

# Pike Central High School

A guide to planning your  
education & career.

## Principal

Brian Holland

## Assistant Principal

Alicia Cornelius

## Athletic Director

Billy Hewig


## Counselors

Pam Julian

Caren Richeson



“EXPECT EXCELLENCE”



**The pathways to success is published annually for students to make informed decisions when choosing courses for the next school year. Please note that the courses and guide lines listed within this book were current at the time of printing. Changes may occur from year to year due to teacher assignments, student enrollment and request, and other factors.**

# Table of Contents

Diploma Types.....	4
Quantitative Reasoning Courses.....	5
Indiana College & Career Pathways and NCAA Eligibility Reference Guide.....	6
Grading Scale.....	7
Four-Year High School Course Plan.....	8
PC Course Listing by Department.....	9
Course Descriptions.....	12
Agriculture.....	12
Art.....	12
Business.....	14
Family & Consumer Sciences.....	15
Health & Physical Education.....	16
Language Arts.....	17
Mathematics.....	18
Multidisciplinary.....	19
Music.....	20
PLTW Biomedical Sciences.....	21
PLTW Pre-Engineering.....	22
Science.....	22
Social Studies.....	23
Trade & Industrial Education.....	24
World Languages.....	25
Patoka Valley Career & Technical Coop Selecting Policy.....	26
Dual Credit & Advanced Placement Classes.....	27

# INDIANA CORE40

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

Course and Credit Requirements	
<b>English/ Language Arts</b>	<b>8 credits</b> Including a balance of literature, composition and speech.
<b>Mathematics</b>	<b>6 credits (in grades 9-12)</b> 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II <i>Or complete Integrated Math I, II, and III for 6 credits.</i>
<b>STUDENTS MUST TAKE A MATH OR QUANTITATIVE REASONING COURSE EACH YEAR IN HIGH SCHOOL</b>	
<b>Science</b>	<b>6 credits</b> 2 credits: Biology I 2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World
<b>Directed Electives</b>	<b>5 credits</b> World Languages Fine Arts Career and Technical Education
<b>Physical Education</b>	<b>2 credits</b>
<b>Health and Wellness</b>	<b>1 credit</b>
<b>Electives*</b>	<b>6 credits</b> (College and Career Pathway courses recommended)
<b>40 Total State Credits Required</b>	

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

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

## CORE40 with Academic Honors (minimum 47 credits)

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

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

## CORE40 with Technical Honors (minimum 47 credits)

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

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

**PCHS requires a minimum of 42 credits for C-40 and standard diploma. PCHS has two local requirements added to the Core -40 for a total of 42 credits. These requirements are 1 credit in a computer class (8-12) and 1 credit in Personal Financial Responsibility.**

# PIKE CENTRAL 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.
- For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.
- 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.”
- These are the Pike Central courses that meet the quantitative reasoning criteria.

## ADVANCED PLACEMENT

**Calculus AB, Advanced Placement (2562)**

**Physics B, Advanced Placement (3080)**

## AGRICULTURE

**Landscape Management (5136)**

## BUSINESS AND SOCIAL STUDIES

**Business Math (4512)**

**Global Economics (4558)**

**Personal Financial Responsibility (4540)**

## ENGINEERING AND TECHNOLOGY

**Computer Integrated Manufacturing (4810)**

**Computer Science (4634)**

**Digital Electronics (4826)**

**Engineering Design and Development (4828)**

**Principles of Engineering (4814)**

## SCIENCE

**Chemistry I (3064)**

**Chemistry II (3066)**

**Physics B, Advanced Placement (3080)**

**Integrated Chemistry-Physics (3180)**

## TRADE AND INDUSTRIAL EDUCATION

**Precision Machining I (5782)**

**Precision Machining II (5784)**

# INDIANA COLLEGE & CAREER PATHWAYS AND PATHWAY COURSES BY CLUSTER

Visit [www.doe.in.gov/pathways](http://www.doe.in.gov/pathways) for sample career plans in each pathway.

## AGRICULTURE

Sample Career Opportunities: Farming • Fish and Wildlife Management • Food Processing/ Production • Agricultural Services and Supplies • Garden and Landscape Services • Agricultural Food Sciences • Forest and Conservation Work/Science • Timber Harvesting

## ARTS, AV TECHNOLOGY & COMMUNICATION

Sample Career Opportunities: Arts and Crafts • Photography • Dramatic Arts and Theater/ Video/Film • Music • Design • Interior Design • Architecture Group • Landscape Architect • Archival Science • Communications/ Journalism/ Broadcast • Multimedia Studies • Literature and Foreign Language • Liberal Arts and Humanities

## EDUCATION & TRAINING

Sample Career Opportunities: Educational Administration • Special Education • Elementary Education • Preschool Education • Instructional Design • Teaching Assisting • Adult and Continuing Education • Secondary and Vocational Education • Speech Language Pathology • Psychology.

## HOSPITALITY & HUMAN SERVICES

Sample Career Opportunities: Restaurant Owner • Chef • Steward • Director of Human Resources • Front Desk Supervisor • Sales Manager • Travel Agent • Tour Guide • Interpreter • Parks & Gardens Director • Gaming & Casino Manager • Fairs/Festivals Event Planner • Museum Curator • Tourism Coordinator • Lodging Management

## MANUFACTURING

Sample Career Opportunities: Photographic Processing • Printing • Desktop Publishing • Equipment Operation • Welding • Metal Machining • Tool and Die Making • Metal Fabrication • Optical Technology • Quality Control/ Inspection • Clothing Production • Home Furnishings • Power Plant Operation • Electrician • Plumbing • Industrial Maintenance

## TRANSPORTATION

Sample Career Opportunities: Truck and Bus Driving • Airplane Piloting • Air Traffic Control • Water Transportation • Transportation Operations • Logistics Planning and Management Services • Warehousing and Distribution Center • Transportation Systems/Infrastructure Planning, Management, and Regulation

## ARCHITECTURE & CONSTRUCTION

Sample Career Opportunities: Bricklaying • Carpentry • Electrical Power • General Construction • Plumbing • Construction Equipment Operation • Painting • Architecture • Landscape Architecture • Civil Engineering • Engineering Technician • Surveyor • CAD

## BUSINESS & MARKETING

Sample Career Opportunities: Food Service and Lodging Management • Public Administration • Medical Services Management • Business Management and Administration • Personnel Management • Accounting and Financial Management • Securities Sales • Health Unit Coordinating • Bookkeeping • Office Clerical • Banking Support Services • Computer Operation • Paralegal • Administrative Assistant • Controller • Human Resources

## HEALTH SCIENCE

Sample Career Opportunities: Speech Pathology and Audiology • Dentistry • Physician Assisting • Medicine • Nursing • Optometry • Podiatry • Veterinary Medicine • Dental Hygiene • Cardiology • Laboratory Technology • Emergency Medical Technology • Nuclear Medical Technology • Radiological Technology • Occupational/Physical Therapy • Mental/Physical Health Assisting • Nurse Assisting • Pharmacology

## INFORMATION TECHNOLOGY

Sample Career Opportunities: Network Administrator • Technical Support Specialist • Animator, Programmer • Web Administrator • Webmaster • Software Applications Specialist • Audio/Video Engineer • Database Administrator • Maintenance Technician • PC Support Specialist

## PUBLIC SAFETY

Sample Career Opportunities: Legal services • Legal Assisting • Law Enforcement • Fire Safety • Security Services • EMT • Correctional Officer



# NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE

## Divisions I and II Initial-Eligibility Requirements

### CORE COURSES

- **NCAA Division I requires 16 core courses.** NCAA Division II currently requires 14 core courses. Division II will require 16 core courses for students enrolling on or after August 1, 2013. See the charts below.
- **NCAA Division I will require 10 core courses** to be completed prior to the seventh semester (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become "locked in" at the seventh semester and cannot be retaken for grade improvement.

*o Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement, but will not be able to compete.*

### TEST SCORES

- **Division I** uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- **Division II** requires a minimum SAT score of 820 or an ACT sum score of 68.
- The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a sum of the following four sections: English, mathematics, reading and science.
- **When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.**

### GRADE-POINT AVERAGE

- **Be sure** to look at your high school's List of NCAA Courses on the NCAA Eligibility Center's website ([www.eligibilitycenter.org](http://www.eligibilitycenter.org)). Only courses that appear on your school's List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- **Division I** students enrolling full time before **August 1, 2016**, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- **Division I** GPA required to receive athletics aid and practice on or after **August 1, 2016**, is 2.000 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **Division I** GPA required to be eligible for competition on or after **August 1, 2016**, is 2.300 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **The Division II** core GPA requirement is a minimum of 2.000.
- Remember, the NCAA GPA is calculated using NCAA core courses only.

### DIVISION I 16 CORE COURSES

- 4 years of English.
- 3 years of mathematics (Algebra I or higher).
- 2 years of natural/physical science (1 year of lab if offered by high school).
- 1 year of additional English, mathematics or natural/physical science.
- 2 years of social science.
- 4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).

### DIVISION II 16 CORE COURSES

- (2013 and After)
- 3 years of English.
  - 2 years of mathematics (Algebra I or higher).
  - 2 years of natural/physical science (1 year of lab if offered by high school).
  - 3 years of additional English, mathematics or natural/physical science.
  - 2 years of social science.
  - 4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).

## GRADING SCALE

GRADE	REGULAR WEIGHT	PARTIAL WEIGHT .5	FULL WEIGHT 1
A+ 100%	4.33	5	5.33
A 99 - 93%	4	4.5	5
A- 92 - 90%	3.67	4.25	4.67
B+ 89 - 87%	3.33	4	4.33
B 86 - 83%	3	3.5	4
B- 82 - 80%	2.67	3.25	3.67
C+ 79 - 77%	2.33	3	3.33
C 76 - 73%	2	2.5	3
C- 72 - 70%	1.67	2.25	2.67
D+ 69 - 67%	1.33	2	2.33
D 66 - 63%	1	1.5	2
D- 62 - 60%	0.67	1.25	1.67
F Below 60%	0	0	0

### Partial (.5) Weight

Algebra H  
 Geometry H  
 Algebra II H  
 English 9 H  
 English 10 H  
 Adv. Bio-Chem I  
 Pre-Calculus DC  
 Trigonometry DC  
 Biology H  
 Spanish IV  
 German ACP  
 Psychology DC

### Full (1) Weight

Calculus AP  
 English 12AP  
 English 11AP  
 Physics AP  
 US History AP

The *Pathways to Success* is published annually for students to make informed decisions when choosing courses for the next school year. Please note that the courses and guide lines listed within this book were current at the time of printing. Changes may occur from year to year due to teacher assignments, student enrollment and requests, and other factors.

## Four-Year High School Course Plan Indiana College and Career Pathway Plan

Based on your desired high school diploma track and plan after high school, the following is a layout of the courses you will take. Request the help of your school counselor to ensure you take the correct classes to be prepared for colleges and careers. Below you can find Career Pathway Plans to take as elective options.

Grade	English	Math	Science	PE/Social Studies	Electives (6 semesters each grade except 10th) / Career Pathway Plan		
9	English 9	Algebra I / Geometry H	Biology	PE I & II			
10	English 10	Geometry/ Algebra II H	Chemistry or ICP	World History	Personal Finance / Health		
11	English 11	Algebra II / Pre-Calculus	3rd Science	US History			
12	English 12	Math or Quantitative Reasoning		Government/ Economics			

### Agriculture

<b>9th:</b> Animal Science
<b>10th:</b> Plant and Soil Science
<b>11th:</b> Horticulture Science
<b>12th:</b> Landscape

### Art

<b>9th:</b> Intro to 2D or 3D Art
<b>10th:</b> Adv. 2D or 3D Art
<b>11th:</b> Drawing, Painting, or Ceramics
<b>12th:</b> Digital Design & Visual Comm.

### Communications

<b>11th or 12th:</b> Radio & Television
---

### Early Childhood

<b>9th:</b> Child Development
<b>10th:</b> Nutr. & Well. /Adv Nutr. & Well.
<b>11th:</b> Early Childhood Education I
<b>12th:</b> Early Childhood Education II

### Automotive

<b>11th:</b> Automotive Services Tech I
<b>12th:</b> Automotive Services Tech II

### Welding

<b>11th:</b> Welding I
<b>12th:</b> Welding II

### Education Careers

<b>9th:</b> Child Development
<b>10th:</b> Nutr. & Well /Adv Nutr. & Well.
<b>11th:</b> Early Childhood Education I
<b>12th:</b> Education Professions I

### Cosmetology

<b>11th:</b> Cosmetology I
<b>12th:</b> Cosmetology II

### Culinary Arts

<b>12th:</b> Culinary Arts & Hospitality
--

### Precision Machining

<b>11th:</b> Precision Machines I
<b>12th:</b> Precision machines II

### Engineering

<b>9th:</b> Intro to Engineering
<b>10th:</b> Principles of Engineering
<b>11th:</b> Computer Integrated Manuf.

### Criminal Justice

<b>11th:</b> Intro to Criminology & Criminal Investigations
<b>12th:</b> Criminal Investigations & Traffic

### Construction Trades

<b>11th and 12th:</b> Construction Trades
---

### Biomedical Sciences

<b>9th:</b> Principles of Biomed
<b>10th:</b> Human Body Systems
<b>11th:</b> Medical Intervention
<b>12th:</b> Biomedical Innovations

### Health Careers

<b>11th or 12th:</b> Anatomy & Physiology
<b>11th or 12th:</b> Medical Terminology
<b>12th:</b> Health Science Education (HOSA)

### Computer Tech Support & Networking

<b>9th, 10th, 11th:</b> Admin & Office Manag.
<b>12th:</b> Computer Tech & Networking

### Business

<b>9th:</b> Admin & Office Manag. / Princ. of Manag.
<b>10th:</b> Personal Finance / Principles of marketing
<b>11th:</b> Business Law and Entrepreneurship
<b>12th:</b> Introduction to Accounting



# PC COURSE LISTING BY DEPARTMENT

## AGRICULTURE

Course	Length	Prerequisites/Recommendation	Grade
Agriculture Power, Structure and Technology	Full Year	None	10 11 12
Animal Science	Full Year	None	9 10 11 12
Horticultural Science	Full Year	None	10 11 12
Landscape Management	Full Year	None	10 11 12
Plant and Soil Science	Full Year	None	9 10 11 12
Supervised Ag Experience	Full Year	Teacher Permission	10 11 12

## ART

Course	Length	Prerequisites/Recommendation	Grade
Introduction to 2D Art	Fall/Spring	None	9 10 11 12
Advanced 2D Art	Fall/Spring	Credit in Intro to 2D Art	9 10 11 12
Ceramics	Fall/Spring	Credit in Adv 3D Art	10 11 12
Digital Design	Fall	Previous Art Experience	10 11 12
Visual Communication	Spring	Credit in Digital Design	10 11 12
Intro to 3D Art	Fall/Spring	Credit in Intro 2D Art	9 10 11 12
Advanced 3D Art	Fall/Spring	Credit Intro to 3D Art	9 10 11 12
Painting I	Fall/Spring	Credit in Intro and Adv. 2D Art and Drawing	10 11 12
Drawing I	Fall/Spring	Credit in Intro & Adv 2D Art	10 11 12

## BIOMEDICAL SCIENCE (PLTW)

Course	Length	Prerequisites/Recommendation	Grade
Principles of Biomedical Sciences (PLTW)	Full Year	Biology I or enrolled in Biology I	9 10 11 12
Human Body Systems (PLTW)	Full Year	Principles of Biomedical Sciences	10 11 12
Medical Intervention (PLTW)	Full Year	Human Body Systems	11 12
Biomedical Innovations (PLTW)	Full Year	Medical Interventions	12

## BUSINESS

Course	Length	Prerequisites/Recommendation	Grade
Introduction to Accounting	Full Year	None	11 12
Business Math	Full Year	None	11 12
Business Law and Ethics	Fall/Spring	None	11 12
Administrative and Office Management	Fall/Spring	None	9 10 11 12
Digital Citizen (Comp apps)	Fall/Spring	None	9
Entrepreneurship and New Ventures	Fall/Spring	None	9 10 11 12
Global Economics	Fall/Spring	None	12
ICE Interdisciplinary Coop Ed	Full Year	None	12
Principles of Management	Fall/Spring	None	10 11 12
Personal Financial Respons.	Fall/Spring	None	10 11 12
Principles of Marketing	Fall/Spring	None	10 11 12

## ENGLISH

Course	Length	Prerequisites/Recommendation	Grade
English 9	Full Year	None	9
English 9, Honors	Full Year	Testing in 8th grade or Teacher Recommendation	9
English 10	Full Year	None	10
English 10, Honors	Full Year	B+ or above in English 9 Honors or Teacher Recommendation	10
English 11	Full Year	None	11
English 11 AP, Language and Composition	Full Year	A- or above in English 10, English 10 Honors or Teacher Recommendation	11
English 12 AP, Language and Composition	Full Year	B+ or above in English 11 AP or Teacher Recommendation	12
Student Publications	Full Year	Teacher Approval	9 10 11 12

## FAMILY AND CONSUMER SCIENCE

Course	Length	Prerequisites/Recommendation	Grade
Advanced Nutrition		Nutrition and Wellness	10 11 12
Child Development	Fall/Spring	None	10 11 12
Early Childhood Education I Dual Credit	All Year	Child Development	11 12
Early Childhood Education II Dual Credit	All Year	ECE I	12
Interpersonal Relationships	Spring	None	9 10 11 12
Nutrition and Wellness	Fall	None	10 11 12
ECE Lab	All Year	Must take with ECE I	11 12
Education Professions Dual Credit	All Year	Child Development	12

## MATHEMATICS

Course	Length	Prerequisites/Recommendation	Grade
Algebra I Lab	Full Year	None	9 10 11 12
Algebra I	Full Year	None	9 10
Algebra I Honors	Full Year	Teacher recommendation	8 9
Geometry	Full Year	Algebra I	9 10 11 12
Geometry Honors	Full Year	Algebra I Honors or Teacher Recommendation	9 10
Algebra II	Full Year	Geometry	10 11 12
Algebra II Honors	Full Year	Geometry Honors and Teacher Recommendation	10 11 12
Quantitative Reasoning	Full Year	Algebra II	11 12
Pre-Calculus Dual Credit	Fall	Algebra II Honors or Teacher Recommendation See OCU requirements on bottom of page 27	11 12
Trigonometry Dual Credit	Spring	Pre-Calculus See OCU requirements on bottom of page 27	11 12
AP Calculus AB	Full Year	Pre-Calculus and Trigonometry	12

## MULTIDISCIPLINARY

Course	Length	Prerequisites/Recommendation	Grade
Basic Skills			9 10 11 12
Cadet Teaching	Full Year	Students will be selected for this course through an application process	12
JAG I Jobs for American Grads	Fall/Spring	Application Required	10 11 12
JAG II Jobs for American Grads	Fall/Spring	Application Required	11 12
Peer Tutor		Application Required	10 11 12
Reconnecting Youth		Students will be selected for this course through an interview process	9 10 11 12
Resource	Fall/Spring		9 10 11 12
Supervised Study (no credit)	Fall/Spring		9 10 11 12

## MUSIC

Course	Length	Prerequisites/Recommendation	Grade
Beginning Chorus	Full Year	None	9 10 11 12
Choral Chamber Ensemble (Swing)	Full Year	Auditions	9 10 11 12
Beginning Concert Band	Fall/Spring	Completion of middle school band	9 10 11 12
Piano and Electronic Keyboard	Fall/Spring	None	9 10 11 12
Music Theory and Composition	Fall/Spring	None	9 10 11 12
Music History and Appreciation	Fall/Spring	None	9 10 11 12
Musical Theatre	Fall/Spring	None	9 10 11 12
Applied Music			10 11 12

## PHYSICAL EDUCATION

Course	Length	Prerequisites/Recommendation	Grade
Health and Wellness	Fall/Spring	None	9 10 11 12
Health Careers Jasper			12
Physical Education I	Fall	None	9 10 11 12
Physical Education II	Spring	None	9 10 11 12
Elective PE-Strength & Conditioning	Fall/Spring	PE I and PE II	10 11 12

## SCIENCE

Course	Length	Prerequisites/Recommendation	Grade
Biology I	Full Year	None	9
Biology I, Honors	Full Year	Teacher recommendation	9
Biology II	Full Year	Biology I	11, 12
Adv. Science Biochemistry	Full Year	Chem. I	11 12
Environmental Science	Full Year	Biology, ICP or Chem.	11 12
Principles of Biomed	Full Year	None	9 10 11 12
Integrated Chemistry/Physics	Full Year	Bio I, Algebra I	10
Chemistry I	Full Year	Biology I or Biology I Honors, Algebra I	10 11 12
Chemistry II	Full Year	Chem. I	11 12
Anatomy & Physiology	Full Year	Biology, ICP or Chem. I	11 12
AP Physics I: Algebra Based	Full Year	Geom., completed or currently enrolled in Algebra II	11 12

## SOCIAL STUDIES

Course	Length	Prerequisites/Recommendation	Grade
World History	Full Year	None	10
United States History	Full Year	None	11
United States History Advanced Placement	Full Year	None	11 12
Government	Fall/Spring	None	12
Psychology Dual Credit	Fall/Spring	See OCU requirements on bottom of page 22	12
Sociology	Fall/Spring	None	12

## TECHNOLOGY/ENGINEERING

Course	Length	Prerequisites/Recommendation	Grade
Intro to Engineering PLTW Dual Credit	Full Year	None	9 10 11
Principles of Engineering PLTW Dual Credit	Full Year	IEC	10
Computer Integrated Man. PLTW Dual Credit	Full Year	IED and POE credits	11 12

## WORLD LANGUAGES

Course	Length	Prerequisites/Recommendation	Grade
German I	Full Year	Strong English scores recommended	9 10 11 12
German II ACP	Full Year	German I with a minimum grade of C- and minimum GPA of 2.7	10 11 12
German III/IV ACP College Project Dual Credit	Full Year	German II with a minimum grade C- and minimum GPA of 2.7	11 12
Spanish I	Full Year	Strong English scores	9 10 11 12
Spanish II	Full Year	C or above in Spanish I	10 11 12
Spanish III	Full Year	C or above in Spanish II	10 11 12
Spanish IV	Full Year	C or above in Spanish III	11 12

## VOCATIONAL CAREER PREPARATION PROGRAMS

Course	Length	Prerequisites/Recommendation	Grade
Auto Services Technology I Dual Credit	Full Year	Must have own means of transportation	11
Auto Services Technology II Dual Credit	Full Year	Must have own means of transportation	12
Construction Trades I & II Dual Credit	Full Year	Must have own means of transportation	11 12
Computer Tech Support and Networking Dual Credit	Full Year	Algebra I, Computer Applications, Must have own transportation	11 12
Early Childhood Education Dual Credit	Full Year	Child Development credit	12
Health Careers Dual Credit	Full Year	Must have own means of transportation	12
Educational Professions Dual Credit	Full Year	Child Development credit	12
Cosmetology I & II Dual Credit	Full Year	Must have means of transportation	11 12
Culinary Arts & Hospitality Dual Credit	Full Year	Must have means of transportation	11 12
Criminal Justice Dual Credit	Full Year	Accuplacer	11 12
Welding I Dual Credit	Full Year	Students will be selected for this course through an application process	11
Welding II Dual Credit	Full Year	Welding I	12
Precision Machine I Dual Credit	Full Year	None	11 12
Precision Machine II Dual Credit	Full Year	Precision Machine I	12

# PIKE CENTRAL HIGH SCHOOL COURSE DESCRIPTIONS

*All courses depend on sufficient enrollment. Some courses are only offered every other year.*

## AGRICULTURE DEPARTMENT

### AGRICULTURE POWER, STRUCTURE & TECHNOLOGY | 5088 (AG POW) |

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

**Recommended Grade Level: 10-12**

**Credits: 2 credit(s) per semester. A four credit/two semester course.**

**A Core 40, AHD, THD elective course**

### ANIMAL SCIENCE | 5008 (ANML SCI) |

Animal Science is a two semester program that provides students with an overview of the field of animal science. 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 can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, social and political issues related to the industry and management practices for the care and maintenance of animals while incorporating leadership development, supervised agricultural experience and learning about career opportunities in the area of animal science.

**Recommended Grade Level: 9-12**

**A two credit/two semester course**

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

**A Core 40, AHD, THD elective course**

### HORTICULTURAL SCIENCE | 5132 (HORT SCI) |

Horticultural Science is a yearlong course designed to give students a background in the field of horticulture and its many career opportunities. It addresses the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, hydroponics, floriculture and floral design, management practices for field and greenhouse production, interior plantscapes, marketing concepts, production of herbaceous, woody, and nursery stock, fruit, nut, and vegetable production, integrated pest management and employability skills. Students participate in a variety of activities including extensive laboratory work usually in a school greenhouse.

**Recommended Grade Level: 10-12**

**A two credit/two semester course**

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

**A Core 40, AHD, THD elective course**

### LANDSCAPE MANAGEMENT | 5136 (LAND MGMT) |

Landscape Management is a yearlong 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, management and employability skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers.

**Recommended Grade Level: 10-12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

### PLANT AND SOIL SCIENCE | 5170 (PLT SL SCI) |

Plant and Soil Science is a yearlong course that provides students with opportunities to participate in a variety of activities including laboratory work. Topics covered include: the taxonomy of plants, the various plant components and their functions, plant growth, plant reproduction and propagation, photosynthesis and respiration, environmental factors affecting plant growth, integrated pest management plants and their management, biotechnology, the basic components and types of soil, calculation of fertilizer application rates and procedures for application, soil tillage and conservation, irrigation and drainage, land measurement, grain and forage quality, cropping systems, precision agriculture, principles and benefits of global positioning systems and new technologies, harvesting, and career opportunities in the field of plant and soil science.

**Recommended Grade Level: 9-12**

**A two credit/two semester course**

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

**A Core 40, AHD, THD elective course**

### SUPERVISED AGRICULTURAL EXPERIENCE | 5228 (SAE) |

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students experience and apply what is learned in the classroom, laboratory, and training site to real-life situations. Students work closely with their agricultural science and business teacher, parents, and/or employers to get the most out of their program. This course is offered each semester as well as during the summer.

**Recommended Grade Level: 10-12**

**Recommended Prerequisite: Any Agriculture Course (Teacher permission is required)**

**A one credit/one semester course A maximum of eight credits can be earned.**

**A Core 40, AHD, THD elective course**

## ART DEPARTMENT

### ADVANCED TWO-DIMENSIONAL ART (L) | 4004 (ADV 2D ART) |

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

**Recommended Grade Level: 9-12**

**Prerequisite: Introduction to Two-Dimensional Art**

**A one credit/one semester course**

**Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma. A Core 40, AHD, THD elective course**

### ADVANCED THREE-DIMENSIONAL ART (L) | 4006 (ADV 3D ART) |

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

ways to utilize and support art museums, galleries, studios, and community resources.

**Recommended Grade Level: 9-12**

**Prerequisite: Introduction to Three-Dimensional Art**

**A one credit/one semester course**

**Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma. A Core 40, AHD, THD elective course**

## **CERAMICS (L)**

**| 4040 (CERAMICS) |**

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.

**Recommended Grade Level: 11-12**

**Prerequisite: Advanced 3-D Art**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## **DIGITAL DESIGN (L)**

**| 4082 (DIG DESIGN) |**

Digital Design is a course based on the Indiana Academic Standards for Visual Art. Students in digital design engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. They incorporate desktop publishing, multi-media, digitized imagery, computer animation, and web design. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

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

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

**Students must apply for admission to this course**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## **DRAWING (L)**

**| 4060 (DRAWING) |**

Drawing is a course based on the Indiana Academic Standards for Visual Art. Students in drawing engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing and use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

**Recommended Grade Level: 10-11-12**

**Prerequisite: Introduction to Two-Dimensional Art and Advanced Two-Dimensional Art**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## **INTRODUCTION TO TWO-DIMENSIONAL**

**| 4000 (2D ART) |**

Introduction to Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background

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

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## **INTRODUCTION TO THREE-DIMENSIONAL ART | 4002 (3D ART) |**

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

**Recommended Grade Level: 9-12**

**Prerequisite: Introduction to 2D Art**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## **PAINTING (L)**

**| 4064 (PAINTING) |**

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

**Recommended Grade Level: 11-12**

**Prerequisite: Introduction to Two-Dimensional Art, Advanced Two-Dimensional Art, and Drawing**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## **VISUAL COMMUNICATION (L)**

**| 4086 (VA S IB) |**

Visual Communication is a course based on the Indiana Academic Standards for Visual Art. Students in visual communication engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. They create print media utilizing graphic design, typography, illustration, and image creation with digital tools and computer technology. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

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

**Recommended Prerequisites: Digital Design**

**Students must apply for admission to this course.**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

## BUSINESS DEPARTMENT

### ADMINISTRATIVE AND OFFICE MANAGEMENT | 4528 (CompApAdv) |

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

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

### BUSINESS LAW AND ETHICS | 4560 (BUS LAW ETH) |

Business Law and Ethics provides an overview of the legal system in the business setting. Topics covered include: basics of the judicial system, contract, personal, employment and property law. Application of legal principles and ethical decision-making techniques are presented through problem-solving methods and situation analyses.

**Recommended Grade Level: 11-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

### BUSINESS MATH | 4512 (BUS MATH) |

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

**Recommended Grade Level: 11-12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

### DIGITAL CITIZENSHIP (ONLINE ONLY) | 4530 (DIGI CITI) |

Digital Citizenship prepares students to use computer technology in an effective and appropriate manner. Students develop knowledge of word processing, spreadsheets, presentation and communications software. Students establish what it means to be a good digital citizen and how to use technology appropriately.

**Recommended Grade Level: 9**

**A one credit/one semester course**

**Local Requirement for all diploma types.**

### ENTREPRENEURSHIP AND NEW VENTURES | 5966 (ENT VENT) |

Entrepreneurship and New Ventures introduces entrepreneurship, and develop skills and tools critical for starting and succeeding in a new venture. The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and "go to" market strategies will be explored. Additionally, topics of government and legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting and business plan development will be covered.

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

### GLOBAL ECONOMICS | 4558 (GLOB ECON) |

Global Economics is a business course that provides students with an understanding of their role as consumers and producers in domestic and global economies. This course enables students to understand how the economic system operates while comprehending their role in that system. Students deal with public policy, international economics, microeconomics,

and macroeconomics in comparing economic systems and using selected economic measures. Instructional strategies may include development of a school-based enterprise, case studies, field trips, guest speakers, job shadowing, simulations, Internet research, and business experiences.

**Recommended Grade Level: 12**

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

**A Core 40, AHD, THD elective course**

**May fulfill up to one graduation credit of the Economics requirement.**

**Qualifies as a quantitative reasoning course.**

### ICE - INTERDISCIPLINARY COOPERATIVE EDUCATION | 5902 (ICE) | (Including Related Instruction and On-The-Job Training)

Interdisciplinary Cooperative Education (ICE) spans all career and technical education program areas through an interdisciplinary approach to training for employment. Time allocations are a minimum of fifteen hours per week of work-based learning and approximately five hours per week of school-based instruction. The following two components must be included as part of the Interdisciplinary Cooperative Education course.

**Related Instruction**, that is classroom based, shall be organized and planned around the activities associated with the student's individual job and career objectives in a career cluster area; and shall be taught during the same semesters as the student is receiving on-the-job training. The concepts, skills, and attitudes basic to occupational competence are to be taught in school and are to be applied and tested on the job. The sequence of related instructional topics in school shall be continuously correlated with the student's job activities.

For a student to become occupationally competent and therefore employable, the related instruction should cover in varying proportions: (a) general occupational competencies, (b) specific occupational competencies, and (c) specific job competencies.

**On-the-Job Training** is the actual work experience that relates directly to the student's career objectives. On-the-job, the student shall have the opportunity to apply the concepts, skills, and attitudes learned during Related Instruction, as well as the skills and knowledge that have been learned in other courses.

**Recommended Grade Level: 12**

**Credits: Grades and credits for related instruction and on-the-job training experiences are reflected under one course title for a total of six credits for the year.**

**A Core 40, AHD, THD elective course**

### INTRODUCTION TO ACCOUNTING | 4524 (ACC) |

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

**Recommended Grade Level: 11-12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

### PERSONAL FINANCIAL RESPONSIBILITY | 4540 |

Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt.

**Recommended Grade Level: 10-12**

**A one credit/one semester course**

**Local Requirement for all diploma types.**

**PRINCIPLES OF MANAGEMENT | 4518 (ADV BUS CC) |**

Students will learn the functions performed by business and the role of business in their personal and professional lives. Areas of study include business management, finance, human resources, marketing, information management, entrepreneurship, and the social responsibility of business and ethical decision-making.

**Recommended Grade Level: 10-12**  
**A one credit/one semester course**  
**A Core 40, AHD, THD elective course**

**PRINCIPLES OF MARKETING | 5914 (PRN MRKT) |**

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

**Recommended Grade Level: 10-12**  
**A one credit/one semester course.**  
**A Core 40, AHD, THD elective course**

**FAMILY & CONSUMER SCIENCES DEPARTMENT****ADVANCED NUTRITION AND WELLNESS | 5340 (ADV NTRN WEL) |**

Advanced Nutrition and Wellness is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. Advanced Nutrition and Wellness is an especially appropriate course for students interested in careers in the medical field, athletic training and dietetics. This course builds on the foundation established in Nutrition and Wellness, which is a required prerequisite. This is a project-based course; utilizing higher-order thinking, communication, leadership and management processes. Topics include extensive study of major nutrients, nutritional standards across the lifespan, influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills; attention will be given to nutrition, food safety and sanitation. This course is the second in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

**Recommended Grade Level: 10-12**  
**Prerequisites: Nutrition and Wellness**  
**A one credit/one semester course**  
**A Core 40, AHD, THD elective course**

**CHILD DEVELOPMENT | 5362 (CHLD DEV) |**

Child Development is an introductory course that is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child care giving and nurturing; and support systems for parents and caregivers. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Authentic applications such as introductory laboratory/field experiences with young children and/or service learning that build knowledge of children, child development, and nurturing of children are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

**Recommended Grade Level: 10-12**  
**Credits: 1 credit per semester, maximum of 2 semesters, 2 credits maximum**  
**Qualifies as one of the F&CS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6).**  
**A Core 40, AHD, THD elective course**

**EARLY CHILDHOOD EDUCATION I | 5412 (ECE I) |**

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; 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 postsecondary programs are encouraged.

**Recommended Grade Level: 11-12**  
**Recommended Prerequisite: Child Development**  
**Credits: 2 credits per semester, maximum of 2 semesters, 4 credits maximum**  
**A Core 40, AHD, THD elective course**  
**This course is aligned with postsecondary courses for Dual Credit through Ivy Tech**

**EARLY CHILDHOOD EDUCATION II | 5406 (ECE II) |**

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 postsecondary programs or in a combination of the two. Dual credit agreements with postsecondary programs are encouraged.

**Recommended Grade Level: 12**  
**Prerequisites: Early Childhood Education I**  
**Recommended Prerequisite: Nutrition and Wellness**  
**Credits: 3 credits per semester, maximum of 2 semesters, 6 credits maximum**  
**A Core 40, AHD, THD elective course**  
**This course is aligned with postsecondary courses for Dual Credit through Ivy Tech**

## EDUCATION PROFESSIONS I

| 5408 (ED PROF I) |

Education Professions I 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. 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 teacher. Articulation with postsecondary programs is encouraged.

**Recommended Grade Level: 12**

**Prerequisites: Child Development, Early Childhood Education I**

**Credits: 2 credits per semester, maximum of 2 semesters, 4 credits maximum**  
**A Core 40, AHD, THD elective course**

**This course is aligned with postsecondary courses for Dual Credit through Ivy Tech**

## INTERPERSONAL RELATIONSHIPS

| 5364 (INTR RLT) |

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.

**Recommended Grade Level: 9-12**

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

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

**A Core 40, AHD, THD elective course**

## NUTRITION AND WELLNESS

| 5342 (NUTR WLNS) |

Nutrition and Wellness is an introductory course valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers related to nutrition, food, and wellness. This is a nutrition class that introduces students to only the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Direct, concrete mathematics and language arts proficiencies will be applied. This course is the first in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

**Recommended Grade Level: 10-12**

**A one credit/one semester course**

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

**A Core 40, AHD, THD elective course**

## HEALTH & PHYSICAL EDUCATION DEPARTMENTS

### ELECTIVE PHYSICAL EDUCATION (L)

| 3560 (ELECT PE) |

Elective Physical Education, a course based on selected standards from the 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 marital arts; aquatics; gymnastics; and dance. It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.)

**Recommended Grade Level: 10-12**

**Recommended Prerequisites: Physical Education I and II**

**Credits: 1 credit per 1 semester. A maximum of 6 credits may be earned provided that there is no course or skill level duplication.**

**A Core 40, AHD, THD elective course**

### HEALTH & WELLNESS EDUCATION

| 3506 (HLTH&WELL) |

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

**Recommended Grade Level: 10-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

### HEALTH SCIENCE EDUCATION

| 5282 |

Health Science Education is a one-year program for senior students who have an interest to explore a medical career. The Health Science class meets two hours each day. The class offers career orientation, ethics, medical terminology, basic anatomy, nutrition, diseases and laboratory practice in patient care. The students will participate in on-the-job observations in areas such as: nursing, therapies, radiology, optometry, physicians, dentistry and/or medical records. Students must have a passing grade to participate in on-the-job observations. Students explore such topics as interpersonal skills and professional ethics. Dual credit is available in Medical Terminology from Vincennes University. Students wishing to specialize in Pre-Pharmacy will be considered for the afternoon class only. The pre-pharmacy option offers an intense six week, two hour a day study of general pharmacy, body systems, classifications of drugs and basic science for the pharmacy technician. The course provides an opportunity for students to gain experience observing in a local retail pharmacy daily with real on-the-job experiences. Students will be more prepared to continue their schooling in college to pursue a career as a pharmacist. Class enrollment is limited by the number of retail pharmacies available. Interest and grade point average will be used to select enrollees. **Students must provide their own transportation.**

**Suggested Grade Level: 12**

**A four credit/two semester course**



**MEDICAL TERMINOLOGY (COLLEGE CREDIT) | 5274 (MED TERMS) |**

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 taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information. Students have the opportunity to acquire skills in interpreting medical records and communications accurately and logically. Emphasis is on forming a foundation for a medical vocabulary including meaning, spelling, and pronunciation. Medical abbreviations, signs, and symbols are included.

**Recommended Grade Level: 11-12**

**Recommended Prerequisites: None**

**Credits: 1 credit per semester**

**A Core 40, AHD, THD elective course**

**This course is aligned with postsecondary courses for Dual Credit.**

**PHYSICAL EDUCATION I | 3542 (PHYS ED) |**

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

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**PHYSICAL EDUCATION II | 3544 (PHYS ED II) |**

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in four of the following that were not in PHYS ED I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.).

**Recommended Grade Level: 9-12**

**Recommended Prerequisites: Physical Education I**

**Credits: 1 credit per 1 semester**

**A Core 40, AHD, THD elective course**

**LANGUAGE ARTS DEPARTMENT****ENGLISH 9 | 1002 (ENG 9) |**

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

**Recommended Grade Level: 9**

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

**A Core 40, AHD and THD course**

**ENGLISH 9 HONORS | 1003 (ENG 9H) |**

English 9 Honors will challenge students by covering core standards in greater depth. It is highly suggested that students pursuing an AHD take this course.

**Recommended Grade Level: 9**

**Prerequisite: Testing in 8th Grade or teacher recommendation**

**A two credit/two semester course A Core 40, AHD and THD course**

**ENGLISH 10 | 1004 (ENG 10) |**

English 10, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 10, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

**Recommended Grade Level: 10**

**Recommended Prerequisites: B+ or above in ENG 9H or teacher recommendation**

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

**A Core 40, AHD, THD elective course**

**ENGLISH 10 HONORS | 1005 (ENG 10H) |**

English 10 Honors will challenge students by covering core standards in greater depth. It is highly suggested that students pursuing an AHD take this course.

**Recommended Grade Level: 10**

**Prerequisite: B+ in ENG 9 H or teacher recommendation**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

**ENGLISH 11 | 1006 (ENG 11) |**

English 11, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 11 and the Common Core State Standards for English/Language Arts, is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes and a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

**Recommended Grade Level: 11**

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

**A two credit/two semester course**

**A Core 40, AHD and THD course**

**ENGLISH 11 AP, LANGUAGE AND COMPOSITION | 1056 (ADV ENG CC) |**

Advanced English/Language Arts, College Credit, is an advanced course based on Indiana's Academic Standards for English/Language Arts and the Common Core State 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 postsecondary institution through an adjunct agreement with a secondary school.

**Recommended Grade Level: 11**

**Recommended Prerequisites: A- or above in English 10, English 10 Honors or teacher recommendation**

**A two credit/two semester course**

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

**ENGLISH 12 | 1008 (ENG 12) |**

English 12, an integrated English course based on Indiana's Academic Standards for English/Language Arts for Grade 12 and the Common Core State Standards for English/Language Arts, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes and tech-

nical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

**Recommended Grade Level: 12**

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

**A two credit/two semester course**

**A Core 40, AHD and THD course**

## **ENGLISH 12 AP**

**| 1058 (ADV ENG CC) |**

Advanced English/Language Arts, College Credit, is an advanced course based on Indiana's Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts in Grades 11 and 12. This course provides students with a first year college level experience; its overview and objectives are abstracted from the College Board's AP English Course Description. The purpose is to develop your understanding of the ways writers use language to provide meaning and pleasure; the focus of the course is "close critical analysis of imaginative literature," which includes a study of a work's structure, its style, its themes, an author's use of figurative language, imagery, symbolism, tone, etc. 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 Level: 12**

**Recommended Prerequisites: B+ or above in English 11 AP or teacher recommendation**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

## **STUDENT PUBLICATIONS**

**| 1086 (STDNT PUBS) |**

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

**Recommended Grade Level: 9-12**

**Recommended Prerequisites: Teacher recommendation**

**Credits: 1-8 credits. The nature of this course allows for successive semesters of instruction at advanced levels. May be offered over three or four years by subtitling**

**A Core 40, AHD, THD elective course**

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

**NOTE: This is the designated school newspaper or yearbook course.**

# **MATHEMATICS DEPARTMENT**

## **ALGEBRA I**

**| 2520 (ALG I) |**

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

**Suggested Grade Level: 9-12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

## **ALGEBRA I HONORS**

**| 25203 ALG I H |**

Algebra I Honors will challenge students by covering core standards in greater

depth. It is highly suggested that students who plan to pursue higher level mathematics take this course.

**Suggested Grade Level: 8-9**

**Prerequisite: teacher recommendation**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

## **ALGEBRA I LAB**

**2516 (ALG I LAB)**

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

**Recommended Grade Level: 9-12**

**A two credit/two semester course**

**Counts as a Mathematics Course for General Diplomas only.**

**A Core 40, AHD, THD elective course**

## **ALGEBRA II**

**| 2522 (ALG II) |**

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Algebra II is made up of 5 strands: Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential & Logarithmic Equations and Functions; Polynomial, Rational, and Other Equations and Functions; and Data Analysis, Statistics, and Probability. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**Recommended Grade Level: 10-12**

**Recommended Prerequisite: Geometry**

**A two credit/two semester course**

**A Core 40, AHD, THD course**

## **ALGEBRA II HONORS**

**| 2544 ALG II H |**

Algebra II Honors will challenge students by covering core standards in greater depth. It is highly suggested that students who plan to pursue higher level mathematics take this course.

**Recommended Grade Level: 10-11**

**Prerequisites: Geometry Honors or teacher recommendation**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

## **AP CALCULUS AB**

**| 2562 (CALC AB AP) |**

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. You'll learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and how to make connections amongst these representations. You will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

**Recommended Grade Level: 12**

**Prerequisites: Pre-Calculus and Trigonometry**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

**\*Graphing calculator required.**

**GEOMETRY**| **2532 (GEOM)** |

Geometry formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Five 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.

**Recommended Grade Level: 9-12****Recommended Prerequisite: Algebra I****A two credit/two semester course****A Core 40, AHD, THD course****GEOMETRY HONORS**| **25321 (GEO H)** |

Geometry Honors will challenge students by covering core standards in greater depth. It is highly suggested that students who plan to pursue higher level mathematics take this course.

**Recommended Grade Level: 9-10****Prerequisite: Algebra I Honors and teacher recommendation****A two credit/two semester course****A Core 40, AHD and THD course****PRE-CALCULUS DUAL CREDIT**| **2564 (PRECAL)** |

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

**Recommended Grade Level: 11-12****Recommended Prerequisite: Algebra II Honors or teacher recommendation****A one credit/one semester course****A Core 40, AHD and THD course****Students have the option to take the course as Math 115, College Algebra (3 credit hours) through Oakland City University.****\*Graphing calculator required.****QUANTITATIVE REASONING**| **2550 (QUANT REAS)** |

Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**Recommended Grade Level: 11-12****Recommended Prerequisite: Algebra II****A two credit/two semester course****A Core 40, AHD and THD course****TRIGONOMETRY DUAL CREDIT**| **2566 (TRIG)** |

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

**Recommended Grade Level: 11-12****Prerequisites: Pre-Calculus****A one credit/one semester course****A Core 40, ADH and THD course****Students will have the option to take the course as Math 120, Trigonometry (3 credit hours) through Oakland City University.****\*Graphing calculator required.****MULTIDISCIPLINARY DEPARTMENT****BASIC SKILLS DEVELOPMENT**| **0500** |

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

**A one credit/one semester course that is REQUIRED until passing the ECA.****CADET TEACHING EXPERIENCE**| **0502 (CADET TCHG)** |

This elective course provides students in grades eleven or twelve organized exploratory teaching experiences in grades kindergarten through grade nine. All teaching experiences should be preplanned by the high school Cadet Teaching Experience teacher-trainer and the cooperating teacher(s) who are interested in 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 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.

**Suggested Grade Level: 11-12 Students must apply for admission to the class.****A two credit/two semester course A total of four credits may be earned.****Cadet teaching experience for high school students takes place with 6th graders.****A Core 40, AHD, THD elective course****JAG I (Jobs for America's Graduates)**| **5220** |

JAG (Jobs for America's Graduates) is a career exploration and preparation course that provides a hands-on approach to exploring personal strengths and challenges as well as job attainment skills (cover letter, resume, job application, interviewing, etc.) and work place "survival" skills (interpersonal relations, team work, etc.). Students will work to build strengths in academic areas, time management, and communication. Students will receive support in obtaining employment and finding opportunities for job shadowing and internships. Students will learn about various traditional and non-traditional careers. Students will also gain understanding regarding requirements and types of training and education needed for certain career fields.

Students also receive support in achieving a High School Diploma and completing college entrance requirements. This course involves individual assignments, team activities/projects, academic remediation support, service learning opportunities, guest speakers, field trips (including some JAG events such as the Leadership Development and Career Development conferences), and career exploration. Students will also participate in the JAG Career Association in various activities focused on Career and Leadership Development, Service Learning, and Civic/Social Awareness.

**Recommended Grade Level: 10-12**

**Recommended Prerequisites: Instructor Approval**

**Credits: two semesters, one credit per semester**

**Counts as an Elective for all diplomas**

### **JAG II (Jobs for America's Graduates) | 5221**

JAG (Jobs for America's Graduates) is a career exploration and preparation course that provides a hands-on approach to exploring personal strengths and challenges as well as job attainment skills (cover letter, resume, job application, interviewing, etc.) and work place "survival" skills (interpersonal relations, team work, etc.). Students will receive support in obtaining employment and finding opportunities for job shadowing and internships. Students will build on the knowledge and experience gained in JAG I. This course will provide students with continuing opportunities to develop their skills in essential life and career related areas. Students also receive support in achieving a High School Diploma and completing college entrance requirements. This course involves individual assignments, team activities/projects, academic remediation support, service learning opportunities, guest speakers, field trips (including some JAG events such as the Leadership Development and Career Development conferences), and career exploration. Students will also participate in the JAG Career Association in various activities focused on Career and Leadership Development, Service Learning, and Civic/Social Awareness.

**Recommended Grade Level: 11-12**

**Recommended Prerequisites: JAG I**

**Credits: two semesters, one credit per semester**

**Counts as an Elective for all diplomas**

### **PEER TUTORING | 0520 (PEER TUTR)**

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 pre-planned 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.

**Prerequisites: Application Required**

**Recommended Grade Level: 10-12**

**Credits: One credit per semester up to 2 credits**

**Counts as an Elective for all diplomas.**

### **RECONNECTING YOUTH | 0590**

Reconnecting Youth is a semester long class which focuses on 3 main goals: Increasing school performance, decreasing drug use, and decreasing emotional distress. The class has curriculum that covers: improving self-esteem, setting goals and making decisions, personal control (ability to successfully cope with stress, anger, anxiety, and depression), and interpersonal communication (communication skills to help improve relationships). Students must go through an interview to be in the class. Space is limited to 20 students.

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

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.

**Recommended Grade Level: 10-12**

**Laboratory course**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**The nature of this course allows for successive semesters of instruction at an advanced level provided that defined standards are utilized.**

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

### **BEGINNING CHORUS (L) | 4182 (BEG CHOR)**

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

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.**

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

### **BEGINNING CONCERT BAND (L) | 4160 (BEG BAND)**

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

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.**

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

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

Choral Chamber Ensemble is based on the Indiana Academic Standards for High School Choral Music. Student musicianship and specific performance skills in this course are enhanced through specialized small group instruction. The activities expand the repertoire of a specific genre. Chamber ensemble classes provide instruction in creating, performing, listening to, and analyzing music in addition to focusing on specific subject matter. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

**Recommended Grade Level: 9-12 Students must audition for admission.**

**Laboratory course**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.**

## **MUSIC DEPARTMENT**

### **APPLIED MUSIC | 4200 (APPL MUS)**

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

**Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma**  
**MUSICAL THEATRE (L) | 0518 (MUS THTR) |**

Musical Theatre is based on the Indiana Academic Standards for Theatre. Students in this course study the history of musical theatre and its place in today's society. They participate in staging, choreographing, rehearsing, and performing an original or existing musical work. This class may be taught collaboratively among music, theatre, dance, and visual arts faculty. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

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

**A Career Academic Sequence course**

**MUSIC HISTORY AND APPRECIATION | 4206 (MUS HIST) |**

Music History and Appreciation is based on the Indiana Academic Standards for Music and standards for this specific course. Students receive instruction designed to explore music and major musical styles and periods through understanding music in relation to both Western and Non-Western history and culture. Activities include analyzing and describing music; evaluating music and music performances; and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

**Recommended Grade Level: 9-12**

**Credits: a 1 or 2 semester course for 1 credit each semester**

**The nature of this course allows for two successive semesters of instruction, provided that defined standards are utilized.**

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

**A Core 40, AHD, THD elective course**

**MUSIC THEORY AND COMPOSITION (L) | 4208 (MUS THEORY) |**

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

**Recommended Grade Level: 9-12 Students must apply for admission.**

**Laboratory course**

**Credits: a 1 or 2 semester course for 1 credit each semester.**

**The nature of this course allows for two successive semesters of instruction, provided that defined standards are utilized.**

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

**A Core 40, AHD, THD elective course**

**PIANO AND ELECTRONIC KEYBOARD (L) | 4204 (PIANO KEY) |**

Piano and Electronic Keyboard is based on the Indiana Academic Standards for High School Music Technology and Instrumental Music. Students taking this course are offered keyboard classes in order to develop music proficiency and musicianship. Students perform with proper posture, hand position, fingering, rhythm, and articulation; compose and improvise melodic and harmonic material; create and perform simple accompaniments; listen to, analyze, sight-read, and study a variety of keyboard literature; study the elements of music as exemplified in a variety of styles; and make interpretive decisions.

**Recommended Grade Level: 9-12**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.**

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

**PROJECT LEAD THE WAY (PLTW)  
BIOMEDICAL SCIENCES**

**BIOMEDICAL INNOVATIONS | 5219 |**

**4th PLTW Course**

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students

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. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or 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.

**Suggested Grade Level: 12th grade or permission of the instructor**

**Recommended Prerequisites: Principles of Biomedical Sciences, Human Body Systems and Medical Intervention**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**HUMAN BODY SYSTEMS | 5216 (HUMAN SYST) |**

**2nd PLTW Course**

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.

**Suggested Grade Level: 10th grade or permission of instructor**

**Recommended Prerequisite: Principles of the Biomedical Sciences**

**A one credit/one semester course**

**A Core 40, AHD, THD elective course**

**MEDICAL INTERVENTION | 5217 |**

**3rd PLTW Course**

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

**Suggested Grade Level: 11th grade or permission of instructor**

**Recommended Prerequisites: Principles of Biomedical Sciences and Human Body Systems**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**PRINCIPLES OF BIOMEDICAL SCIENCES | 5218 |**

**1st PLTW Course**

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.

**Suggested Grade Level: 9th grade or permission from instructor**

**A two credit/two semester course A Core 40 science course.**

## PROJECT LEAD THE WAY (PLTW) PRE-ENGINEERING

### COMPUTER INTEGRATED MANUFACTURING | 5534 (CIM) |

#### 3rd year optional course

Computer Integrated Manufacturing is a course that applies mathematical and scientific principles to the manufacturing areas of rapid prototyping, robotics, and automation. Classroom and laboratory instruction will develop problem-solving skills as students use computer controlled rapid prototyping and CNC equipment to construct actual models of their three-dimensional design solutions. Students will evaluate their designs using various techniques of analysis and make appropriate modifications before producing their prototypes. Additional areas of instruction include an introduction to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. This course is offered at Jasper and Forest Park through our Vocational Cooperative.

**Suggested Grade Level: 11-12**

**Prerequisites: Principles of Engineering, Introduction to Engineering & Design**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**Dual credit available through Ivy Tech.**

### INTRODUCTION TO ENGINEERING DESIGN | 4812 |

#### 1st PLTW Course

Introduction to Engineering Design is an introductory course which develops student problem solving skills with emphasis placed on the development of three-dimensional solid models. Students will work from sketching simple geometric shapes to applying a solid modeling computer software package. They will learn a problem solving design process and how it is used in industry to manufacture a product. The Computer Aided Design System (CAD) will also be used to analyze and evaluate the product design. The techniques learned, and equipment used, are state of the art and are currently being used by engineers throughout the United States.

**Recommended Grade Level: 9-12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**Dual Credit available through Ivy Tech.**

### PRINCIPLES OF ENGINEERING | 4814 |

#### 2nd PLTW Course

Principles of Engineering is a broad-based survey course designed to help students understand the of engineering and engineering technology and its career possibilities. Students will be introduced to the physics behind engineering and develop engineering problem solving skills that are involved in post secondary education programs and engineering careers. They will also learn how engineers address concerns about the social and political consequences of technological change.

**Recommended Grade Level: 10-12**

**Prerequisite: Algebra I**

**A two credit/two semester course A Core 40, AHD, THD elective course**

**Dual Credit available through Ivy Tech.**

## SCIENCE DEPARTMENT

### ADVANCED SCIENCE, BIOCHEMISTRY (L) | 3092 (ADV SCI ST/BIOCH) |

Advanced Science Biochemistry is a class that combines themes from chemistry and biology. It focuses on the study of carbon chemistry since this is the basis of all life. Students explore the structure and reactions of various groups of carbon compounds such as alkanes, alcohols, aldehydes and carboxylic acids. Additional topics include the study of carbohydrates (sugars and starches), lipids (fats, oils, waxes, etc.), and proteins (polymers of amino acids). The class includes several major experiments where students learn additional laboratory skills. Biochemistry provides a strong background for students pursuing careers in agriculture, biology, or the medical field i.e. physician, nurse, medical lab technician, dentist, pharmacist, optometrist, or veterinarian. In particular, this class is especially recommended for anyone going into nursing.

**Recommended Grade Level: 11-12**

**Recommended Prerequisite: Chemistry I**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

### ANATOMY & PHYSIOLOGY

| 5276 (A&P) |

Anatomy & Physiology is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. Introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, skeleton, muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields.

**Recommended Grade Level: Grade 11-12**

**Recommended Prerequisites: Biology, ICP or Chemistry**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

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

**This course is aligned with postsecondary courses for Dual Credit**

### BIOLOGY I (L) | 3024 (BIO I) |

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

**Recommended Grade Level: 9**

**A two credit/two semester course**

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

### BIOLOGY II (L) | 3026 (BIO II) |

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

**Recommended Grade Level: 10**

**Recommended Prerequisite: Biology I**

**Credits: A two credit course**

**Counts as life science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas**

### CHEMISTRY I (L) | 3064 (CHEM I) |

Chemistry I is a course based on regular laboratory investigations of matter, chemical reactions, and the role of energy in those reactions. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. In addition, students enrolled in this course are expected to (1) gain an understanding of the history of chemistry, (2) explore the uses of chemistry in various careers, (3) investigate chemical questions and problems related to personal needs and societal issues, and (4) learn and practice laboratory safety.

**Prerequisite: a C or better in Algebra I and a B- or better in Biology I**

**A Core 40, AHD and THD course**

**A two credit/two semester course**

### CHEMISTRY II (L) | 3066 (CHEM II) |

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

**Prerequisite: B- or above in Chemistry I**

**A Core 40, AHD and THD course A two credit/two semester course**

**ENVIRONMENTAL SCIENCE (L) | 3010 (ENVSCI) |**

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

**Recommended Grade Level: 11-12**

**Recommended Prerequisite: Biology and ICP or Chemistry**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

**INTEGRATED CHEMISTRY-PHYSICS (L) | 3108 (ICP) |**

Integrated Chemistry-Physics is a laboratory-based course in which students explore fundamental chemistry and physics principles. Students enrolled in this course examine, through the process of scientific inquiry, the structure and properties of matter, chemical reactions, forces, motion, and the interactions between energy and matter. Working in a laboratory environment, students investigate the basics of chemistry and physics in solving real-world problems that may have personal or social consequences beyond the classroom.

**Recommended Grade Level: 10**

**Prerequisites: Biology I and Algebra I (Algebra I may be taken concurrently)**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

**PHYSICS I: ALGEBRA BASED, ADVANCED PLACEMENT (L) | 3080 (PHYS B AP) |**

Advanced Placement Physics 1 is a course based on content established by the College Board that is equivalent to an introductory algebra based college physics class. This course will study velocity, acceleration, projectiles, classical mechanics, gravity, energy, momentum, oscillating motion, waves, electrostatics and DC circuits. Special emphasis is given to conducting laboratory experiments and analyzing data, generating conceptual models, applying models, critical thinking and problem solving. This course provides the foundation in physics for students interested in pursuing physical sciences or engineering in college. Students may take the AP Physics 1 exam and earn college credit based on their AP exam score.

**Prerequisite: Geometry, and have completed or be concurrently enrolled Algebra II**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**SOCIAL STUDIES DEPARTMENT****PSYCHOLOGY (DUAL CREDIT) | 15320 (PSYCH) |**

Psychology is the scientific study of mental processes and behavior. The standards have been divided into six content areas: Scientific Methods; Developmental; Cognitive; Personality, Assessment and Mental Health; Socio-cultural; and Biological Bases of Behavior. In the Scientific Methods area, research methods and ethical considerations are discussed. Developmental psychology takes a life span approach to physical, cognitive, language, emotional, social, and moral development. Cognitive aspects of psychology focus on learning, memory, information processing, and language. Personality, Assessment and Mental Health topics include psychological disorders, treatment, personality, and assessment. Socio-cultural dimensions of behavior deal with topics such as conformity, obedience, perceptions, attitudes, and the influence of the group on the individual. The Biological Bases focus on the way the brain and nervous system function, including topics such as sensation, perception, motivation, and emotion.

**Suggested Grade Level: 12**

**A one credit/one semester course**

**A Core 40, AHD and THD course**

**A Career Academic Sequence course.**

**Dual Credit through OCU.**

**SOCIOLOGY | 1534 (SOCIOLOGY) |**

Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cul-

tures, and in social settings and groups. Students will describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry students will 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 will also analyze the role of individuals in the community and social problems in today's world.

**Suggested Grade Level: 12**

**A one credit/one semester course**

**A Core 40, AHD and THD course**

**A Career Academic Sequence course**

**UNITED STATES GOVERNMENT | 1540 (US GOV) |**

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 by citizens is stressed. Students will understand the nature of citizenship, politics, and government when they understand their rights and responsibilities as citizens and be able to explain how those rights and responsibilities as citizens are part of local, state, and national government in the US today. Students examine how the US constitution protects individual rights and provides the structures and functions for the various levels of government affecting their lives. Students will also analyze how the US government interacts with other nations and evaluate the United States' role in world affairs. Students inquire about American government through primary and secondary sources and articulate, evaluate, and defend positions on political issues with sound reasoning and evidence. As a result, students can explain the roles of citizens in the US and the participation of individuals and groups in government, politics, and civic activities, recognize the need for civic and political engagement of citizens, and exercise rights and responsibilities in order to preserve and improve their civil society and constitutional government.

**Suggested Grade Level: 12**

**A one credit/one semester course**

**A Core 40, AHD and THD course**

**UNITED STATES HISTORY | 1542 (US HIST) |**

United States History builds upon concepts developed in previous studies of U.S. History. 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. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. They will 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.

**Suggested Grade Level: 11**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

**UNITED STATES History AP | 1562 (US HIST AP) |**

United States History, Advanced Placement is a course based on the content established by the College Board. The course has a chronological frame from 1492 to the present and focuses on multiple causation and change in United States history over time. A variety of historical themes are examined in order to place the history of the United States into larger analytical contexts. Students are expected to analyze and interpret primary sources and develop awareness of multiple interpretations of historical issues in secondary sources. Historical events and issues in U.S. history are to be examined from multiple perspectives.

**Suggested Grade Level: 11-12**

**Credits: A 1 or 2 credit course, 1 credit per semester.**

**A Core 40, AHD and THD course**

**WORLD HISTORY AND CIVILIZATION | 1548 (WLD HST/CVL) |**

World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas of the earth and that significantly influenced people and places in subsequent eras. Some key events and developments pertain primarily to particular people and places;

others, by contrast, involve transcultural interactions and exchanges between various peoples and places in different parts of the world. Students are expected to practice skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, analysis and interpretation, research, issues-analysis, and decision-making. They are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. Students are expected to examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present.

**Suggested Grade Level: 10**

**A two credit/two semester course**

**A Core 40, AHD and THD course**

## TRADE AND INDUSTRIAL EDUCATION

### **AUTOMOTIVE SERVICES TECHNOLOGY I | 5510 (AUTO TECH OR AST) |**

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 postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/ calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

**Recommended Grade Level: 11**

**A six credit/two semester course**

**A Core 40, AHD, THD elective course**

**Dual credit aligned with Ivy Tech.**

**This course meets at Southridge High School and requires a 4 period block.**

### **AUTOMOTIVE SERVICES TECHNOLOGY II | 5546 (AUTO TECH II) |**

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

**Recommended Grade Level: 12**

**Recommended Prerequisites: Automotive Services Technology I**

**A six credit/two semester course**

**A Core 40, AHD, THD elective course**

**Dual credit aligned with Ivy Tech.**

**This course meets at Southridge High School and requires a 4 period block.**

### **COMPUTER TECH-SUPPORT AND NETWORKING | 5234 (NTRK FUND) |**

Networking Fundamentals introduces students to concepts of local and wide area networks, home networking, networking standards using the IEEE/OSI Model, network protocols, transmission media and network architecture/topologies. Security and data integrity will be introduced and emphasized throughout this course. The purpose of this course is to offer students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered

will include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs as well as creating a wireless LAN.

**Recommended Grade Level: 12**

**Recommended Prerequisites: Computer Tech Support**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**This course is aligned with postsecondary courses for Dual Credit.**

**This course meets at Vincennes University Jasper Campus.**

### **CONSTRUCTION TRADES I AND II**

**| 5580 (CONST TECH I) |**

Construction Technology I includes classroom and laboratory experiences covering the formation, installation, maintenance, and repair of buildings, homes, and other structures. This course also covers the use of working drawings and applications from the print to the work. Students will explore 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. Elementary aspects of residential design and site work will also be covered. 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 the skills needed for layout and construction processes of floor and wall systems from blueprints and professional planning documents. Instruction will be given in the following areas, administrative requirements, definitions, building planning, foundations, wall coverings, roof and ceiling construction, and roof assemblies. 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's Safety & Health Standards for the construction industry.

**Recommended Grade Level: 11-12**

**Recommended Prerequisites: Introduction to Construction**

**Credits: 2-3 credits per semesters, maximum of 2 semesters, maximum of 6 credits**

**A Core 40, AHD, THD elective course**

**This course is aligned with postsecondary courses for Dual Credit**

**This course meets at Washington High School and requires a 4 period block.**

### **COSMETOLOGY I AND II**

**| 5802 (CSMTLGY I) |**

Cosmetology I offers an introduction to cosmetology with an emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, bacteriology, and sanitation. In the second semester greater emphasis is placed on the application and development of these skills. The State of Indiana requires a total of 1500 hours of instruction for licensure. Cosmetology II builds on concepts learned in Cosmetology I with an emphasis on the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology.

**Recommended Grade Level: 11-12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**This course meets at Vincennes Beauty College and requires a 4 period afternoon block.**

### **CRIMINAL JUSTICE I**

**| 5822 |**

### **CRIMINAL JUSTICE II**

**| 5824 |**

Criminal Justice I is a TWO year program for Junior and senior students who have an interest and a career objective in law enforcement or public safety. Training will include specialized classroom and practical experiences designed to supplement the training provided by officially designated law enforcement agencies. Instruction will focus on an Introduction to Criminal Justice where students will study the history, role, development, philosophy, and constitutional aspects of the United States criminal justice system. The course will explore the various segments of the criminal justice system, their interrelationship, function, and responsibility. Introduction to Traffic Control and Accident Investigation where the student will have acquired an understanding of the police role in traffic enforcement and investigation. Introduction to Criminology where students will learn the phenomena of crime and delinquency, types of offenses and offenders, and the basic components of the United States criminal justice system and Criminal Investigations which is designed as an introduction to the investigative process. The course will focus on crime scene investigation; physical evidence; interviewing; and, interrogation. The course will include field trips to observe a trial and court proceedings, visit a correctional facility, hands on accident investigation, the causation factors of



crime in the United States and hands on criminal investigations including a mock crime scene that the students will have to solve and report on.

**Suggested Grade Level: 11-12**

**A two credit/two semester course**

***Criminal Justice I and II will be offered every other year alternating I and II.***

***It is possible to earn 12 dual credits in this program.***

**A Core 40, AHD, THD elective course**

**A Career Academic Sequence, Career-Technical program**

### **CULINARY ARTS AND HOSPITALITY MANAGEMENT | 5440 (CULART HOSP) |**

Culinary Arts and Hospitality Management 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 postsecondary programs is encouraged.

**Recommended Grade Level: 12**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**This course meets at Dubois High School and requires a 3 period morning block.**

### **PRECISION MACHINE I, DUAL CREDIT | 5782 (MACH TECH) | CIP Code: 48.0501**

Precision Machine Technology includes a wide range of classroom and laboratory experiences that develop skills and knowledge in the shaping of metal parts. Emphasis is placed on basic precision machining operations including the use of lathes, mills, surface grinders, drill press, and bench work. Instruction includes the use and care of precision tools such as micrometers, indicators, combination squares, scales, and calipers. Advanced instruction include preparation in the use of Computer Numerically Controlled (CNC) machines that reflect current industry practices. Application of mathematical skills and blue print reading is part of the daily experience. Technical reading and writing skills will also be emphasized.

**Recommended Grade Level: 11-12**

**Recommended Prerequisites: Algebra I and Geometry**

**A four to six credit course over two semesters. Schools on block schedules may adjust the total number of credits to meet the local standard.**

**The nature of this course allows for a second year of instruction provided that content and standards address higher levels of knowledge.**

**A Core 40, AHD, THD elective course**

**Qualifies as a quantitative reasoning course.**

**Dual credit requirements on page 22.**

### **PRECISION MACHINE II, DUAL CREDIT | 5784 (PCSN MACH II) |**

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.

**Recommended Grade Level: Grade 12**

**Prerequisites: Precision Machining I**

**Credits: 2-3 credits per semester, maximum of 6 credits**

**A Core 40, AHD, THD elective course**

**Qualifies as a quantitative reasoning course**

**Dual credit requirements on page 22.**

### **RADIO AND TELEVISION I | 5986 (RAD TV I) |**

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.

**Recommended Grade Level: 11-12**

**Recommended Prerequisites: Introduction to Communications**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

**This course meets at Jasper High School and requires a 3 period morning block.**

### **WELDING TECHNOLOGY I, II DUAL CREDIT | 5776 |**

Welding Technology includes classroom and laboratory experiences that develop a variety of skills detailed in American Welding Society (AWS) Entry Level Guidelines and Certifications. Areas of study include SMAW, GMAW, FCAW, GTAW, OAW, RSW Welding and OAC-A, PAC, CAC-A Cutting. 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 industrial metals in four basic welding positions. Reinforcement of mathematical skills in geometry, precision measurement, and estimation will be part of the daily instruction. Understanding the principles of metallurgy, gases, and materials science is integral to this course. This course meets at PCHS.

**Recommended Grade Level: 11-12**

**A six credit/two semester course**

**A Core 40, AHD, THD elective course**

**Students may demonstrate proficiency and earn certification(s) through AWS. Dual Credit available through Ivy Tech and Vincennes University.**

## **WORLD LANGUAGES DEPARTMENT**

### **GERMAN I | 2040 (GER I) | SPANISH I | 2120 (SPAN I) |**

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

**Recommended Grade Level: 9-12**

**Prerequisites: B or above in English courses**

**A two credit/two semester course**

**A Core 40, AHD, THD elective course**

### **German II ACP | 2043 |**

ACP G150 Beginning German II. Introduction to present-day German and to selected aspects of the cultures of German-speaking countries. Introduction to German grammatical forms and their functions. Development of listening comprehension, simple speaking proficiency, controlled reading skills and simple written compositions. Active oral participation required.

**Recommended Grade Level : 10-12**

**Prerequisites: German I, minimum GPA of 2.7 and a minimum of 70% on both the written AND speaking parts of the German I final.**

**Credits: A 2- credit course, 4 credit hours with IU**

**A Core 40, AHD, THD, elective course**

**German III-IV ACP**

| 2046 |

German ¾ (2044/2046), ACP Indiana University German 200/250: An accelerated Course in intermediate German combining German 3 and 4 (2044 and 2046): Further development of oral and written command of language structures. Review of selected grammatical items. Listening comprehension. Reading of literary and non-literary texts. Discussion of selected films. Oral presentations. Writing of compositions based on material covered. Emphasis on both speaking proficiency and structural awareness. Conducted in German. Enrollment capped at 24.

**Recommended grade level 11-12****Prerequisites: German I and II, minimum GPA of 2.7 and a minimum of 70% on both the written AND speaking parts of the German II final.****3 credit hours with IU for semester I (G200), 3 credit hours for semester 2 (G250), for a total of 6.****SPANISH II**

| 2122 (SPAN II) |

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

**Recommended Grade Level: 9-12****Prerequisites: Spanish I, 70% or higher in Spanish I****A two credit/two semester course****A Core 40, AHD, THD elective course****SPANISH III**

| 2124 (SPAN III) |

Spanish III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-direct-

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

**Recommended Grade Level: 11-12****Prerequisites: Spanish I and II, 70% or higher in Spanish II****A two credit/two semester course****A Core 40, AHD, THD elective course****SPANISH IV**

| 2126 (SPAN IV) |

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

**Recommended Grade Level: 10-12****Prerequisites: Spanish I, II and III, 70% or higher in Spanish III****A two credit/two semester course****A Core 40, AHD, THD elective course**


---

## PATOKA VALLEY CAREER & TECHNICAL COOPERATIVE POLICY FOR SELECTING STUDENTS TO PROGRAMS

Selection to some programs is limited. All interested students must complete an application and return it to their school guidance office by May 1st or an earlier date established by the guidance office. The school which hosts the program receives 50% of the available enrollments. Remaining enrollments are divided using a percentage based upon school's prior year total school enrollment. Allotments are determined after May 1st, which is the final date for students to submit applications. After May 1st, all enrollments are final and do obligate tuition payments by participating schools; therefore, changes are generally not allowed.

In the case that there are more applications than available enrollments, the following procedure will dictate selection of students. First, juniors will receive priority over seniors in all two year programs. Second, students will be selected according to the following criteria: Career Interest (determined by previous classes, work experience, and possibly an interview), attendance record, disciplinary record, the need to repeat courses required for graduation, GPA or grades in classes, and the approval of the school administration and guidance.

Selecting to enroll in a course away from your home school is a great commitment and responsibility. It is strongly recommended that the student and parent make time to visit the school prior to submitting an application. This visit may be an Open House, a school bus trip, or may be arranged individually via the school guidance office.

# DUAL CREDIT AND ADVANCED PLACEMENT CLASSES

The following is a list of dual credit option courses that Pike Central offers. All courses depend on sufficient enrollment numbers. Please check with your Guidance Counselor to confirm your course selection. Check under each department for a course description.

PC #	PIKE CENTRAL NAME	COLLEGE	COLLEGE COURSE NUMBER AND CREDITS
5510	Automotive Services Tech I	Ivy Tech	AUTO 101 Steering and Suspension 3 cr.
5546	Automotive Services Tech II		AUTO 107 Engine Principles and Design 3 cr.
			AUTO 121 Brakes -3 cr.
			AUTO 127 Engine Repair -3 cr.
2562	Calculus AB, AP	OCU	Advanced Placement
5822	Criminal Justice	Ivy Tech	CRIM 113 Criminal Investigations 3 cr. and/or CRIM 111 Traffic 3 cr.
5412	Early Childhood Education I	Ivy Tech	ECED 100 & 101
5413	Early Childhood Education II	Ivy Tech	ECED 103
5408	Education Professions I, II	Ivy Tech	ECUD 101
1056	English 11 AP		AP English Language and Composition
1058	English 12 AP		AP English Literature and Composition
2046	German III/IV ACP College Project DC	IU	G200 G250, 6 credits with IU
2043	German II ACP	IU	G150, 4 credits with IU
5219	Biomedical Intervention	Ivy Tech	BIOT 107 4 credits - Must have completed all 4 PLTW
5274	Medical Terminology	VU	HITM Medical Terminology for Allied Health
3084	Physics AP		Advanced Placement
2564	Pre-Calculus/Trig DC	OCU	MATH 115 & 120 - 6 cr. (see OCU criteria below)
5782	Precision Machine I	VU	PMTD 110/110L 117, 118, 119 - 12 cr.
5784	Precision Machine II	VU	PMTD 108, 109, 111, 112 - 10 cr.
15320	Psychology DC	OCU	PSYC 101 3 cr.
1562	US History AP		
57760	Welding Technology II	Ivy Tech	WDT 114 Intro Welding 3 cr.
			Weld 108 Shielded Metal Arc Weld I 3 cr.
			Weld 207 Gas Metal Arc Welding 3 cr.
			Weld 100 Weld Processes 3 cr.
4812	IED Intro to Engineering	Ivy Tech	PLTW DESN 102 ADMF 103 Technical Graphics or Graphic Communication for Manufacturing
5534	CIM Comp Integ Manufacturing	Ivy Tech	PLTW ADMF 116 Automation and Robotics in Manufacturing I
4814	POE Principles of Engineering	Ivy Tech	PLTW ADMF 115 Materials and Processes for Manuf

## DUAL CREDIT PRE-REQUISITE AND PLACEMENT REQUIREMENTS

COURSE #	NAME	SAT/PSAT	ACT	ACCUPLACER
HIMT 110	Medical Terminology DC	SAT 420 CR 380 W PSAT 42 CR 38 W	21 R 15 E	89 R 68 SS

**OCU** All dual credit with OCU must meet following criteria: Possess a minimum GPA of 2.5 on a 4.0 scale from an accredited, approved, or commissioned high school; and possess a minimum PSAT score of 129, or a minimum SAT score of 1290, or a minimum ACT score of 18. If a student possesses a GPA of 3.0 on a 4.0 scale from an accredited, approved, or commissioned high school and is on track to earn a Core 40 high school diploma, he or she may be eligible to enroll in dual credit without a qualifying test score.

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

2017-18 Request Form All Courses

Diploma Type: \_\_\_\_\_

All Courses are full year unless noted									
	Agriculture	Art (1sem)	Family and Consumer Science	Career & Technical (CTE)					
5228	SAE* (FFA required) (app needed)	Intro 2D Art	Child Development (1 Sem)	5802 Cosmetology					
5088	Agricultural Power (CTE)	Adv 2D Art	Interpersonal Relations (1 Sem)	5580 Construction Trades					
5132	Horticultural Science	Ceram	Nutrition & Wellness (1 Sem)	5440 Culinary Arts & Hospitality					
5008	Animal Science	Digital Design (App needed)	Early Child Ed I DC (CTE)	5822 Criminal Justice (1 or 2 Sem)					
5170	Plant and Soil	Visual Comm (prereq: 4082)	Early Child Ed II DC (CTE)	5510 Auto Tech I 55100 Auto II DC					
5136	Landscape Management		Education Professions DC (CTE)	5234 IT Computer Tech & Networking					
		<b>Mathematics</b>		5776 Welding Tech I 57760 Welding II					
	<b>Business</b>	Algebra I	<b>Social Sciences</b>	5782 Precision Mach Tech I DC					
4524	Accounting	Algebra I Honors	Economics (1 Sem)	5784 Precision Mach Tech II DC					
4512	Business Math	Algebra II	Government (1 Sem)	5986 Radio and TV					
4560	Business Law and Ethics (1 Sem)	Algebra II Honors	US History						
4528	Admin & Office (1 Sem)	Calculus AB AP	US History AP	<b>PLTW Pre-Engineering - CTE</b>					
1514	Economics (1 Sem)	Geometry	Psychology DC (1 Sem)	4812 Intro to Eng Design (IED) DC					
5966	Entrepreneurship (1 Sem)	Geometry Honors	Sociology (1 Sem)	4814 Principles of Eng (POE) DC					
5900	ICE on the Job Training (w/ 5902)	Pre-Calculus DC	World History & Civilization	4810 Computer Int Manuf (CIM) DC					
5902	ICE Related Instruction (w/ 5900)	Trigonometry Dual Credit							
5286	Principles of Management (1 Sem)	Quantitative Reasoning	<b>World Languages</b>						
4540	Personal Financial Resp. (1 Sem)		German I	<b>Science</b>					
5914	Principles of Marketing (1 Sem)	<b>Music</b>	German II ACP	3092 Advanced Science Biochemistry					
		Beginning Concert band	German III/IV ACP	5276 Anatomy and Physiology (A & P)					
	<b>Health/PE/PLTW</b>	Beginning Chorus	Spanish I	3024 Biology I					
3560	Elective PE (1 or 2 Sem)	4160	Spanish II	30243 Biology Honors					
3506	Health Wellness Education (1 Sem)	4182	Spanish III	3026 Biology II					
5282	Health Careers	4180	Spanish III	3108 Integrated Chemistry/Physics (ICP)					
5274	Medical Terminology DC	4146	Spanish IV	3064 Chemistry I					
3542	PE I Boys	4200		3066 Chemistry II					
35421	PE I Girls	4162	<b>Language Arts</b>	3010 Environmental Science					
		4204	English 9	3080 Physics B AP					
	<b>Multidisciplinary</b>	4208	English 9 Honors						
502	Cadet Teaching (app needed)	4206	English 10	<b>ACP</b> : Accelerated Course Program					
9996	Student Worker (app needed)	528	English 10 Honors	<b>AP</b> : Advanced Placement					
0500	Basic Skills Dev (ISTEP Remediation)	Student Worker	English 11	<b>DC</b> : Dual Credit					
5200	Peer Tutor (app needed) (1 or 2 Sem)	Principles of Biomed (CTE)	English 11 AP	<b>CTE</b> : Career Tech Education					
9999	Supervised Study (1 or 2 Sem)	Human Body Systems (CTE)	English 12						
5220	JAG Jobs for American Graduates	Medical Intervention (CTE)	English 12 AP						
		Biomedical Innovations (CTE)	Student Publications						