IDOE Course #4000**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 semester course, 1 credit per semester
•Counts as an elective credit for all diplomas.
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

1301 Advanced Two-Dimensional 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.

•**IDOE Course #4004**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Two-Dimensional Art
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective credit for all diplomas.
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1453 Introduction to Three-Dimensional Art

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

•**IDOE Course #4002**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 semester course, 1 credit per semester
•Counts as a directed elective or elective credit for all diplomas.
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1303 Advanced Three-Dimensional 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.

•**IDOE Course #4006**
•Recommended Grade: 9, 10, 11, 12

•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized
•Counts as a directed elective or elective for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1216 Ceramics I

Ceramics is a course based on the Indiana Academic Standards for Visual Art. Students in ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and the firing processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

•**IDOE Course #4040**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Two-Dimensional Art, Introduction to Three-dimensional Art (L)
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective credit for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1226 Ceramics II

Students will conduct further studies on hand-building and begin to master skills on the potter's wheel. Students will be encouraged to experiment with hand-building and thrown pieces in combination. Emphasis will be placed on creating not only applied art pieces (functional), but on fine art works of art (artistic expression) as well. A continuation of developing visual thinking processes, the elements and principles of design, aesthetics, creativity, and craftsmanship will take place. Students will implement critical and analytical thinking skills as it applies to his or her own work and works by professional artists. Overall, course projects will cover clay fundamentals as well as provide the opportunity for projects to be differentiated according to each student's interests. A sketchbook is needed for this course.

•**IDOE Course #4040**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Two-Dimensional Art, Introduction to Three-dimensional Art (L)

•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective credit for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1416 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.

•IDOE Course #4064
•Recommended Grade: 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Two-Dimensional Art
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective credit for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1426 Painting II

Students will continue to study several different painting methods, techniques and styles using various types of paint such as tempera, acrylic, gauche, and watercolor. Students will utilize their skills of color theory to create thought provoking works of art. Emphasis will be placed on developing advanced visual thinking processes, the elements and principles of design, composition, creativity, craftsmanship, and aesthetics. Students will study different time periods in art history in order to learn from and be inspired by a range of artists. Students will implement critical and analytical thinking skills as it applies to his or her own work and works by professional artists. Overall, course projects will cover painting fundamentals as well as provide the opportunity for projects to be differentiated according to each student's interests. A sketchbook is needed for this course.

•IDOE Course #4064
•Recommended Grade: 10, 11, 12
•Required Prerequisites: Painting I
•Recommended Prerequisites: Introduction to Two-Dimensional Art
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective credit for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory Course

1228 Ceramics III, 1438 Drawing III, 1428 Painting III

Students who are seriously interested in the arts and who have taken the two previous corresponding courses may take this advanced course. Students will continue producing portfolio quality pieces with advanced skill and in-depth knowledge. Students will be expected to complete a series of independent projects as a means to enhance and build a well-rounded portfolio. Students will learn how to complete a digital portfolio, create an exhibit displaying their work, and conduct the necessary preparation for college and art scholarships. Students will also be expected to seek out and attend local art events to foster their learning about aesthetics and art history. Sketchbooks will be used not only to plan for projects, but also to document their learning, journal their reflections, and develop their art criticism writing skills.

•Recommended Grade: 11, 12
•Required Prerequisites: Two previous corresponding courses
•These are independent courses and must have instructor approval
•Credits: 1 semester course, 1 credit per semester.

3201-3202 Student Media: Yearbook

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

*A certain amount of work can be completed in the class, but extra hours beyond the school day are expected. Yearbook would be considered a co-curricular.

•IDOE Course #1086
•Recommended Grade: 9, 10, 11, 12
•Required 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 or in different media types where defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective for all diplomas
•Fulfills the Fine Arts requirement for the Core 40 with Academic Honors.
•NOTE: This is the designated School Media course, including newspaper and yearbook.

1951-1952 Advanced Concert 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..

•**IDOE Course #4170**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none (Middle School Band or Audition)
•Recommended Prerequisites: Beginning and Intermediate Concert Band (Middle School Band)
•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

1930-1935 Applied Music

Applied Music is based on the Indiana Academic Standards for High School Choral or Instrumental Music. Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music.

•**IDOE Course #4200**
•Recommended Grade: 9,10, 11, 12
•Required Prerequisites: none
•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

1841-1842 Beginning Chorus

Beginning Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. A broad spectrum of music literature is learned ranging from classical works, to Broadway and Show tunes. Other activities in the class create and develop understanding and appreciation of diverse styles of music, accomplished by listening, journal writing, and visual and hands-on experiences. Through this, students will develop appreciation for the intent of the composer and performer. Students may have the opportunity to experience live performances by professions during and outside of the school day. Students will be given the opportunity to perform outside of the school day.

•**IDOE Course #4182**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•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

1851-1852 Intermediate Chorus

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. A broad spectrum of music literature is learned ranging from classical works, to Broadway and Show tunes. Other activities in the class create and develop understanding and appreciation of diverse styles of music, accomplished by listening, journal writing, and visual and hands on experiences. Through this, students will develop appreciation for the intent of the composer and performer. Students may have the opportunity to experience live performances by professions during and outside of the school day. Students will be given the opportunity to perform outside of the school day.

•IDOE Course #4186
•Recommended Grade: 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Beginning Chorus
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory course

1861-1862 Advanced Chorus

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. A broad spectrum of music literature is learned ranging from classical works, to Broadway and Show tunes. Other activities in the class create and develop understanding and appreciation of diverse styles of music, accomplished by listening, journal writing, and visual and hands-on experiences. Through this, students will develop appreciation for the intent of the composer and performer. Students may have the opportunity to experience live performances by professions during and outside of the school day. Students will be given the opportunity to perform outside of the school day.

•IDOE Course #4188
•Recommended Grade: 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Beginning and Intermediate Chorus
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective for all diplomas

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

1801-1802 Choral Chamber Ensemble

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. This course meets during a regular class period, but requires extra hours beyond the school day. The choral chamber ensemble has an extensive schedule throughout the school year going to many of the local churches for Sunday evening performances. The music chosen for the groups listed above is intended to challenge and to motivate the members. Finally, Choral Chamber Ensemble (Swing Choir) is considered to be a yearlong course and may not be dropped at the semester, unless special arrangements are made with the director.

•IDOE Course #4180
•Recommended Grade: 10, 11, 12
•Required Prerequisites: none (Audition Required)
•Recommended Prerequisites: One year or two semesters of Beginning Chorus
•Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
•Counts as a directed elective or elective for all diplomas
•Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
•Laboratory course

1701-1702 Dance Choreography: Ballet, Modern, Jazz, or Ethnic-Folk

Dance Choreography is based on the Indiana Academic Standards for Dance. Learning activities in choreography are sequential and systematic and allow students to exhibit self- expression. A wide variety of materials and experiences are used in order to provide students with the knowledge, skills, and appreciation of the multi-styled and multicultural dance expressions. Choreographic activities provide students opportunities to participate in roles as a soloist, a choreographer or leader, and in a subject role. Students also explore a wide variety of choreographic philosophies as well as administrative and media skills necessary for the promotion and documentation of works to be performed. Students experience and learn to use appropriate terminology to describe, analyze, interpret, and critique dance compositions by professional individuals or companies.

•IDOE Course #4142
•Recommended Grade: 9,10, 11, 12
•Required Prerequisites: none
•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

1711-1712 Electronic Music

Electronic Music is based on the Indiana Academic Standards for High School Music Technology. Students taking this course are provided with a wide variety of activities and experiences to develop skills in using electronic media and current technology to perform, create, and respond to music. Students in this class will create jingles for commercials and advertisements, create music videos using various technology platforms, and incorporate digital music media for various projects.

- **IDOE Course #4202**
- Recommended Grade: 9,10, 11, 12
- Required Prerequisites: none
- 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

HEALTH & PHYSICAL EDUCATION

9100 Physical Education I

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

- **IDOE Course #3542**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Grade 8 Physical Education
- 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 restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent in activity.

9200 Physical Education 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.

- **IDOE Course #3544**
- 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

9206 Health and Wellness

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

- **IDOE Course #3506**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: 8th grade health education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills the Health and Wellness requirement for all diploma types

9516-9517 Weight Training: Elective
9324-9325 Advanced P.E.: Elective

Elective Physical Education, a course based on selected standards from Indiana's Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for

a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. 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 IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

- **IDOE Course #3560**
- Required Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 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.

MATHEMATICS

6101-6102 Algebra I

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

- **IDOE Course #2520**
- Recommended Grade: 8, 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Pre-Algebra
- Credits: 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement 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

Applied Algebra I

Applied Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of five strands: Numbers Sense; Expressions and Computation; Linear Equations; Inequalities and Functions; Systems of Equations and Inequalities and Quadratic and Exponential Equations and Functions. The strands are further developed by focusing on the content of the Algebra content connectors.

- **IDOE Course #2520**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 4 units maximum
- Fulfills a Mathematics requirement for the certificate of completion

6050-6051 Algebra 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 I. This course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

- **IDOE Course #2516**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for the General Diploma only or as an elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Algebra I Lab is 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.

6440-6441 Mathematics Lab

Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana's Academic Standards for Mathematics. 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.

- **IDOE Course #2560**
- 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.

6201-6202 Algebra II

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

- **IDOE Course #2522**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Algebra I
- Recommended Prerequisites: Algebra I, Geometry
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

6203-6204 Honors Algebra II

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

- **IDOE Course #2522**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Algebra I
- Recommended Prerequisites: Honors Geometry with a “B” or better or permission of department and administration.
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

6511 Pre-Calculus: Algebra

6513 (S1) Dual Credit: MA153/MA 154 PFW

Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides

students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- **IDOE Course #2564**
- Recommended Grade: 11, 12
- Required Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- Recommended Prerequisites: Honors Algebra II with a recommended "B" average or permission of department and administration.
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

6512 Pre-Calculus: Trigonometry

6514 (S2) Dual Credit: MA153/MA 154 PFW

Pre-Calculus: Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- **IDOE Course #2566**
- Recommended Grade: 11, 12
- Required Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- Recommended Prerequisites: Honors Algebra II with a recommended "B" average or permission of department and administration.
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

6501-6502 AP Calculus AB

6601-6602 Dual Credit: AP Calculus/MA165 PFW

AP Calculus AB is a course based on the content established and copyrighted by the College Board. 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.

- **IDOE Course #2562**
- Recommended Grade: 11,12
- Required Prerequisites: Pre-Calculus: with a B or higher or approval from department and administration
- 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

6517-6518 Finite Mathematics

6552-6553 Dual Credit: MA 135 Finite Math with Ivy Tech

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.

- **IDOE Course #2530**
- Recommended Grade: 11, 12
- Required Prerequisites: Algebra II
- Credits: 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

6301-6302 Geometry

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

- **IDOE Course #2532**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra I
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma

6321-6322 Honors Geometry

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

- **IDOE Course #2532**
- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: Must pass Algebra I with an "A-" average or permission of department and administration
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diploma

6451-6452 AP Statistics

6461-6462 Dual Credit: AP Statistics/STAT 125 PFW

AP Statistics is a course based on the content established and copyrighted by the College Board. The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

- **IDOE Course #2570**
- Recommended Grade: 11, 12
- Required Prerequisites: Algebra II with a B or higher or approval by the department and administration
- Credits: 2 semester course, 1 credit per semester.
- Counts as a mathematics course for all diplomas
- Qualifies as a quantitative reasoning course

MULTIDISCIPLINARY

3621-3622 Basic Skills Development

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.

- **IDOE Course #0500**
- Recommended Grade: 9, 10, 11, 12

•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 credit per semester up to 8 semesters, 8 credits maximum
•Counts as an elective for all diplomas

5901-5902 Cadet Teaching Experience

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

•**IDOE Course #0502**
•Recommended Grade: 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 credit per semester, up to 4 semesters, 4 credits maximum
•Counts as a directed elective or elective for all diplomas
•Cadet teaching experience for high school students is limited to grades kindergarten through grade nine

3215 College-Entrance Preparation

College-Entrance Preparation utilizes individual student score reports from the PSAT, PLAN, ACCUPLACER, or other formative assessments to prepare students for college readiness assessments. Based on individual student score reports, students should receive targeted instruction to strengthen their foundations in critical reading, writing, and mathematics. This course may also include college selection and application units, to better prepare students for overall college-readiness. Being "college ready" means being prepared for any post-secondary education or training experience, including readiness for study at two-year and four-year institutions leading to a post-secondary credential (i.e., a certificate, license, Associate's or Bachelor's degree). A college-ready student has the necessary English and mathematics skills to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework.

•**IDOE Course #0532**
•Recommended Grade: 10, 11
•Required Prerequisites: none
•Recommended Prerequisites: Algebra II or Analytical Algebra II
•Credits: 1 semester course, 1 credit per semester, 4 credits maximum
•Counts as an elective credit for all diplomas.
•The nature of this course allows for successive semesters of instruction provided progressively advanced proficiencies and content standards are utilized

2812 Community Service

Community Service is a course created by public law IC 20-30-14. Community service allows students in grades nine through twelve (HEA 1629) the opportunity to earn up to two high school credits for completion of approved community service projects or volunteer service that "relates to a course in which the student is enrolled or intends to enroll."

- **IDOE Course #0524**
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an Employability Requirement, Capstone Course or elective for the Certificate of Completion

2214 EDU 200 Exam Self As Teacher PFW

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

- **IDOE Course #7161**
- Recommended Grade(s): 11,12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas

3707-3708 Peer Tutoring

Peer Tutoring provides high school students with an organized exploratory experience to assist students in kindergarten through grade twelve (K-12), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences and to explore career options in related fields. Peer Tutoring experiences are preplanned by the teacher trainer and any cooperating teacher under whom the tutoring is to be provided. It must be conducted under the supervision of a licensed teacher. The course provides a balance of class work relating to the development of and use of: (1) listening skills, (2) communication skills, (3) facilitation skills, (4) decision-making skills, and (5) teaching strategies.

- **IDOE Course #0520**
- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an elective for all diplomas.

SCIENCE

7131-7132 Biology I

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

- **IDOE Course #3024**
- Recommended Grade: 9,10
- Required Prerequisites: Completion or current enrollment in Algebra 1
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills the Biology requirement for all diplomas

7136-7137 Honors Biology I

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

- **IDOE Course #3024**
- Recommended Grade: 9,10
- Required Prerequisites: Completion or current enrollment in Algebra 1
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills the Biology requirement for all diplomas

7210-7211 AP Biology

AP Biology 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 major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties.

- **IDOE Course #3020**
- Recommended Grade: 11, 12
- Required Prerequisites: B or better in Biology I and Chemistry I or approval from department and administration
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course
- Laboratory course

7301-7302 Chemistry I

Chemistry I is a course based on the following core topics: properties and states of matter; atomic structure and the Periodic Table; bonding and molecular structure; reactions and stoichiometry; behavior of gasses; thermochemistry; solutions; acids and bases. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, the Science and Engineering Practices (SEPS) and cross-cutting concepts.

- **IDOE Course #3064**
- Recommended Grade: 10,11
- Required Prerequisites: completion of Biology I and completion or current enrollment in Algebra II
- Recommended Prerequisites: Algebra II (completion or current enrollment)
- Credits: 2 semester course, 1 credit per semester
- Fulfills a science (physical) course requirement for all diploma
- Qualifies as a Quantitative Reasoning course

7311-7312 AP Chemistry

AP Chemistry is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics.

- **IDOE Course #3060**
- Recommended Grade: 11, 12
- Required Prerequisites: B or better in first year Chemistry and Biology I or approval of department and administration
- Recommended Prerequisites: Algebra II, Pre-Calculus Algebra/Pre-Calculus Trigonometry
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course
- Laboratory course

7010-7011 Environmental Science

Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students completing Environmental Science, acquire the essential tools for understanding the complexities of national and global environmental systems. Students enrolled in this course conduct in-depth scientific studies of environmental systems, flow of matter and energy, natural disasters, environmental policies, biodiversity, population, pollution, and natural and anthropogenic resource cycles. Cross-cutting concepts are an integral part of this course. Students formulate, design, and carry out laboratory and field investigations as an essential course component using the Science and Engineering Practices.

- **IDOE Course #3010**
- Recommended Grade: 9,10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a science (life) course requirement for all diploma

7151-7152 Integrated Chemistry-Physics

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

- **IDOE Course #3108**
- Recommended Grade: 11,12
- Required Prerequisites: successful completion of Biology 1
- Recommended Prerequisites: Algebra I
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a science (physical) course requirement for all diploma
- Qualifies as a Quantitative Reasoning course

7509-7510 Physics I

Physics I is a course focused on the following core topics: constant velocity; constant acceleration; forces; energy; linear momentum in one dimension; simple harmonic oscillating systems; mechanical waves and sound; light and geometric optics; simple circuit analysis, magnetism, and electromagnetism. Instruction will focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation using the Science and Engineering Practices (SEPS) and cross-cutting concepts.

- **IDOE Course #3084**
- Recommended Grade: 11, 12
- Required Prerequisites: B or better in Algebra II and Chemistry or approval from department and administration
- Recommended Prerequisites: None
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a science (physical) course requirement for all diplomas
- Qualifies as a Quantitative Reasoning course

7503-7504 AP Physics 1: Algebra-Based

AP Physics 1 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 Physics 1: Algebra-based is equivalent to a first-semester college course in algebra-based physics. The course includes Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power: and mechanical waves.

- **IDOE Course #3080**
- Recommended Grade: 11, 12
- Required Prerequisites: B or better in Algebra II and Chemistry or approval from department and administration.
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course

5221-5222 Animal Science

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.

- **IDOE Course #5008**
- Recommended Grade(s): 9, 10, 11, 12
- 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
- Dual credit option available

66055-66066 AP Computer Science Principles

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

- **IDOE Course #4801**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Computer Science, Algebra I
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

SOCIAL STUDIES

8623 Current Problems, Issues, and Events

Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems or issues selected will have contemporary historical significance and will be studied from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

•**IDOE Course #1512**
•Recommended Grade: none
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 semester course, 1 credit per semester. Course may be repeated for credit if the content of the course changes.
•Counts as an elective for all diplomas

8506 Economics

Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students 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.

•**IDOE Course #1514**
•Recommended Grade: 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 semester course, 1 credit per semester
•Counts as an elective for all diplomas
•Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
•Fulfills a Social Studies requirement for the General Diploma only
•Qualifies as a quantitative reasoning course

8620 Ethnic 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.

•**IDOE Course #1516**
•Recommended Grade: none
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 semester course, 1 credit
•Counts as an elective for all diplomas
•Must be offered at least once per school year

8306-8307 Geography and History of the World

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

- **IDOE Course #1570**
- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a Social Studies requirement for the General Diploma
- Counts as an elective for all diplomas
- Fulfills the Geography History of the World/World History and Civilization graduation requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

8309-8310 AP World History Modern

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.

- **IDOE Course #1612**
- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester
- 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
- Students who score a 3 or higher on the AP Exam at the end of the year can earn college credit based on college admission standards

8217 Indiana 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.

- **IDOE Course #1518**
- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- 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

8108 Intro to Psychology Dual Credit: PSYC 101 Ivy Tech

8106 Psychology (Non Dual Credit)

8107 Intro to Psychology Dual Enrollment: PSY 1700 IN Tech

Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas: History and Scientific Method, Biological Basis for Behavior, Development, Cognition, Personality and History and Scientific Method explores the history of psychology, the research methods used, and the ethical considerations that must be utilized. Biological Basis for Behavior focuses on the way the brain and nervous system function, including sensation, perception, motivation and emotion. Development analyzes the changes through one's life including the physical, cognitive, emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment explains at the approaches used to explain one's personality and the assessment tools used. Abnormal Psychology explores psychological disorders and the High School Course Titles and Descriptions 2022-2023 178 various treatments used for them. Socio-Cultural Dimensions of Behavior covers topics such as conformity, obedience, perceptions, attitudes and influence of the group on the individual. Psychological Thinking explores how to think like a psychologist and expand critical thinking skills needed in the day-to-day life of a psychologist.

Psychology is offered as Dual Credit through Ivy Tech. The course follows college standards and rigor. The course moves at a fast pace to cover all the course material in one semester. There will be regular tests and one research paper during the course. Students who earn a C or better earn Ivy Tech college credit.

- **IDOE Course #1532**
- Recommended Grade: 11,12
- Required Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

8606 Sociology (Non Dual Credit)

8607 Intro to Sociology Dual Enrollment: SS 2800 IN Tech

Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. Students describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry students examine society, group behavior, and social structures. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. The impact of social groups and institutions on group and individual behavior and the changing nature of society will be examined. Influences on group behavior and social problems are included in the course. Students also analyze the role of individuals in the community and social problems in today's world.

- **IDOE Course #1534**
- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

8214 Topics in History: Civil War

Topics in History provides students the opportunity to study specific historical eras, events, or concepts. Development of historical research skills using primary and secondary sources is emphasized. The course focuses on one or more topics or themes related to United States or world history. Examples of topics might include: (1) twentieth- century conflict, (2) the American West, (3) the history of the United States Constitution, and (4) democracy in history. This course explores the causes and effects of the American Civil War. Students will study key concepts and debates during the time; key battles waged, specific people involved, and key changes that came as a result. Students will learn through lectures, writing papers, participating in discussions, reading articles, conducting research, and completing individual and group projects. Above all, students will gain a greater understanding of the time and learn to appreciate the unique contributions made by the people who lived through it.

- **IDOE Course #1538**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: United States History or World History and Civilization
- Credits: 1 semester course, 1 credit per semester. This course may be repeated if the material in the course is different from one semester to the next. Topics in History can address different topics in World History or U.S. History.
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

8213 Topics in History: World War I & II

Topics in History provides students the opportunity to study specific historical eras, events, or concepts. Development of historical research skills using primary and secondary sources is emphasized. The course focuses on one or more topics or themes related to United States or world history. Examples of topics might include: (1) twentieth- century conflict, (2) the American West, (3) the history of the United States Constitution, and (4) democracy in history. This course explores the causes and effects of the two World Wars fought in the

20th Century. Students will study key concepts and debates during the time; key battles waged, specific people involved, and key changes that came as a result. Students will learn through lectures, writing papers, participating in discussions, reading articles, conducting research, and completing individual and group projects. Above all, students will gain a greater understanding of the time and learn to appreciate the unique contributions made by the people who lived through it.

•IDOE Course #1538
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: United States History or World History and Civilization •Credits: 1 semester course, 1 credit per semester. This course may be repeated if the material in the course is different from one semester to the next. Topics in History can address different topics in World History or U.S. History.
•Counts as an elective for all diplomas
•Fulfills course requirement for General Diploma

8215 Topics in Social Science: Social History of Rock & Roll

Topics in Social Science provides students with an opportunity for in-depth study of a specific topic, theme, or concept in one of the social science disciplines such as anthropology, archaeology, economics, geography, political science, psychology, or sociology. It is also possible to focus the course on more than one discipline. A subtitle should be included to give a clear idea of the course content. For example, a course focusing on a specific in political science might be entitled, "Topics in Social Science: Comparative Government." Courses taught under this title should emphasize scientific methods of inquiry and help students develop effective research and thinking skills.

This course seeks to balance understanding the development and significance of Rock & Roll within its historical and social environment, with a focus on listening to the music as the main mode of understanding. Prominent players and groups of each era will be covered, as well as the societal factors that shaped the many styles of rock and other popular music. Through listening, analysis, and discussion students will explore the music and culture surrounding rock music. Class assignments will be organized around song analysis, small group discussions, and in-class activities. Note: No prior musical experience (academic or otherwise) is required to participate in this course.

•IDOE Course #1550
•Recommended Grade: 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: US History
•Credits: 1 semester course, 1 credit per semester
•Counts as an elective for all diplomas
•Fulfills course requirement for General Diploma

8406 United States Government

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. Analysis of how the United States interacts with other nations and the government's role

in world affairs is included in this course. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

- **IDOE Course #1540**
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills Government requirement for all diplomas

8408 AP United States Government/Dual Credit

8412 United States Government Dual Credit: POLS 101 Ivy Tech

AP United States Government and Politics 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 U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they complete a political science research or applied civics project.

- **IDOE Course #1560**
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Students should be able to read a college level textbook and write grammatically correct sentences.
- Credits: 1 to 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills Government requirement for all diplomas

8001-8002 United States History

United States History is a two semester course that builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

- **IDOE Course #1542**
- Recommended Grade: none

•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 2 semester course, 1 credit per semester
•Fulfills the US History requirement for all diplomas

8004-8005 AP United States History

8007-8008 United States History Dual Credit: History 101 Ivy Tech

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.

•**IDOE #1542**
•Recommended Grade: none
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 2 semester course, 1 credit per semester
•Fulfills the US History requirement for all diplomas

WORLD LANGUAGE

Three years of Foreign Language are required for the Academic Honors Diploma or two years of two languages. Many colleges require a minimum of two years for admission.

4301-4302 German I

German I, a course based on Indiana's Academic Standards for World Languages, introduces students to effective strategies for beginning German language learning, and to various aspects of German-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 German-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 German language and culture outside of the classroom.

•**IDOE Course #2040**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none

•Credits: 2 semester course, 1 credit per semester
•Counts as a directed elective or elective for all diplomas
•Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

4401-4402 German II

German II, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for German 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 German-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 German language and culture outside of the classroom.

•**IDOE Course #2042**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: German I
•Recommended Prerequisites: none
•Credits: 2 semester course, 1 credit per semester
•Counts as a directed elective or elective for all diplomas
•Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

4501-4502 German III

German III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for German 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 German- 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 German language and culture outside of the classroom.

•**IDOE Course #2044**
•Recommended Grade: 9, 10, 11, 12
•Required Prerequisites: German I and II
•Recommended Prerequisites: none
•Credits: 2 semester course, 1 credit per semester
•Counts as a directed elective or elective for all diplomas
•Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

4601-4602 Spanish I

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

- **IDOE Course #2120**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

4701-4702 Spanish II

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

- **IDOE Course #2122**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Spanish I
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

4814-4815 Spanish III

Spanish III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to

derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation High School Course Titles and Descriptions 2022-2023 222 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.

- **IDOE Course #2124**
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Spanish I and II
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

Advanced World Language Dual Credit: Spanish 113-123
4703-4704 Spanish II
4803-4804 Spanish III

Advanced World Language, College Credit is a course covering (1) any advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school, or (2) any other post-secondary world language course offered for dual credit under the provisions of 511 IAC 6-10.

- **IDOE #2152**
- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Levels I, II, and III of the language
- Credits: 1 semester course, 2 credits per semester. May be offered for successive semesters
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma
- Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty.
- Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school.

CAREER & TECHNICAL EDUCATION (CTE) PROGRAMS FOR THE CLASS OF 2023 & 2024

Information: With the passage of the Graduation Pathways Model, students are now able to individualize their graduation requirements to align with their postsecondary goals. They can choose the options that best meet their postsecondary needs and aspirations.

This portion of the guide organizes our current courses under each CTE Pathway designed by the state. By completing one of the state designed pathways, students will become a "CTE Concentrator." A CTE Concentrator is one way of filling "Bucket 3" of the Pathway Model for the class of 2023 and 2024. To become

a CTE concentrator, a student must earn a C average in at least two, non-duplicative advanced courses (courses beyond an introductory course) within a particular program or program of study.

The non-duplicative advanced courses, that count towards the pathways, are listed under that pathway heading in the guide. Other similar elective courses (that are NOT considered a part of the pathway) are listed as elective courses under that Career Cluster Heading. Some electives are required pre-reqs for some of the advanced courses within the pathways. Even though these courses do not specifically count towards the pathway, they are still required courses. These are noted in the guide.

Required Classes to Graduate:

2207 Personal Financial Responsibility

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

- **IDOE Course #4540**
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester, 1 credit maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course

2056 Preparing for College and Careers

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

- **IDOE Course #5394**
- Recommended Grade(s): 9
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester, 2 credits maximum

•Only 1 credit may count toward CTE Concentrator Status for Perkins IV Pathways
•Counts as a directed elective or elective for all diplomas

CTE Electives:

2771-2772 Work Based Learning Capstone

2773 Work Based Learning Summer

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.

•**IDOE Course #5974**
•Recommended Grade(s): 11, 12
•Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway.
•Recommended Prerequisites: none
•Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum (15 hours classroom, 70 hours workplace)
•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
•Counts as a directed elective or elective for all diplomas

5120-5122 Cooperative Education

Cooperative Education is an approach to employment training that spans all career and technical education program areas through school-based instruction and on the job training. Time allocations are a minimum of fifteen hours per week of on-the-job training and approximately five hours per week of school-based instruction, focused on employability skills development. Additionally, all state and federal laws and regulations related to student employment and cooperative education must be followed.

•**IDOE Course #6162**
•Recommended Grade(s): 12
•Required Prerequisites: none
•Recommended Prerequisites: Preparing for College and Careers; two credits in a career and technical education course
•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

2801-2802 Career Exploration Internship

The Career Exploration Internship course is a paid or unpaid work experience in the public or private sector that provides for workplace learning in an area of student career interests. Unlike the work-based Learning capstone course in which students gain expertise in a specific occupation, the career exploration internship is intended to expose students to broad aspects of a particular industry or career cluster area by rotating through a variety of work sites or departments. In addition to their workplace learning activities, students participate in 1) regularly scheduled meetings with their classroom teacher, or 2) a regularly scheduled seminar with the teacher for the purpose of helping students make the connection between academic learning and their work-related experiences. Specific instructional standards tied to the career cluster or pathway and learning objectives for the internship must be written to clarify the expectations of all parties – the student, parent, employer, and instructor.

- **IDOE Course #0530**
- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Preparing for College and Careers; Career Information and Exploration
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas.

ADVANCED MANUFACTURING

Pathway: Machine Tech

5411-5412 Precision Machining I @ SA

Precision Machining I provides students with a basic understanding of the precision machining processes used in industry, manufacturing, maintenance, and repair. The course instructs the student in industrial safety, terminology, tools and machine tools, measurement, and layout. Students will become familiar with the setup and operation of power saws, drill presses, lathes, milling machines, grinders, and an introduction to CNC (computer numerically controlled) machines.

- **IDOE Course #5782**
- Recommended Grade(s): 10, 11, 12
- 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
- Qualifies as a quantitative reasoning course
- Dual credit & workplace certifications available

5421-5422 Precision Machining II @ SA

Precision Machining II is a more in-depth study of skills learned in Precision Machining I, with a stronger focus in CNC setup/operation/programming. Classroom activities will concentrate on precision set-up and inspection work as well as machine shop calculations. Students will develop skills in advanced machining and measuring parts involving tighter tolerances and more complex geometry. A continued focus on safety will also be included.

- **IDOE Course #5784**
- Recommended Grade(s): 11, 12
- Required Prerequisites: Precision Machining I
- 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
•Qualifies as a quantitative reasoning course
•DC & Certifications available

Pathway: Welding

5907-5908 Welding Technology I @ NA

Welding Technology I includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and Shielded Metal Arc welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Designer, Researcher or Engineer. Emphasis is placed on safety at all times.

OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

•IDOE Course #5776
•Recommended Grade(s): 11, 12
•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
•Schools wishing to offer this course for multiple credits should utilize Next Level Programs of Study courses.
•DC & Certifications available

5903-5904 Welding Technology II @ NA

Welding Technology II builds on the skills covered in Welding Technology I. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

•IDOE Course #5778
•Recommended Grade(s): 12
•Required Prerequisites: Welding Technology I
•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
•DC & Certifications available

AGRICULTURE

AG Electives:

5001-5002 Introduction to Agriculture, Food, and Natural Resources

Introduction to Agriculture, Food and Natural Resources is a one or two semester course that is highly recommended as a prerequisite to and as a foundation for all other agricultural classes. Through hands-on learning activities, students are encouraged to investigate areas of agriculture. Students are introduced to the following areas of agriculture: animal science, plant and soil science, food science, horticultural science, agricultural business management, natural resources, agriculture power, structure, and technology, careers in agriculture, leadership, and supervised agricultural experience. An activity and project-based approach is used along with team building to enhance the effectiveness of the student learning activities.

- **IDOE Course #5056**
- Required Grade(s): 8
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

5115-5116 Ag Mechanization & Technology Capstone

Agriculture Power, Structure, and Technology I is a yearlong course in which students develop an understanding of basic principles of selection, operation, maintenance, and management of agricultural production equipment. Topics covered include: concrete work, agricultural construction, plumbing and small engine repair, welding and electricity. Students are introduced to career opportunities in agricultural mechanization and related industries. Students in the class will work on the projects they have brought in as well as assisting the students in the 2-period Ag Power class

- **IDOE Course #7228**
- Recommended Grade(s): 11, 12
- Required Prerequisites: Ag Power, Structures and Technology; Ag Structures Fabrication and Design (-or- Precision Ag)
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits max
- Counts as a directed elective or elective credits for all diplomas

5221-5222 Animal Science

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.

- **IDOE Course #5008**
- Recommended Grade(s): 9, 10, 11, 12
- 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
•Dual Credit available

5201 Supervised Agricultural Experience (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.

•**IDOE Course #5228**
•Recommended Grade(s): 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
•Credits: 1 semester course, 1 credit per semester, 8 credits maximum
•Counts as a directed elective or elective for all diplomas.
•Curriculum content and standards-based plan for learning should not be duplicated when the course is taken for multiple semesters.

Pathway: Ag Power

5113-5114 Agriculture Power, Structure, and Technology

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.

•**IDOE Course #5088**
•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 2024-25 school year because this course is included in Perkins V pathways.
•Dual Credit available

5210-5211 Agribusiness Management

Agribusiness Management provides foundation concepts in agricultural business. It is a two semester course that introduces students to the principles of business organization and management from a local and global perspective, with the utilization of technology. Concepts covered in the course include accounting and record keeping, business planning and management, food and fiber, forms of business, finance, management, sales and

marketing, careers, and leadership development. Students will demonstrate principles and techniques for planning, development, application and management of agribusiness systems through a supervised agriculture experience (work based learning) programs.

- **IDOE Course #5002**
- Recommended Grade(s): 11, 12
- 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 an elective or directed elective for all diplomas.
- Qualifies as a quantitative reasoning course
- Dual Credit available

Pathway: Animal Systems

5223-5224 Advanced Life Science, Animals @ SA

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.

- **IDOE Course #5070**
- Recommended Grade(s): 11, 12
- Required Prerequisites: Animal 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
- Counts as an elective or directed elective for all diplomas.
- Fulfills a science requirement for all diplomas.
- Qualifies as a quantitative reasoning course
- Dual credit available

5210-5211 Agribusiness Management

Agribusiness Management provides foundation concepts in agricultural business. It is a two semester course that introduces students to the principles of business organization and management from a local and global perspective, with the utilization of technology. Concepts covered in the course include accounting and record keeping, business planning and management, food and fiber, forms of business, finance, management, sales and marketing, careers, and leadership development. Students will demonstrate principles and techniques for planning, development, application and management of agribusiness systems through a supervised agriculture experience (work based learning) programs.

- **IDOE Course #5002**
- Recommended Grade(s): 11, 12
- 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 an elective or directed elective for all diplomas.
- Qualifies as a quantitative reasoning course

•Dual credit available

Pathway: Landscape

5609-5610 Horticultural Science

Horticulture Science is a two semester course that provides students with a background in the field of horticulture. Coursework includes hands-on activities that encourage students to investigate areas of horticulture as it relates to the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Students are introduced to the following areas of horticulture science: reproduction and propagation of plants, plant growth, growth-media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest, greenhouse management, floral design, and pest management. Students participate in a variety of activities including extensive laboratory work usually in a school greenhouse.

•**IDOE Course #5132**
•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 2024-25 school year because this course is included in Perkins V pathways.
•Dual credit available

5600-5603 Landscape Management I

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

•**IDOE Course #5136**
•Recommended Grade(s): 11, 12
•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 an elective or directed elective for all diplomas
•Qualifies as a quantitative reasoning course
•Schools wishing to offer this course for multiple credits should utilize Next Level Programs of Study courses.
•Dual credit available

5606-5607 Landscape Management II

Landscape Management II is a two semester course that extends the content and skills of Landscape Management and provides the student with in-depth exploration of the many career opportunities in the diverse field of landscape management. Students continue to build knowledge and skill in the procedures used in landscape planning and design using current industry standards and practices. Extended laboratory experiences

include application of the principles and procedures involved especially in the Midwest and Great Lakes areas with landscape construction; turf management; scheduling and oversight of landscape maintenance; weed control; non-pathogenic and disease prevention, diagnosis, and treatment; communications; management skills necessary in landscaping operations; and the use and maintenance of equipment utilized by landscapers. Students should also participate in leadership development, supervised agricultural experience and career exploration activities in the area of landscape management.

- **IDOE Course #5137**
- Recommended Grade(s): 12
- Required Prerequisites: Landscape Management I
- Recommended Prerequisites: Plant and Soil Science; or Horticulture Science
- Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
- Counts as an elective or directed elective for all diplomas
- Qualifies as a quantitative reasoning course
- Dual credit available

ARCHITECTURE & CONSTRUCTION

Construction Electives:

5349-5350 Principles of Construction Trades @ AC & NA

Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic safety. Additionally, students will study the roles of individuals and companies within the construction industry and reinforce mathematical and communication skills necessary to be successful in the construction field.

- **IDOE Course #7130**
- Recommended Grade(s): 9, 10, 11, 12
- 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

Pathway: Construction

5331-5332 Construction Trades I @ NA

Construction Trades I classroom and laboratory experiences involve the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of construction, future trends and career options, reading technical drawings and transforming those drawings into physical structures are covered. The relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Students will examine the design and construction of floor and wall systems and develop layout and floor construction skills. Blueprints and other professional planning documents will also be covered. Students will develop an understanding and

interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration Safety and Health Standards for the construction industry.

- **IDOE Course #5580**
- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Construction
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Schools wishing to offer this course for multiple credits should utilize Next Level Programs of Study courses.
- Dual credit available

5337-5338 Construction Trades II @ NA

Construction Trades II builds on the formation, installation, maintenance, and repair skills learned in Construction Trades I. Information on materials, occupations, and professional organizations within the industry will be covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will also develop exterior finishing competencies. The course includes instruction on the installation of cornices, windows, doors and various types of sidings currently used in industry. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing.

- **IDOE Course #5578**
- Recommended Grade(s): 12
- Required Prerequisites: Construction Trades I
- 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
- Qualifies as a quantitative reasoning course.
- Dual credit available

ARTS, AV TECH, & COMMUNICATIONS

Pathway: Radio & TV

5751-5752 Radio and Television I @ NA

Radio and Television I focuses on communication, media and production. Emphasis is placed on career opportunities, production, programming, promotion, sales, performance, and equipment operation. Students will also study the history of communication systems as well as communication ethics and law. Students will develop oral and written communication skills, acquire software and equipment operation abilities, and integrate teamwork skills. Instructional strategies may include a hands-on school-based enterprise, real and/or simulated occupational experiences, job shadowing, field trips, and internships.

- **IDOE Course #5986**
- Recommended Grade(s): 11,12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Communications

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

5753-5754 Radio and Television II @ NA

Radio and Television II prepares students for admission to television production programs at institutions of higher learning. Students train on professional equipment creating a variety of video projects. During this second-year program students integrate and build on first-year curriculum while mastering advanced concepts in production, lighting and audio.

•IDOE Course #5992
•Recommended Grade(s): 12
•Required Prerequisites: Radio and Television I
•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

BUSINESS MGT, MARKETING, & FINANCE

Business Elective:

2013-2014 Accounting Fundamentals

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.

•IDOE Course #4524
•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
•The Principles course is not required until the 2024-2025 school year because this course is included in Perkins V pathways.

Pathway: Accounting

2311-2312 Principles of Business Management

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

•**IDOE Course #4562**
•Recommended Grade(s): 9, 10, 11
•Required Prerequisites: none
•Recommended Prerequisites: Digital Applications and Responsibility
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts as a directed elective or elective for all diplomas

2663-2664 Advanced Accounting

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for various forms of business ownership using double-entry accounting covered in Accounting Fundamentals, including an emphasis on payroll accounting. Topics covered include calculating gross pay, withholdings, net pay, direct deposits, journalizing payroll transactions and preparing individual earnings records and payroll registers. Emphasis is placed on applying Generally Accepted Accounting Principles through hands-on practice with popular commercial accounting software packages that are currently used in business.

•**IDOE Course #4522**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Business Management; Accounting Fundamentals
•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
•Qualifies as a quantitative reasoning course

Culinary Arts

Pathway: Hospitality and Tourism

5458-5459 Principles of Culinary and Hospitality

Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment.

•**IDOE Course Code #7173**
•Recommended Grade(s): 9, 10, 11
•Required Prerequisites: : None
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts Toward: Counts as a Directed Elective or Elective for all diplomas

EDUCATION & TRAINING

Pathway: Early Childhood

5013-5014 Early Childhood Education I @ NA

Early Childhood Education prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of suggested topics. Major course topics include: career paths in early childhood education, promoting child development and learning, building family and community relationships, observing, documenting, and assessing to support young children and families, using developmentally effective approaches, using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula, and services available to young children. Students examine basic principles of child development, importance of family, licensing, and elements of quality care of young children. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings, developmentally appropriate practices of guidance and discipline, application of basic health, safety, and nutrition principles when working with children, an overview of management and operation of licensed child care facilities or educational settings, child care regulations and licensing requirements, and employability skills. Intensive experiences in one or more early childhood settings, resumes, and career portfolios are required components. A standards-based plan for each student guides the laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Early Childhood Education teacher. Student laboratory/field experiences may be either school- based or "on-the-job" in community-based early childhood education centers or in a combination of the two. Dual credit agreements with post-secondary programs are encouraged.

- **IDOE Course #5412**
- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Nutrition and Wellness; Child Development; and Advanced Child Development
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

5017-5018 Early Childhood Education II @ NA

Early Childhood Education II prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. ECE II is a sequential course that builds on the foundational knowledge and skills of Early Childhood Education I, which is a required prerequisite. In ECE II students further refine, develop, and document the knowledge, skills, attitudes, and behaviors gained in the foundational course. Major topics of ECE II include: overview of the Child Development Associate (CDA) credential, safe and healthy learning environment, physical and intellectual competence, social and emotional development, relationships with families, program management, and professionalism. The course standards parallel the expectations and documentation required for Child Development Associate (CDA) credentialing. These include rigorous levels of self-critique and reflection, performance assessments by instructors, parents, and other professionals, comprehensive assessment of knowledge through a standardized exam, and other professional documentation. Extensive experiences in one or more early childhood education settings are required: a minimum total of 480 hours must be accrued in ECE I and ECE II. These experiences may be either school-based or "on-the-job" in community-based early childhood education centers, or in a combination of the two. A standards-based plan for each student guides the

early childhood education experiences. Students are monitored in these experiences by the Early Childhood Education II teacher. Dual credit agreements with post-secondary programs are encouraged.

- **IDOE Course #5406**
- Recommended Grade(s): 12
- Required Prerequisites: Early Childhood Education I
- 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

Pathway: Education Careers

Principles of Teaching

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

- **IDOE Course #7161**
- Recommended Grade(s): 9, 10, 11
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts Toward: Counts as a Directed Elective or Elective for all diplomas

5010-5011 Education Professions I @ NA

Education Professions I provides the foundation for employment in education and related careers and prepares students for study in higher education. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom settings and career portfolios are required components. A standards-based plan guides the students 'field experiences. Students are monitored in their field experiences by the Education Professionals I teacher. Articulation with post-secondary programs is encouraged.

- **IDOE Course #5408**
- Recommended Grade(s): 11,12
- Required Prerequisites: none
- Recommended Prerequisites: Nutrition and Wellness; Child Development, Advance Child Development; and Interpersonal Relationships
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

5019-5020 Education Professions II @ NA

Education Professions II prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach that utilizes higher

order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Extensive field experiences in one or more classroom settings, resumes, and career portfolios are required components. A standards-based plan guides the students 'field experiences. Students are monitored in their field experiences by the Education Professions II teacher. Articulation with post-secondary programs is encouraged.

- **IDOE Course #5404**
- Recommended Grade(s): 12
- Required Prerequisites: Education Professions I
- 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

FAMILY & CONSUMER SCIENCE

FACS Electives:

0636-0637 Child and Adolescent Development

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

- **IDOE Course #7157**
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Teaching
- 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 diploma

0608-0609 Nutrition @ AC & Bluffton

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

- **IDOE Course #7171**
- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: Principles of Culinary and Hospitality
- 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

0506 Interpersonal Relationships

Interpersonal Relationships is an introductory course that is especially relevant for students interested in careers that involve interacting with people. It is also valuable for all students as a life foundation and academic enrichment. This course addresses knowledge and skills needed for positive and productive relationships in career, community, and family settings. Major course topics include communication skills; leadership, teamwork, and collaboration; conflict prevention, resolution, and management; building and maintaining relationships; and individual needs and characteristics and their impacts on relationships. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of interpersonal relationships. Direct, concrete language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides a foundation for continuing and post-secondary education for all career areas that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, and the general public.

•**IDOE Course #5364**
•Recommended Grade(s): 9, 10, 11, 12
•Required Prerequisites: NONE
•Recommended Prerequisites: none
•Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum

HEALTH SCIENCE

Health Science Electives:

5146-5147 Principles of Biomedical Sciences

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

NOTE: This course aligns with the PLTW Principles of Biomedical Sciences curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5218**
•Recommended Grade(s): 9
•Required Prerequisites: Biology I or concurrent enrollment in Biology I is required
•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 requirement for all diplomas

Pathway: Biomed

5148-5149 Human Body Systems

Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions.

NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5216**
•Recommended Grade(s): 10
•Required Prerequisites: Principles of Biomedical Sciences
•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 requirement for all diplomas

5162-5163 Medical Interventions

Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning High School Course Titles and Descriptions 2022-2023 300 approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments.

NOTE: This course aligns with the PLTW Medical Interventions curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5217**
•Recommended Grade(s): 11
•Required Prerequisites: Principles of Biomedical Sciences
•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 requirement for all diploma types

5164-5165 Biomedical Innovations

Biomedical Innovation is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st Century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. Students have the opportunity to work on an independent project and may work with a mentor or advisor from a healthcare or postsecondary industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

NOTE: This course aligns with the PLTW Biomedical Innovations curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5219**
•Recommended Grade(s): 12
•Required Prerequisites: Principles of Biomedical Sciences; Human Body Systems or Anatomy and Physiology; Medical Interventions
•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

Pathway: Nursing

5503- 5504 Health Science Education I @ NA

Health Care Specialties is the first section of a two-year pathway and is intended for juniors who are interested in health occupations. The class consists of lectures, labs and clinical work. The course includes the study of anatomy and physiology, medical terminology and introduction to health careers. Students learn the skills, attitudes, knowledge, and understanding necessary to enter the medical field. This course teaches A & P, but is not Dual Credit.

•**IDOE Course #5282**
•Recommended Grade: 11, 12
•Required Prerequisites: Biology I and Chemistry I
•Recommended Prerequisites: none
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Dual credit & Certifications available

5506-5507 Health Careers II @ NA

Health Science is intended for seniors who are interested in health occupations. The class consists of lectures, labs and clinical work. The clinical time may take place at a variety of locations within the county during the second semester. Students learn the skills, attitudes, knowledge, and understanding necessary to enter the medical field.

•**IDOE Course #5284**
•Recommended Grade: 12
•Required Prerequisites: Health Science Education I
•Recommended Prerequisites: none
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Dual credit & Certifications available 77

5513-5514 Student To Work Health Science @ NA

Students will be given the opportunity to job shadow CNA, maintenance, dietary, housekeeping and admitting through Adams Health Network; students will then have the choice of pursuing a certification in one of those areas. This course will be a combination of classroom work and clinicals throughout the school year.

•Recommended Grade: 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 4 credits maximum
•Dual credit & Certifications available

HOSPITALITY & HUMAN SERVICES

Pathway: Culinary Arts

5454-5455 Culinary Arts and Hospitality I @ Bluffton

Culinary Arts and Hospitality I prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; ; apply basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Work based experiences in the food industry are strongly encouraged. A standards-based plan guides the students 'laboratory experiences. Students are monitored in their laboratory experiences by the Culinary Arts and Hospitality teacher. Articulation with post-secondary programs is encouraged.

- **IDOE Course #5440**
- Recommended Grade(s): 11,12
- Required Prerequisites: none
- Recommended Prerequisites: Nutrition and Wellness; Introduction to Culinary Arts and Hospitality
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- Counts as a directed elective or elective for all diplomas
- Dual credit & Certifications available

5456-5457 Culinary Arts and Hospitality II @ Bluffton

Culinary Arts and Hospitality II: Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course includes: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Advanced Culinary Arts builds upon skills and techniques learned in Culinary Arts and Hospitality Management, which must be successfully completed before enrolling in this advanced course. Work based experiences in the food industry are strongly encouraged. A standards-based plan guides the students 'laboratory and work based experiences. Students are monitored in these experiences by the Advanced Culinary Arts teacher. Articulation with post-secondary programs is encouraged.

- **IDOE Course #5346**

•Recommended Grade(s): 11, 12
•Required Prerequisites: Culinary Arts and Hospitality I
•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 diploma
•Dual credit & Certifications available

Pathway: Human & Social Services

5057-5058 Human and Social Services I @ NA

Human and Social Services I is an introductory/exploratory course for students interested in careers in human and community services and other helping professions. Areas of exploration include family and social services, youth development, and adult and elder care, and other for profit and non-profit services. This project-based course will help students integrate higher order thinking, communication, leadership, and management processes to conduct investigations in human and social services at the local, state, national, or global/world level. Research and development, interdisciplinary projects, and/or collaboration with post-secondary faculty, community agencies or organizations, or student organizations are appropriate approaches. Students will be introduced to human and social services professions through presentations from a variety of guest speakers, job shadowing, field trips and introductory and exploratory field experiences. Case studies, role play, and application of professional codes of ethics will be utilized reflecting the challenges of working in diverse communities. Service learning experiences are highly recommended. Achievement of applicable FACS, academic, and employability competencies will be documented through a student portfolio.

•IDOE Course #5336
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Nutrition and Wellness; Interpersonal Relationships; Child Development; or Human Development and Wellness
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts as a directed elective or elective for all diplomas

5059-5060 Human and Social Services II @ NA

Human and Social Services II is a core component of the Family and Human Services pathway. The course prepares students for occupations and higher education programs related to assisting individuals and families in meeting their potential. Through work based experiences, students apply the knowledge and skills developed in the Human Services Foundations course. Concentration areas include family and social services, youth development, and adult and elder care. Ethical, legal, and safety issues, as well as helping processes and collaborative ways of working with others, will be addressed. Learning experiences will involve analysis of the influence of culture and socioeconomic factors on individual choices and opportunities, service delivery models, and theoretical perspectives. Intensive laboratory/field experiences in one or more human social service agencies are a required component of this course. Student laboratory/field experiences may be either school-based, if available, or “on the job” in community-based agencies, or a combination of the two. A standards-based plan guides the students ’laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Human and Social Services II teacher. Achievement of applicable standards will be documented through a student portfolio. Articulation with post-secondary programs is encouraged.

•IDOE Course #5462

•Recommended Grade(s): 11, 12
•Required Prerequisites: Human and Social Services I
•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

PUBLIC SAFETY

Pathway: Criminal Justice

5631-5632 Criminal Justice I @ NA

Criminal Justice I Introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. This course provides the opportunity for dual credit for students who meet post-secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

•**IDOE Course #5822**
•Recommended Grade(s): 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Interpersonal Relationships
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts as a directed elective or elective for all diplomas
•Dual credit available

5633-5634 Criminal Justice II @ NA

Criminal Justice II introduces students to concepts and practices in traffic control as well as forensic investigation at crime scenes. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry as well as collection of evidence, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information-gathering activities and chain of custody procedures will also be reviewed. Current trends in criminal justice and law enforcement will also be covered.

•**IDOE Course #5824**
•Recommended Grade(s): 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Criminal Justice I
•Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
•Counts as a directed elective or elective for all diplomas
•Dual credit available

Pathway: Fire & Rescue

5828-5829 Fire and Rescue I @ SA

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

- **IDOE Course #5820**
- Recommended Grade(s): 11, 12
- 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
- Dual credit & Certifications available

5773-5774 Fire and Rescue II @ SA

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

- **IDOE Course #5826**
- Recommended Grade(s): 12
- Required Prerequisites: Fire and Rescue I
- 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
- Dual credit & Certifications available

STEM

STEM Elective:

5140-5141 Introduction to Engineering Design

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

•**IDOE Course #4802**
•Recommended Grade(s): 9, 10, 11, 12
•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.
•Dual credit available

Pathway: Engineering

5142-5143 Principles of Engineering

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. 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.

•**IDOE Course #5644**
•Recommended Grade(s): 10, 11, 12
•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
•Qualifies as a quantitative reasoning course
•Dual credit available

5153-5154 Aerospace Engineering

Aerospace Engineering should provide students with the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evolution of aircraft, space vehicles and their operating systems. Emphasis should include investigation and research on flight characteristics, analysis of aerodynamic design, and impact of this technology on the environment. Classroom instruction should provide creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of air and space vehicles, their systems, and launching, guidance and control procedures. NOTE: This course aligns with the PLTW Aerospace Engineering curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5518**

•Recommended Grade(s): 10, 11, 12
•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
•Qualifies as a quantitative reasoning course

5167-5168 Civil Engineering and Architecture

Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design. NOTE: This course aligns with the PLTW Civil Engineering and Architecture curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5650**
•Recommended Grade(s): 11, 12
•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
•Qualifies as a quantitative reasoning course
•Dual credit available

Pathway: Computer Science/Programming

5003-5004 Computer Science I @ SA

Computer Science I introduces the structured techniques necessary for the efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. The fundamental

concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce accurate outputs. Topics include program flow-charting, pseudo coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, control breaks, and offers students an opportunity to apply skills in a laboratory environment.

•**IDOE Course #4801**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Computer Science
•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

•Qualifies as a quantitative reasoning course
• DC available

5007-5008 Computer Science II @ SA

Computer Science II explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. 67 Indiana Department of Education High School Course Titles and Descriptions Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers, and data file access methods. An emphasis on logical program design using a modular approach, which involves task-oriented program functions.

•IDOE Course #5236
•Recommended Grade(s): 11, 12
•Required Prerequisites: Computer Science I
•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
•Qualifies as a quantitative reasoning course
• DC available

TRANSPORTATION

Pathway: Auto Tech

5351-5352 Automotive Services Technology I @ SA

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

•IDOE Course #5510
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Transportation
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

•Counts as a directed elective or elective for all diplomas
•DC & Certifications available

5451-5452 Automotive Services Technology II @ SA

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

•**IDOE Course #5546**
•Recommended Grade(s): 11, 12
•Required Prerequisites: Automotive Services Technology I
•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
•DC & Certifications available

CAREER & TECHNICAL EDUCATION (CTE) PROGRAMS FOR 2025 & BEYOND

Information: With the Next Level Programs of Study (NLPS), students are now able to individualize their graduation requirements to align with their postsecondary goals. They can choose the options that best meet their postsecondary needs and aspirations.

This portion of the guide organizes our current courses under each CTE Pathway designed by the state. By completing one of the state designed pathways, students will become a "CTE Concentrator." A CTE Concentrator is one way of filling "Bucket 3" of the Pathway Model. To become a CTE concentrator, a student must earn a C average in all courses within the pathway of that particular program or program of study.

The courses that count towards the pathways, are listed under that pathway heading in the guide. Other similar, elective courses (that are NOT considered a part of the pathway) are listed as elective courses under that Career Cluster Heading. At this time, all required pre-requisites can be considered "co-requisites".

Required Classes to Graduate:

2207 Personal Financial Responsibility

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

- **IDOE Course #4540**
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester, 1 credit maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course

2056 Preparing for College and Careers

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests,

values, and goals, examining multiple life roles and responsibilities as individuals and family members, planning and building employability skills, transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real world experiences, is recommended.

•**IDOE Course #5394**
•Recommended Grade(s): 9
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 1 or 2 semester course, 1 credit per semester, 2 credits maximum
•Only 1 credit may count toward CTE Concentrator Status for Perkins IV Pathways
•Counts as a directed elective or elective for all diplomas

CTE Electives:

5201 Supervised Agricultural Experience (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.

•**IDOE Course #5228**
•Recommended Grade(s): 9, 10, 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
•Credits: 1 semester course, 1 credit per semester, 8 credits maximum
•Counts as a directed elective or elective for all diplomas.
•Curriculum content and standards-based plan for learning should not be duplicated when this course is taken for multiple semesters.

5115-5116 Agribusiness Capstone AG BUS CAP

Agribusiness Management Capstone course is a two semester course that introduces students to the Principles of agribusiness management and leadership from a local and global perspective, with the utilization of technology. The course will help students build a strong knowledge base of the agribusiness industry as they

study agribusiness types, communications, agricultural law, leadership, and teamwork, ethics, and agricultural economics. Additionally, students will understand the role of selling in the agricultural economy, stressing the

points and terminology necessary in today's agriculture. Students will demonstrate principles and techniques for planning, development, application and management of agribusiness systems through project-based learning and a supervised agriculture experience (work-based learning) programs.

•IDOE Course #7238
•Recommended Grade(s): 11, 12
•Required Prerequisites: Any Agriculture Concentrator Sequence
•Recommended Prerequisites: none
•Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits max
•Counts as a directed elective or elective for all diplomas

2771-2772 Work Based Learning Capstone

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.

•IDOE Course #5974
•Recommended Grade(s): 11, 12
•Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway.
•Recommended Prerequisites: none
•Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum (15 hours classroom, 70 hours workplace)
•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
•Counts as a directed elective or elective for all diplomas
•No longer counts toward concentrator status.
•Counts as a directed elective or elective for all diplomas
•Cadet teaching experience for high school students is limited to grades kindergarten through grade nine

5120-5122 Cooperative Education

Cooperative Education is an approach to employment training that spans all career and technical education program areas through school-based instruction and on the job training. Time allocations are a minimum of fifteen hours per week of on-the-job training and approximately five hours per week of school-based

instruction, focused on employability skills development. Additionally, all state and federal laws and regulations related to student employment and cooperative education must be followed.

•IDOE Course #6162
•Recommended Grade(s): 12
•Required Prerequisites: none
•Recommended Prerequisites: Preparing for College and Careers; two credits in a career and technical education course
•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
•Course is funded at a flat rate of $150; No longer counts toward concentrator status

ADVANCED MANUFACTURING

Pathway: Industrial Technical Maintenance: Mechanical

5101-5102 Principles of Advanced Manufacturing

Principles of Advanced Manufacturing is a course that includes classroom and laboratory experiences in Industrial Technology and Manufacturing Trends. Domains include safety and impact, manufacturing essentials, lean manufacturing, design principles, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

•IDOE Course #7108
•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

5103-5104 Advanced Manufacturing Technology

Advanced Manufacturing Technology introduces manufacturing processes and practices used in manufacturing environments. The course also covers key electrical principles, including current, voltage, resistance, power, inductance, capacitance, and transformers, along with basic mechanical and fluid power principles. Topics include, types of production, production materials, machining and tooling, manufacturing planning, production control, and product distribution will be covered. Students will be expected to understand the product life cycle from conception through distribution. This course also focuses on technologies used in production processes. Basic power systems, energy transfer systems, machine operation and control will be explored. This course will use lecture, lab, online simulation and programming to prepare students for Certified Production Technician Testing through Manufacturing Skill Standards Council (MSSC).

•IDOE Course #7103
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Advanced 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

5105-5106 Industrial Maintenance Fundamentals

Industrial Maintenance Fundamentals introduces students to fundamental Welding and Machining skills. Students will be introduced to basic skills in welding, cutting and brazing, and machine tooling that are applicable in a wide variety of trade professions. Specifically, students will learn safe practices in oxy-fuel and Arc welding processes along with experience in using turning, milling, and grinding applications.

•IDOE Course #7104
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Advanced Manufacturing; Advanced Manufacturing 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

5107-5108 Industrial Maintenance Capstone

The Industrial Maintenance Capstone course examines the procedures for the removal, repair and installation of machine components. The methods of installation, lubrication practices, and maintenance procedures for industrial machinery are analyzed. Additionally, the course may cover the mechanical components and electrical drives in a complex mechatronic system. By understanding the inner workings of the complete system, students will learn and apply troubleshooting strategies to identify, localize and (where possible) to correct malfunctions. Preventive maintenance of mechanical elements and electrical drives as well as safety issues within the system will be discussed. This course will use lecture, lab, online simulation and programming to prepare students for C-210 Mechanical Power Systems I Certification through Smart Automation Certification Alliance (SACA).

•IDOE Course #7261
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Advanced Manufacturing; Advanced Manufacturing Technology; Industrial Maintenance Fundamentals
•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

Pathway: Machine Tech

Principles of Precision Machining *@ SA*

Principles of Precision Machining will provide students with a basic understanding of the processes used to produce industrial goods. Classroom instruction and labs will focus on shop safety, measurement, layout, blueprint reading, shop math, metallurgy, basic hand tools, milling, turning, grinding, and sawing operations.

This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Measurement, Materials, & Safety certification that may be required for college dual credit

•IDOE Course #7109
•Recommended Grade(s): 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
•DC & Certifications available

Precision Machining Fundamentals @ *SA*

Precision Machining Fundamentals will build a foundation in conventional milling and turning. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations. Lab work will consist of the setup and operation of vertical and/or horizontal milling machines and engine lathes. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Milling I certification that may be required for college dual credit.

•IDOE Course#7105
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Precision Machining
•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
•Qualifies as a quantitative reasoning course
•It is recommended that Precision Machining program of study be taught in a 2-3 period block of time. VU dual credit requires that Precision Machining Fundamentals and Advanced Precision Machining be completed concurrently
•DC & Certifications available

Advanced Precision Machining @ *SA*

Advanced Precision Machining will build upon the Turning and Milling processes learned in Precision Machining Fundamentals and will build a foundation in abrasive process machines. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations associated with abrasives. Lab work will consist of the setup and operation of bench grinders and surface grinders. Additionally, students will be introduced to Computerized Numeric Controlled (CNC) setup, operations and programming. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Grinding I certification that may be required for college dual credit.

•IDOE Course #7107
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Precision Machining; Precision Machining Fundamentals
•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
•Qualifies as a quantitative reasoning course

•It is recommended that Precision Machining program of study be taught in a 2-3 period block of time.
•VU dual credit requires that Precision Machining Fundamentals and Advanced Precision Machining be completed concurrently
•DC & Certifications available

Pathway: Welding

Principles of Welding Technology @ NA

Principles of Welding Technology includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and basic welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Designer, Researcher, or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for postsecondary and career success.

•**IDOE Course #7110**
•Recommended Grade(s): 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
•DC & Certifications available

Shielded Metal Arc Welding @ NA

Shielded Metal Arc Welding involves the theory and application of the Shielded Metal Arc Welding process. Process theory will include basic electricity, power sources, electrode selection, and all aspects pertaining to equipment operation and maintenance. Laboratory welds will be performed in basic weld joints with a variety of electrodes in the flat, horizontal and vertical positions. Emphasis will be placed on developing the basic skills necessary to comply with AWS industry standards.

•**IDOE Course #7111**
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Welding 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
•DC & Certifications available

Gas Welding Processes @ NA

Gas Welding Processes is designed to cover the operation of Gas Metal Arc Welding (MIG) equipment. This will include all settings, adjustments and maintenance needed to weld with a wire feed system. Instruction on both short-arc and spray-arc transfer methods will be covered. Tee, lap, and open groove joints will be done in all positions with solid, flux core, and aluminum wire. Test plates will be made for progress evaluation. Schools may choose to offer the course as a comprehensive MIG Welding course or a combination of introductory MIG and TIG Welding operations.

•**IDOE Course #7101**

•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Welding 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
•Schools may choose to cover both introductory MIG and TIG Welding. This configuration is available for dual credit through ITCC.
•DC & Certifications available

AGRICULTURE

Pathway: AG Power

50561-50562 Principles of Agriculture

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.

•IDOE Course #7117
•Recommended Grade(s): 9, 10, 11, 12
•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
•DC & Certifications available

Agriculture Power, Structure, and Technology

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.

•IDOC Course #5088
•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
•DC & Certifications available

Agriculture Structures Fabrication and Design

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.

•**IDOE Course #7112**
•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

Pathway: Animal Systems

50561-50562 Principles of Agriculture

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.

•**IDOE Course #7117**
•Recommended Grade(s): 9, 10, 11, 12
•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
•DC available

5221-5222 Animal Science

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.

•**IDOE Course #5008**
•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
•DC available

5223-5224 Advanced Life Science: Animals @ SA

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.

•**IDOE Course #5070**
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Agriculture; Animal Science*
•Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources; Biology; Chemistry; Integrated Chemistry Physics
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts as an elective or directed elective for all diplomas.
•Fulfills a science requirement for all diplomas.
•Qualifies as a quantitative reasoning course
•DC available

Pathway: Landscape

50561-50562 Principles of Agriculture

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.

•**IDOE Course #7117**
•Recommended Grade(s): 9, 10, 11, 12
•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

•DC available

5601-5602 Horticultural Science

Horticulture Science is a two semester course that provides students with a background in the field of horticulture. Coursework includes hands-on activities that encourage students to investigate areas of horticulture as it relates to the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Students are introduced to the following areas of horticulture science: reproduction and propagation of plants, plant growth, growth-media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest, greenhouse management, floral design, and pest management. Students participate in a variety of activities including extensive laboratory work usually in a school greenhouse.

•IDOE Course #5132
•Recommended Grade(s): 9, 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
•DC available

Landscape and Turf Management

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.

•IDOE Course #7115
•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

ARCHITECTURE & CONSTRUCTION

Pathway: Construction Trades: Carpentry

5349-5350 Principles of Construction Trades @ AC & NA

Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic safety. Additionally, students will study the roles of individuals and companies within the construction industry and reinforce mathematical and communication skills necessary to be successful in the construction field.

•IDOE Course #7130
•Recommended Grade(s): 9, 10, 11, 12
•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

Construction Trades: General Carpentry @ NA

Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.

•IDOE Course #7123
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Construction Trades; or Principles of Architecture, Engineering and Construction
•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
•DC available

Construction Trades: Framing and Finishing @ NA

Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

•IDOE Course #7122
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry
•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
•DC available

ARTS, AV TECH, & COMMUNICATIONS

Pathway: Graphic Design

Principles of Digital Design @ Norwell

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

•IDOE Course #7140
•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

Digital Design Graphics @ Norwell

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

•IDOE Course #7141
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Digital 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

Graphic Design and Layout @ Norwell

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

•IDOE Course #5550
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Digital Design; Digital Design Graphics
•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 course is not required until 24-25 school year because this course is included in Perkins V pathways.
•Schools wishing to offer this course for multiple credits should utilize Next Level Programs of Study courses.

Pathway: Radio & Television

Principles of Broadcasting @ NA

The purpose of the Principles of Broadcasting course is to provide entry-level fundamental skills for students who wish to seek or pursue opportunities in the field of broadcasting or mass media. Students will explore the technical aspects of audio and sound design for radio production and distribution, as well as, the technical aspects of video production and distribution.

•IDOE Course #7139
•Recommended Grade(s): 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

Audio and Video Production Essentials @ NA

Audio and Video Production Essentials provides an in-depth study on audio and video production techniques for radio, television, and digital technologies. Students will learn skills necessary for audio production and on-air work used in radio and other digital formats. Additionally, experience will be gained in the development of the video production process; including skills in message development, directing, camera, video switcher, and character generator operations.

•IDOE Course #7306
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Broadcasting
•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

Mass Media Production @ NA

Mass Media Production will focus on the study of theory and practice in the voice and visual aspects of radio and television performance. In addition, this course introduces the skills used to acquire and deliver news stories in a digital media format. Students will learn how to research issues and events, interview news sources, interact with law enforcement and government officials, along with learning to write in a comprehensive news style.

•IDOE Course #7307
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Broadcasting; Audio and Video Production Essentials
•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 MGT, MARKETING & FINANCE

Pathway: Accounting

2311-2312 Principles of Business Management

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

•**IDOE Course #4562**
•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

2013-2014 Accounting Fundamentals

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.

•**IDOE Course #4524**
•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
•Formerly Introduction to Accounting

2663-2664 Advanced Accounting

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for various forms of business ownership using double-entry accounting covered in Accounting Fundamentals, including an emphasis on payroll accounting. Topics covered include calculating gross pay, withholdings, net pay, direct deposits, journalizing payroll transactions and preparing individual earnings records and payroll registers. Emphasis is placed on applying Generally Accepted Accounting Principles through hands-on practice with popular commercial accounting software packages that are currently used in business.

•**IDOE Course #4522**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Business Management; Accounting Fundamentals
•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
•Qualifies as a quantitative reasoning course

EDUCATION & TRAINING

Pathway: Early Childhood

Principles of Early Childhood Education @ NA

This course provides students with an overview of skills and strategies necessary to successfully complete a certificate. Additionally, it provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula and services available to young children. This course also examines basic principles of child development, Developmentally Appropriate Practices (DAP), importance of family, licensing, and elements of quality care of young children with an emphasis on the learning environment related to health, safety, and nutrition. Students may be required to complete observations and field experiences with children as related to this course.

•IDOE Course #7160
•Recommended Grade(s): 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

Early Childhood Education Curriculum @ NA

Early Childhood Education Curriculum examines developmentally appropriate environments and activities in various childcare settings while exploring the varying developmental levels and cultural backgrounds of children. Students may be required to complete observations and field experiences with children as related to this course.

•IDOE Course #7158
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Early Childhood Education
•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 diploma

Early Childhood Education Guidance @ NA

This course allows students to analyze developmentally appropriate guidance, theory and implementation for various early care and education settings. It also provides a basic understanding of the anti-bias/multicultural emphasis in the field of early childhood. Students may be required to complete observations and field experiences with children as related to this course.

•IDOE Course #7159
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Early Childhood Education
•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 diploma

Pathway: Education Careers

Principles of Teaching @ AC & NA

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

•IDOE Course #7161
•Recommended Grade(s): 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

0636-0637 Child and Adolescent Development @ AC & NA

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

•IDOE Course #7157
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Teaching
•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 diploma

Teaching and Learning @ NA

Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.

•IDOE Course #7162
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Teaching

•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 diploma

HEALTH SCIENCE

Pathway: Biomedical

5146-5147 Principles of Biomedical Sciences

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

NOTE: This course aligns with the PLTW Principles of Biomedical Sciences curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5218**
•Recommended Grade(s): 9
•Required Prerequisites: Biology I or concurrent enrollment in Biology I is required
•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 requirement for all diplomas

514-5149 Human Body Systems

Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions.

NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5216**
•Recommended Grade(s): 10
•Required Prerequisites: Principles of Biomedical Sciences
•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 requirement for all diplomas

5162-5163 Medical Interventions

Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning High School Course Titles and Descriptions 2022-2023 300 approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments.

NOTE: This course aligns with the PLTW Medical Interventions curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5217**
•Recommended Grade(s): 11
•Required Prerequisites: Principles of Biomedical Sciences, HBS
•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 requirement for all diploma types

5164-5165 Biomedical Innovations

Biomedical Innovation is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st Century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. Students have the opportunity to work on an independent project and may work with a mentor or advisor from a healthcare or post- secondary industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

NOTE: This course aligns with the PLTW Biomedical Innovations curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5219**
•Recommended Grade(s): 12
•Required Prerequisites: Principles of Biomedical Sciences; Human Body Systems or Anatomy and Physiology; Medical Interventions
•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

Pathway: Nursing

5509-5510 Principles of Healthcare @ NA

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

•**IDOE Course #7168**

•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
•DC available

5521 Medical Terminology @ NA (S1)

55210 Dual Credit: HLHS 101 Medical Terminology 101

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

•IDOE Course #5274
•Recommended Grade(s): 11, 12
•Required Prerequisites: none
•Recommended Prerequisites: none
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
•Counts as a directed elective or elective for all diplomas
•DC available

5523-5525 Healthcare Specialist: CNA @ NA (S2)

The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

•IDOE Course #7166
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Healthcare
•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
•DC & Certifications available

Healthcare Specialist Capstone (S2)

The capstone course will provide Healthcare students acquire additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor's offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework.

•IDOE Course #7255
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
•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

HOSPITALITY & TOURISM

Pathway: Culinary Arts

Principles of Culinary and Hospitality @ Bluffton

Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment.

•IDOE Course #7173
•Recommended Grade(s): 11, 12
•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
•DC & Certifications available

Nutrition @ AC & Bluffton

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

•IDOE Course #7171
•Recommended Grade(s): 9, 10, 11, 12
•Required Prerequisites: Principles of Culinary and Hospitality
•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

Culinary Arts @ Bluffton

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

•IDOE Course #7169
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Culinary and Hospitality
•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
•DC and Certifications available

HUMAN SERVICES

Pathway: Human Services

Principles of Human Services @ NA

Principles of Human Services explores the history of human services, career opportunities, and the role of the human service worker. Focuses on target populations and community agencies designed to meet the needs of various populations. The course includes a required job shadowing project in a Human Services setting (a suggested four-hour minimum to meet Ivy Tech requirements). This course will also encourage cultural awareness and appreciation of diversity. Focuses on cultural variations in attitudes, values, language, gestures, and customs. Includes information about major racial and ethnic groups in the United States.

•IDOE Course #7176
•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

Understanding Diversity @ NA

Understanding Diversity encourages cultural awareness and appreciation of diversity. Focuses on cultural variations in attitudes, values, language, gestures, and customs. Includes information about major racial and ethnic groups in the United States.

•IDOE Course #7174

•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Human 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

Relationships and Emotions @ NA

Relationship & Emotions examines the key elements of healthy relationships. Explores the main problems that damage relationships. Presents research findings on successful and unsuccessful relationships, and emotional connections. Explores the impact of one's emotional and relationship history on current and future romantic relationships. Presents practical, scientific-based skills for improving relationships. Additionally, this course offers practical and useful information for people who have experienced loss. Students have the opportunity to evaluate their own experiences and attitudes toward loss and grief.

•IDOE Course #7177
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Human 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

LAW & PUBLIC SAFETY

Pathway: Criminal Justice

Principles of Criminal Justice @ NA

Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

•IDOE Course #7193
•Recommended Grade(s): 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
•DC available

Law Enforcement Fundamentals

Law Enforcement Fundamentals Critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such

theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organization. This includes the evolution of law enforcement at federal, state, and local levels.

•**IDOE Course #7191**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Criminal Justice
•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
•DC available

Corrections and Cultural Awareness @ NA

Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are stressed. Additionally, this course takes a further examination of the American correctional system; the study of administration of local, state, and federal correctional agencies. The examination also includes the history and development of correctional policies and practices, criminal sentencing, jails, prisons, alternative sentencing, prisoner rights, rehabilitation, and community corrections including probation and parole. Current philosophies of corrections and the debates surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments, and special populations are discussed.

•**IDOE Course #7188**
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals
•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
•DC available

Criminal Justice Capstone

The Criminal Justice Capstone course allows students to complete additional instruction to earn a postsecondary certificate and should include a work-based learning component such as job shadowing, internship, etc. once the core content is completed. Note that there may be age restrictions on work-based learning components.

•**IDOE Course #7231**

•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals, Corrections and Cultural Awareness
•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

Pathway: Fire & Rescue

Principles of Fire and Rescue @ SA

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.

•**IDOE Course #7195**
•Recommended Grade(s): 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
•DC and Certifications available

Fire Fighting Fundamentals @ SA

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 fire fighters 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.

•**IDOE Course #7189**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Fire and Rescue
•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
•DC and Certifications available

Advanced Fire Fighting @ SA

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.

•**IDOE Course #7186**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Fire and Rescue; Fire Fighting Fundamentals
•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
•DC and Certifications available

STEM

Pathway: Computer Science

Principles of Computing

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

•**IDOE Course #7183**
•Recommended Grade(s): 9, 10, 11
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts as a directed elective or elective for all diplomas

Topics in Computer Science

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

•**IDOE Course #7351**
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Computing
•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

Computer Science

Computer Science introduces the fundamental concepts of procedural programming. Topics include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. The course also offers an introduction to the historical and social context of computing and an overview of computer science as a discipline.

•IDOE Course #7352
•Recommended Grade(s): 11, 12
•Required Prerequisites: Principles of Computing
•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
•The AP Computer Science A curriculum may be used to complete the competencies required for this course.

Pathway: Software Development

Principles of Computing @ SA

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

•IDOE Course #7183
•Recommended Grade(s): 9, 10, 11
•Required Prerequisites: none
•Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
•Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
•Counts as a directed elective or elective for all diplomas

Website and Database Development @ SA

Website and Database Development will provide students a basic understanding of the essential Web and Database skills and business practices that directly relate to Internet technologies used in Web site and Database design and development. Students will learn to develop Web sites using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Additionally, students will be introduced to the basic concepts of databases including types of databases, general database environments, database design, normalization and development of tables, queries, reports, and applications. Students will be familiarized with the use of ANSI Standard Structured Query Language. Students will be introduced to data concepts such as data warehousing, data mining, and BIG Data. Students will develop a business application using database software such as Microsoft Access.

•IDOE Course #7185
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Computing

•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

Software Development @ SA

Software Development introduces students to concepts and practices of programming languages and software development. Students are introduced to algorithms and development tools used to document/implement computer logic. Discusses the history of software development, the different types of programming such as real time processing, web/database applications, and different program development environments. Concepts will be applied using different programming languages, and students will develop and test working programs in an integrated system.

•IDOE Course #7184
•Recommended Grade(s): 10, 11, 12
•Required Prerequisites: Principles of Computing
•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

Pathway: Engineering

5140-5141 Introduction to Engineering Design

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

•IDOE Course #4802

•Recommended Grade(s): 9, 10, 11, 12
•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.
•DC available

5142-5143 Principles of Engineering

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. 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.

•**IDOE Course #5644**
•Recommended Grade(s): 10, 11, 12
•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
•Qualifies as a quantitative reasoning course
•DC available

5153-5154 Aerospace Engineering

Aerospace Engineering should provide students with the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evolution of aircraft, space vehicles and their operating systems. Emphasis should include investigation and research on flight characteristics, analysis of aerodynamic design, and impact of this technology on the environment. Classroom instruction should provide creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of air and space vehicles, their systems, and launching, guidance and control procedures. NOTE: This course aligns with the PLTW Aerospace Engineering curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5518**
•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
•Qualifies as a quantitative reasoning course

5167-5168 Civil Engineering and Architecture

Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students

opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design. NOTE: This course aligns with the PLTW Civil Engineering and Architecture curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

•**IDOE Course #5650**
•Recommended Grade(s): 11, 12
•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
•Qualifies as a quantitative reasoning course
•DC available

TRANSPORTATION

Pathway: Automotive Technology

Principles of Automotive Services @ SA

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.

•**IDOE Course #7213**
•Recommended Grade(s): 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
•DC and Certifications available

Brake Systems @ SA

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.

•**IDOE Course #7205**
•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
•Schools partnering with Vincennes University must offer the program of study as part of a 2-3 period block.
•DC and Certifications available

Steering and Suspensions @ SA

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.

•**IDOE Course #7212**
•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
•DC and Certifications available