Knightstown High School
2023-2024

Course Offerings and Curriculum Guide

8149 W. US Highway 40
Knightstown, Indiana 46148
765-345-5153
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KNIGHTSTOWN COMMUNITY HIGH SCHOOL
2023-2024 CURRICULUM GUIDE

Dear Student and Parent:

This curriculum guide **MUST** be studied carefully and understood to be useful to the student and parent in formulating a curriculum plan that meets graduation requirements.

This booklet contains general academic regulations, graduation requirements, honors diploma requirements, special programs, course offerings, course descriptions, and course prerequisites.

Schedule changes will be made **BEFORE THE BEGINNING OF EACH SEMESTER** for the following reasons only: 1) computer error, 2) course cancellation, 3) course conflict, and/or 4) failure to meet prerequisite. The student's schedule will be provided at registration and parent signature of approval will be required. **Once the semester starts, no schedule changes will be granted.**

REMEMBER:

1. **CAREFUL REVIEW OF THIS BOOKLET IS IMPERATIVE.**
2. **STUDENTS, PARENTS, AND COUNSELOR MUST WORK CLOSELY TOGETHER.**
3. **SCHEDULE CHANGES ARE RARELY PERMITTED.**

KNIGHTSTOWN COMMUNITY HIGH SCHOOL
MISSION STATEMENT

Knightstown High School will provide a learning environment where curriculum and programs are developed, implemented and maintained based on the philosophy that:

Students are the priority.

Change is the reality.

Teamwork is a necessity.

KNIGHTSTOWN COMMUNITY HIGH SCHOOL ADMINISTRATION

Principal ..... Mrs. Danielle Carmichael

Assistant Principal .....Mr. Gary Black

Guidance Director.....Ms. Wendy Vischer

Athletic Director ..... Mr. Kyle Whitkemper

CHARLES A. BEARD MEMORIAL SCHOOL CORPORATION CENTRAL OFFICE ADMINISTRATORS AND SCHOOL BOARD MEMBERS

Mr. Jediah Behny .....Superintendent

Mr. Wade Beatty..... President

Mrs. Cynthia Neal..... Vice President

Mr. Gerald Leonard .....Secretary

Mr. Graham Richardson ..... Member

Mr. Thomas Schaetzle ..... Member

Mrs. Melissa Toth..... Member

Mrs. Monica Van Hoy ..... Member

NON-DISCRIMINATION POLICY

The following is the non-discrimination policy of the Charles A. Beard Memorial School Corporation:

The Charles A. Beard School Corporation is an equal opportunity affirmative action institution in accordance with the Civil Rights Legislation which includes Title IX and does not discriminate on the basis of race, religion, national origin, sex, age, handicap or any other basis of discrimination prohibited by law in any of its educational programs, activities, admissions, or employment policies. Concerns regarding this policy should be referred to the central administration building at 345-5101.

GENERAL INFORMATION

Attendance:
We require 8 semesters of high school attendance with a 180-day school year. Furthermore, our students must attend a full school-day schedule. Early graduation is possible, but approval is required. Criteria can be found on the guidance webpage under the folder Early Graduation.

DIPLOMA TYPES

A student may graduate from Knightstown Community High School with one of the following diplomas:

CORE 40 WITH ACADEMIC HONORS DIPLOMA: The Academic Honors Diploma goes beyond the normal requirements for graduation. Students must have a cumulative GPA of 2.67 with all semester grades of a "C-" or above in courses that count toward the diploma and a total of 47 graduation credits. Many colleges offer special scholarships to Academic Honors Diploma recipients.

CORE 40 WITH TECHNICAL HONORS DIPLOMA: The Technical Honors Diploma goes beyond the normal requirements for graduation. Students must have a cumulative GPA of 2.67 with all semester grades of a "C-" or above in courses that count toward the diploma and a total of 47 graduation credits.

CORE 40 DIPLOMA: The Core 40 is a set of essential high school courses that are necessary for admission to most colleges. There is no GPA requirement unless interested in financial aid (2.0 on a 4.0 scale is the state requirement). Students must earn 44 graduation credits.

GENERAL DIPLOMA: The General Diploma meets minimum local and state requirements. There is not a GPA requirement. Students must earn 40 graduation credits. This is not a recommended diploma type for any students interested in any type of post-secondary education. **We will only allow students to Opt-Out of the Core 40 to pursue a General Diploma for extreme circumstances.** Core 40 is the minimum diploma preferred.

Core 40, Academic Honors and Technical Honors Diplomas

INDIANA CORE 40

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

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

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

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

**SAT scores updated September, 2017

***WorkKeys assessment titles updated, 2018

CORE 40 with Academic Honors *(minimum 47 credits)*

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

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits (6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of a "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following:
  - A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
  - B. Earn 6 verifiable transcripted college credits in dual credit courses from the approved dual credit list.
  - C. Earn two of the following:
    1. A minimum of 3 verifiable transcripted college credits from the approved dual credit list,
    2. 2 credits in AP courses and corresponding AP exams,
    3. 2 credits in IB standard level courses and corresponding IB exams.
  - D. Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence based reading and writing section.**
  - E. Earn an ACT composite score of 26 or higher and complete written section
  - F. Earn 4 credits in IB courses and take corresponding IB exams.

CORE 40 with Technical Honors *(minimum 47 credits)*

For the **Core 40 with Technical Honors** designation, students must:

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

Quantitative Reasoning Course Requirement

Starting with the Class of 2016, all students must be in a math course or a quantitative reasoning (QR) course every year of high school. The QR courses offered at KHS are listed below:

AP BIOLOGY	AP Calculus AB
AP Chemistry	AP Physics
Chemistry I	Advanced Life Science, Animals
Agribusiness Management	Integrated Chemistry Physics
Personal Financial Responsibility	

CAREER PLANS

Beginning in the spring of 1996, all freshmen are required to make a career plan for the entirety of high school.

In filing this plan, students, parents, and counselors are expected to work closely together to target each student's projected areas of interest. By considering the questions below and studying the options on the pages which follow, students can begin to develop their plans.

KEY QUESTIONS

1. **What are my *best* subjects?**
2. **What are my *favorite* subjects?**
3. **Do I like "hands-on" classes or more theoretical classes?**
4. **Do I think I want to:**
    a. **go to a four-year college?**
    b. **go to a two-year college or training program?**
    c. **try to enter the workforce directly after graduation?**

ANSWERING THE ABOVE QUESTIONS AND REVIEWING THE PROGRAM DESCRIPTIONS AND COURSE OFFERING WHICH FOLLOW SHOULD AID STUDENTS AND THEIR PARENTS IN COMPLETING THE CAREER PLAN.
(This is completed in the Spring of student's grade 8 and reviewed every Spring)

COLLEGE-PREP CAREER PLAN

Students wishing to pursue a college-prep career plan would be those students who intend to enroll in a four-year college degree program and who are on an Academic Honors Diploma track or Technical Honors Diploma track. Colleges will take the Core 40 Diploma as a minimum requirement, so a higher diploma track is recommended.

While there is some flexibility in these plans, students should realize that all college-prep, honors, and advanced courses contain a heavy workload and place major responsibility on the student for completing all requirements of the course.

Student-parent-school partnerships are essential for success in college-bound classes. While the school and parents must work together to support the student, it must be understood that in this type of course the major responsibility for learning falls on the learner. This type of philosophy is necessary to prepare the student for the rigors of college.

Highly Competitive Sample Plan for Academic Honors Diploma (4-year College Track)

9th Grade	Geometry (Alg I in 8th grade)	Biology I CP	English 9 Honors	World History	World Language I	Careers/ Technology	PE I & II
10th Grade	Honors Algebra II	Chemistry	English 10 Honors	Elective	World Language II	Fine Art	Health
11th Grade	Honors Pre-Calc	AP Biology or AP CHEM	English 11 (or Honors) AP English Literature or AP English Language	US History Or AP US History	World Language III	Elective	Elective
12th Grade	AP Calc	AP Chemistry or AP Physics	AP English Literature or AP English Language	Government and Econ	World Language IV	Etymology/ Speech	Elective

SUMMARY CHART

The following career programs are offered at New Castle Career Center (NCCC). The number of high school credits offered per school year and the grade level participation for each career program is listed. Detailed descriptions of each career program are included in the CAREER PROGRAM DESCRIPTIONS section of this document.

New Castle Career Center **Course Title**	Indiana Dept of Education (DOE) **Course #**	DOE **Course Title**	DOE **Abbrev**	High School **Credits**		High School **Grade Level Participation**	
Broadcasting I	7139 7306 7307	Principles of Radio and TV (1) Audio and Video Production (1) Mass Media Performance (1)	PRIN BROAD AUD VID PROD AUD VID PROD	2 2 2		11	12
Broadcasting II	7308	Radio & TV Broadcasting Capstone	RAD TV II	6			12
Building Trades I	7130 7123 7122	Principles of Construction Trades (1) Construction Trades: General Carpentry (1) Construction Trades: Framing and Finishing (1)	PRIN CON TR CON TRD GC CON TRD FR FIN	2 2 2		11	12
Building Trades II	7242	Construction Trades Capstone	CONST TECH I	6			12
Computer Tech Support	7183 7180 7181	Principles of Computing (1) Information Technology Fundamentals (1) Networking and Cybersecurity Operations (1)	PRIN COMP INFO INFO TECH FUN INFO TEC SUP SER	2 2 2		11	12
Networking Fundamentals	7245	Networking Fundamentals Capstone	IT SUPP CAP	6			12
CDL	7386 7387 7388	Principles of Transportation and Logistics Commercial Drivers Operations Fundamentals Advanced Commercial Drivers Operations	PRIN TRANS LOG CDL OPER FUND ADV CDL FUND	2 2 2			12
Cosmetology I	7330 7331 7332	Principles of Barbering and Cosmetology (1) Barbering and Cosmetology Fundamentals (1) Advanced Cosmetology (1)	PRIN COSMO STY COSMO ADV COSMO	2 2 2		11	
Cosmetology II	7334	Barbering and Cosmetology Capstone (3)	COSMO CAP	6			12
Culinary Arts I	7173 7171 7169	Principles of Culinary and Hospitality (1) Nutrition (1) Culinary Arts (1)	PRIN HOSP FD THRY NUT CUL ARTS	2 2 2		11	12
Culinary Arts II	7233	Culinary Capstone (1)	CUL ARTS CAP	6			12
Criminal Justice I	7193 7191 7188	Principles of Criminal Justice (1) Law Enforcement Fundamentals (1) Corrections and Cultural Awareness (1)	PRIN CR JUST LAW ENF CLT CRT CORR	2 2 2		11	12
Criminal Justice II	7231	Criminal Justice Capstone	CRIM JUST CAP	6			12
Dental Careers I	7135 7316 7317	Principles of Dental Careers (1) Dental Careers Fundamentals Advanced Dental Careers	PRIN DENT CAR DENT CAR FUND ADV DENT CAR	2 2 2		11	
Dental Careers II	7317	Dental Careers Capstone	DENT CAR CAP	6			12
Education Professions I	7161 7157 7162	Principles of Teaching (1) Child and Adolescent Development (1) Teaching and Learning (1)	PRIN TEACH CHLD ADL DEV TEACH LRN	2 2 2		11	12
Education Professions II	7267	Education Professions Capstone	ED PROF CAP	6			12
EMT / Public Safety	7168 5274 7165	Principles of Healthcare (1) Medical Terminology (1) Emergency Medical Tech (1)	PRIN HLCR MED TERMS EMT	2 2 2			12
Graphic Design I	7140 7141	Principles of Digital Design (1) Digital Design Graphics (1)	PRIN DIG DES DIG DES GRAPH GRAPH DES LT	2 2		11	12

	5550	Graphic Design and Layout (1)		2			
Graphic Design II	7246	Digital Design Capstone (3)	DIG DES CAP	6			12
Health Careers I	7166 7168 5274	Healthcare Specialist (1) Principles of Healthcare (1) Med term (1)	HC SPEC CAN PRIN HLCR MED TERMS	2 2 2		11	12
Health Careers II	7255 5218 5216	Healthcare Specialist Capstone (1) Principles of Biomedical Science (1) Human Body Systems (1)	HC SPECPRIN BIOMED CAP HUMAN SYST	2 2 2			12
ICE	6162	Cooperative Education	COOP EDU	6			12
Machine Trades I	7109 7105 7107	Principles of Precision Machining (1) Machining Fundamentals (1) Advanced Precision Machining (1)	PRIN PREC MACH MACH FUN PREC MACH	2 2 2		11	12
Machine Trades II	7219	Precision Machining Capstone	PREC MACH CAP	6			12
Pre-Engineering I	4802 5644 5534	Principles of Design Technology (1) Principles of Engineering (1) Computer Integrated Manufacturing (1)	INT ENG DES PRNC ENG COMP INT MFG	6		11	12
Pre-Engineering II	5698	Engineering Design and Development	ENG DES DEV	6			12
Property & Facility Maintenance I	7130 7123	Principles of Construction Trades (1) Construction Trades: General Carpentry (1)	PRIN CON TR CON TRD GC	2 2		11	12
Property & Facility Maintenance II	7242	Construction Trades Capstone	CONST TECH I	6			12
Supply Chain/Logistics I	4562 7155 7142	Principles of Business Management Logistics Management Supply Chain Management	PRIN BUS LOG MGMT SUP CH MGMT	2 2 2		11	12
Supply Chain/Logistics II	7258	Supply Chain Management Capstone	SUP CH MGMT CAP	6			12
Veterinary Science I	7280 7281 5070	Principles of Veterinary Science (1) Veterinary Science (1) Advanced Life Science Animals (1)	PRIN VET SCI VET SCI ALS ANIML	2 2 2		11	12
Veterinary Science II	7282	Veterinary Science Capstone	VET SCI CAP	6			12
Welding I	7110 7111 7101	Principles of Welding Technology (1) Shielded Metal Arc Welding (1) Gas Welding Processes (1)	PRIN WEL TCH SHLD MAW GAS WEL PRC	2 2 2		11	12
Welding II	7226	Welding Technology Capstone	WELD TECH CAP	6			12

GENERAL INFORMATION

Schedule

All classes meet three (3) hours per day unless otherwise noted. Students attend either a morning or an afternoon session. The remainder of the school day is scheduled at the home school. Students enroll in career programs for the entire school year.

Locations and Transportation

Most programs are located in New Castle either in the New Castle Career Center wing of New Castle High School, the Danielson Center, or at the New Castle EMS building. The Building Trades program has a construction site in a different location each year. Students enrolled in Strategic Marketing attend the career program at Tri High School, and students enrolled in Broadcasting attend Knightstown Community High School. Students in several other programs will complete work experiences during the year at various locations in the area. These sites are coordinated by the career program instructor. Students are responsible for providing their own transportation as necessary.

Pre-Enrollment for a First-Year Program

Eight local school corporations work together to offer the courses that makeup New Castle Career Center (NCCC). Students from each high school have an equal opportunity to apply for and participate in career programs. Students obtain a pre-enrollment form from their counselor at the designated time, complete the form, and return it to their counselor. Each pre-enrollment form must be approved by the principal, counselor, and career program instructor before the student is enrolled in a career program. All students participate in an interview with the career program instructor prior to acceptance. Credits and grades earned in career programs become part of the student's home school record.

Pre-Enrollment for a Second Year Program

Students will receive the second-year pre-enrollment form from their career program instructor. The form must be completed, including the parent's signature, and returned to the career program instructor. The form will be sent to the home school counselor with the recommendation of the career program instructor regarding second-year participation. The form must be approved by the home school counselor and principal. Students may take one year of two complementary programs rather than two years of a single program. Discuss your career plan with your guidance counselor prior to completing a first-year pre-enrollment form for the second year. The student will be given preferred placement, with the recommendation of the counselor.

Early College Option

Seniors participating in career programs may also take advantage of the Early College option offered in partnership between New Castle Career Center and Ivy Tech Community College. Students who meet the requirements at Ivy Tech Community College, including placement testing, are eligible to take core academic courses at Ivy Tech Community College in New Castle. Courses currently include Introduction to Psychology, Introduction to Sociology, Fundamentals of Public Speaking, and English Composition I. The courses are general education courses required for many certificates and degree programs across different colleges. Anatomy and Physiology I and II may be added to the core courses. Classes may change in order to meet the needs of students. With the exception of Anatomy and Physiology, courses offered are part of the Core Transfer Library. Visit transferIN.net to learn more about transferring credits between colleges. The Early College Option is offered at little or no cost to the student. For more information, see your guidance counselor.

Dual College Credits

Many career programs offer dual college credit opportunities. New Castle Career Center has dual credit agreements with Ivy Tech Community College, Vincennes University, and Purdue University. The benefits of dual credits include

1. Enriches the high school curriculum.
2. Introduces high school students to the rigors of college credit courses.
3. Helps students in the transition from high school to college.
4. Helps ensure the students will graduate from college on time.
5. Helps to satisfy the requirements for the Indiana Core 40 with Academic Honors and/or Technical Honors diplomas.
6. Helps parents and students assess the student's readiness for college.
7. **Significantly reduces the cost of a college education - most dual credits are offered to the student at no cost or at a significantly reduced cost.**

The number of dual credits available and the awarding institution varies by career program. Enrollment is required for all dual credits, and placement testing and/or pre-requisite courses are required for some. Placement testing is completed at NCCC or at the home high schools. Test scores determine dual credit eligibility for those career programs that require placement testing. To receive dual credits, students must successfully complete the work required. Students may be dropped from dual credit eligibility due to insufficient progress in a course. Career program instructors provide guidance on dual credit procedures, and all paperwork is completed through NCCC. In some cases, a fee may apply. The ability to transfer dual credits is dependent upon the receiving institution. Visit transferIN.net to learn more about transferring credits between colleges. Dual credits offered in each career program are subject to change at any time. For the most current information available, contact New Castle Career Center.

Industry Certification

Many career programs offer opportunities for students to earn industry certification. The certification process documents skills obtained by students within a career area. The skills and certification are recognized by employers and provide students with an

advantage career-related to the workforce and/or to postsecondary education. The industry certifications available vary by career program. Testing is required for all industry certifications. Students must successfully complete all requirements to receive certification. In some cases, a fee may apply. Industry certifications offered in each career program are subject to change at any time. For the most current information available, contact New Castle Career Center.

Academic & Technical Honors Diplomas
Students who participate in the career programs may be eligible to earn both Academic Honors Diplomas (AHD) and Technical Honors Diplomas (THD), depending on the courses they have successfully completed throughout high school and meeting all other diploma requirements.

For more information on using credits and credentials earned in career programs to meet requirements for Academic and Technical Honors Diplomas, see your guidance counselor or contact New Castle Career Center.

CAREER PROGRAM DESCRIPTIONS

Broadcasting I & II
1 or 2-Year Program

Broadcasting provides students experience in the areas of radio announcing, writing, news, sports, production, recording studio engineering, and music programming on the award-winning student station, Classic Hits 90.7 FM, WKPW. Daily duties include on-air shifts, hourly news and sportscasts production, and weekly production assignments. Year 2 students are assigned more complex, independent projects and are expected to fill lead on-air roles.

Upon completion of this program, students continue their education in 2 and 4-year degree programs at the postsecondary level as well as enter employment in the communications field at radio stations, TV stations, and production companies.

Location	Knightstown Community High School
Dual College Credits:	*BCST 102-Introduction to Audio/Video Production*
	BCST 120-Audio Production I

Building Trades I
1 or 2-Year Program

7130 Principles of Construction Trades PRIN CON TR Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and use for common hand and power tools, learning the types and basic terminology associated with construction drawings, and basic safety. Additionally, students will study the roles of individuals and companies within the construction industry and reinforce the mathematical and communication skills necessary to be successful in the construction field.

7123 Construction Trades: General Carpentry CON TRD GC Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.

7122 Construction Trades: Framing and Finishing CON TRD FR FIN Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and

moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors, and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

Location	New Castle Career Center & Current Job Site
Industry Certifications	*OSHA Safety Certification & NCCER*
Dual College Credits:	*BCTI 100-Intro to Construction Technology*
	BCTI 101-Intro to Carpentry, Part I
	BCTI 102-Intro to Carpentry, Part II
	BCTI 103-Carpentry Framing and Finishing I
	BCTI 104-Carpentry Framing and Finishing II

Building Trades II

7242 Construction Trades Capstone CSTR TR CAP The Construction Trades Capstone course covers the basics of electricity and working with concrete. Electrical topics include the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. Students may also gain an understanding of concrete properties, foundations, slab-on-grades, and vertical and horizontal formwork. The course prepares students for the NCCER Carpentry Forms Level 3 and Electrical Level 1 certificates.

Location	New Castle Career Center & Current Job Site
Industry Certifications	*OSHA Safety Certification & NCCER*

CDL

1-year program

7386 Principles of Transportation and Logistics examines the structure and importance of the commercial transportation industry in the logistics sector of business. Topics covered include an in-depth examination of the various modes of transportation including discussions of regulations, economics, characteristics, and development in major transportation modes. Also discussed are costing and pricing issues in transportation and relationship management between buyers and sellers of transportation. Additionally, this course introduces students to an overview of the CDL licensure and prepares them to get their CDL permit. Students are required to get a Department of Transportation Physical and Drug Screen.

7387 Commercial Drivers Operation Fundamentals introduces students to an orientation of the CDL industry, the CDL license, driver qualifications, and the commercial vehicle. The vehicle control systems are reviewed and discussed. The vehicle systems including engine, suspension, electrical and many others are reviewed in detail. The vehicle inspection is practiced and applied. Range and on the road training in a tractor trailer are major components of this course. Students will discuss driving in a variety of conditions including at night, emergency situations, skidding, and extreme weather. Students will practice many different driving maneuvers including backing, turning, shifting, coupling, space

and speed management in order to prepare for the CDL A exam. This course must be taken concurrently with Advanced Commercial Drivers Operations.

7388 Students will continue to practice until mastery of the pre-trip inspection which is a critical component of passing the CDL A exam. Administrative and professional components of being a professional driver are discussed and explained including, hours of service, accident reporting, personal health, communication and Compliance, Safety, and Accountability (CAS). This course must be taken concurrently with Commercial Drivers Operations Fundamentals. Upon successful completion of Commercial Drivers Operation Fundamentals and Advanced Commercial Drivers Operations the student will be eligible to take the CDL A examination.

Location	Ivy Tech New Castle & Ivy Tech Muncie
Industry Certifications	*CDL A or CDL B*

Computer Operations I

1 or 2-Year Program

7183 Principles of Computing PRIN COMP INFO Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations, and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development, and flowcharting.

7180 Information Technology Fundamentals INFO TECH FUN Information Technology Fundamentals provide the necessary competencies required for an entry-level Information Technology professional. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Students will also learn appropriate customer support, understand the basics of virtualization, desktop imaging, and deployment. This course should also prepare students for the CompTIA A+ Certification Exam.

7181 Networking and Cybersecurity Operations INFO TECH SUP SER Advanced Information Technology will provide students with the fundamental concepts in networking and cybersecurity. Students are introduced to the principles and concepts of computer networking, covering the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students will be able to troubleshoot routers and switches and resolve common issues. The students will also explore the field of Cyber Security/Information Assurance focusing on the technical and managerial aspects of the discipline. Students will be introduced to the basic terminology, concepts, and best practices of computer/network security and the roles and responsibilities of management/security personnel. The students will learn the technologies used and techniques involved in creating a secure computer networking environment including authentication and the types of attacks against an organization

Location	New Castle Career Center
Industry Certifications	*Microsoft Technology Associate (MTA)* *CompTIA A+*

Dual College Credits:	*INFM 109-Informatics Fundamentals*
	ITSP 132-IT Support Essentials I

Computer Operations II

7245 IT Operations: IT Support Capstone IT SUPP CAP IT Support Capstone students will acquire the skills and knowledge needed to provide tier 1 technical support services. The student will learn troubleshooting and problem-solving in working with end-users using various digital tools such as helpdesk software, knowledge bases, ticket management systems, and other tier 1 computer-related support services. Students will also learn to implement, administer, and troubleshoot Information systems using the Microsoft Windows clients and servers in an enterprise environment. Students will be introduced to managing applications, files, folders, and devices in a Windows active directory environment. Additionally, students have the chance to understand and apply Linux and Virtualization concepts.

Location	New Castle Career Center
Industry Certifications	*CompTIA A+*
Dual College Credits:	*ITSP 134-IT Support Essentials II*
	NETI 109-Networking I

Cosmetology I

2-Year Program – must initially enroll as a Junior and continue as a Senior

7330 Principles of Cosmetology offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours.

7331 Barbering and Cosmetology Fundamentals focuses on the development of practical skills introduced in Principles of Cosmetology. Clinical application and theory in the science of cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours.

7332 Advanced Cosmetology will emphasize the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology as it applies to cosmetology. Successful High School Course Titles and Descriptions 2022-2023 308 completion of the course requires at least 375 Cosmetology studio hours.

Location	New Castle Career Center
Dual College Credits:	*COSM 100-Cosmetology I* *COSM 150-Cosmetology II*

Cosmetology II

7334 Barbering and Cosmetology Capstone builds and improves previously developed skills with emphasis on

developing individual techniques. Professionalism, shop management, psychology in relation to cosmetology, and preparation for state board examination are stressed. Successful completion of the course requires at least 375 Cosmetology studio hours.

Location	New Castle Career Center
Industry Certifications	*Indiana State Board of Cosmetology License*
Dual College Credits:	*COSM 200-Cosmetology III* *COSM 250-Cosmetology IV*

Criminal Justice
I
1 or 2-Year Program

7193 Principles of Criminal Justice PRIN CR JUST Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

7191 Law Enforcement Fundamentals LAW ENF CLT AWR Law Enforcement Fundamentals Critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organizations. This includes the evolution of law enforcement at federal, state, and local levels.

7188 Corrections and Cultural Awareness CRT CORR Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are stressed. Additionally, this course takes a further examination of the American correctional system; the study of administration of local, state, and federal correctional agencies. The examination also includes the history and development of correctional policies and practices, criminal sentencing, jails, prisons, alternative sentencing, prisoner rights, rehabilitation, and community corrections including probation and parole. Current philosophies of corrections and the debates surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments, and special populations are discussed.

Location	Henry County Emergency Management Training Room (Near the courthouse)
Industry Certifications	*TBA*
Dual College Credits:	*LAWE 100-Survey of Criminal Justice* *LAWE 101-Basic Police Operations*

Criminal Justice
II
7231 Criminal Justice Capstone CRIM JUST CAP The Criminal Justice Capstone course allows students to complete additional instruction to earn a postsecondary certificate and should include a work-based learning component such as job shadowing, internship, etc. once the core content is completed. Note that there may be age restrictions on work-based learning components.

Location	Henry County Emergency Management Training Room (Near the courthouse)
Industry Certifications	*TBA*
Dual College Credits:	*LAWE 145-Ethics and Professionalism in Criminal Justice* *LAWE 150-Criminal Minds and Deviant Behavior*

Culinary
I
1 or 2-Year Program

7173 Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the foodservice and lodging industry. Introduces procedures for decision making which affect operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the foodservice industry including proper operation techniques for equipment.

7171 Nutrition FD THRY NUT Nutrition students will learn the characteristics, functions, and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient-dense meals or examining the nutritional needs of student-athletes

7169 Culinary Arts CUL ARTS Culinary Arts teach students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces), and various soups. Additional emphasis is placed on the further development of classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick bread.

Location	New Castle Career Center
Industry Certifications	*ServSafe* *CPR*
Dual College Credits:	*HOSP 101-Sanitation and First Aid*
	HOSP 102-Basic Food Theory & Skills
	HOSP 114-Intro to Hospitality

Culinary
II

7233 Culinary Arts Capstone CUL ARTS CAP This course covers the techniques and skills needed in breakfast cookery as well as

insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes, and appetizers. This course also covers the necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

Location	New Castle Career Center
Industry Certifications	*ServSafe* *CPR*
Dual College Credits:	*HOSP 104-Nutrition*
	HOSP 105-Intro to Baking
	HOSP 272-The Tourism System

Dental Careers I & II

2-Year Program – must initially enroll as a Junior and continue as a Senior

THE DENTAL CAREERS PROGRAM PROVIDES STUDENTS WITH OPPORTUNITIES TO LEARN SKILLS NEEDED WHEN ASSISTING DENTISTS WITH CHAIR-SIDE PROCEDURES AND DAILY OFFICE RESPONSIBILITIES. STUDENTS MUST COMPLETE BOTH DENTAL CAREERS I AND II IN ORDER TO COVER THE CURRICULUM AND STANDARDS. JUNIOR STUDENTS ENROLL IN DENTAL CAREERS I WITH THE INTENTION OF COMPLETING BOTH YEARS. DUE TO SPACE LIMITATIONS, SENIOR STUDENTS ARE GENERALLY NOT ACCEPTED IN THE DENTAL CAREERS I PROGRAM. AREAS OF INSTRUCTION INCLUDE TOOTH IDENTIFICATION AND TERMINOLOGY, DISINFECTION/STERILIZATION, ORAL HEALTH, DENTAL MATERIALS, INSTRUMENTATION, OFFICE RECORDS, DIGITAL X-RAYS, RADIATION SAFETY, HYGIENE, OFFICE MANAGEMENT SOFTWARE, AND OSHA GUIDELINES. DENTAL CAREERS I AND II STUDENTS COMPLETE CLINICAL EXPERIENCES IN LOCAL DENTAL OFFICES. STUDENTS PARTICIPATE IN THE SECOND YEAR OF THE PROGRAM TO RECEIVE ADVANCED TRAINING IN EXPANDED DENTAL ASSISTING AND ADDITIONAL EXPERIENCE IN PRIVATE PRACTICES. ONCE STUDENTS COMPLETE 2 YEARS OF DENTAL CAREERS AND 2 YEARS OF WORK EXPERIENCE, THEY ARE ELIGIBLE TO TEST FOR THEIR CDA (CERTIFIED DENTAL ASSISTANT).

STUDENTS COMPLETING THIS PROGRAM MAY PURSUE 2 AND 4-YEAR POSTSECONDARY DEGREES RELATED TO THE DENTAL FIELD OR MAY BECOME EMPLOYED IN DENTIST OFFICES OR DENTAL LABS.

Location	New Castle Career Center
Industry Certifications	*Indiana Radiology Provisional License*
Dual College Credits:	*HIMT 110-Medical Terminology*
	HIMT 102-Intro to Healthcare

Education Professions I

1 or 2-Year Program

7161 Principles of Teaching PRIN TEACH This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A minimum 20-hour classroom observation experience is required for the successful completion of this course.

7157 Child and Adolescent Development CHLD ADL DEV Child and Adolescent Development examines the physical, social, emotional, cognitive, and moral development of the child from birth through adolescence with a focus on the middle years through adolescence. Basic theories of child development, biological and environmental foundations of development, and the study of children through observation and interviewing techniques are explored. The influence of parents, peers, the school environment, culture, and the media are discussed. An observation experience up to 20 hours may be required for completion of this course. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are still required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.

7162 Teaching and Learning TEACH LRN Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Profession Pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.

Location	New Castle Career Center & Local Education Sites
Dual College Credits:	*EDUC 101-Intro to Teaching*
	EDUC 121-Childhood and Adolescent Development

Education Professions II

The Education Professions Capstone provides an extended opportunity for field experience to further apply concepts that have been presented throughout the pathway. Students will also have the opportunity to explore the topics of the exceptional child and literacy development through children's literature. Students will gain a deeper understanding of inclusive teaching techniques along with policies, theories, and laws related to special education. Students interested in pursuing a career in Elementary Education are encouraged to also study the benefits of using children's literature in the classroom. This course may be further developed to include specific content for students interested in pursuing a career in secondary education.

Location	New Castle Career Center & Local Education Sites
Dual College Credits:	*EDUC 223-Literacy Development through Children's Literature*
	EDUC 230-The Exceptional Child

EMT

1-Year Program – Seniors Only

7168 Principles of Healthcare PRIN HLCR Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

5274 Medical Terminology 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, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

7165 Emergency Medical Tech EMT This course is based on the training program developed by the Department of Transportation and the Emergency Medical Services Commission of Indiana. It covers theories, techniques, and operational aspects of pre-hospital emergency care within the scope and responsibility of the emergency medical technician (EMT). It requires laboratory practice and clinical observation in a hospital emergency room and ambulance. Successful completion of the course meets national requirements to test for certification as an NREMT.

Location	New Castle EMS Building (432 Broad St)
Industry Certifications	*IN Department of Homeland Security EMT License*

Graphic Design I

1 or 2-Year Program

7140 Principles of Digital Design PRIN DIG DES Principles of Digital Design introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. Students will have the opportunity to apply the design theory through an understanding of basic photographic theory and technique. Topics will include image capture, processing, various output methods, and light.

7141 Digital Design Graphics DIG DES GRAPH Digital Design Graphics will help students to understand and create the most common types of computer graphics used in visual communications. Skills are developed through work with professional vector-based and page layout software used in the industry. Additionally, students will be introduced to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices.

5550 Graphic Design and Layout GRAPH DES LT Graphic Design and Layout teach design process and the proper and creative use of type as a means to develop effective communications for global, corporate and social application. Students will create samples for a portfolio, which may include elements or comprehensive projects in logo, stationery, posters, newspaper, magazine, billboard, and interface design.

Location	New Castle Career Center
Industry Certifications	*Adobe Illustrator* *Adobe Publisher*
Dual College Credits:	*DESN 120-Computer Illustration* *DESN 155-Computer Page Layout* *ARTT 111-Visual Design*

Graphic Design
II

7246 Digital Design Capstone DIG DES CAP The Digital Design Capstone course provides students the opportunity to dive deeper into advanced concepts of Visual Communication including user experience/user interface design, video production editing, animation, and/or web design. Depending on the length of the course, students may focus their efforts on one area or explore multiple aspects.

7138 Interactive Media Design IN MED DES Interactive Media Design focuses on the tools, strategies, and techniques for interactive design and emerging technologies, like web and social media. Students will learn the basics of planning, shooting, editing, and post-producing video and sound. Additionally, students will explore the process of integrating text, graphics, audio, and video for effective communication of information.

Location	New Castle Career Center
Industry Certifications	*Adobe Illustrator* *Adobe Publisher*
Dual College Credits:	*DESN 140-Computer Imaging*

Health Careers
I
1 or 2-Year Program

7166 Healthcare Specialist: CNA HC SPEC CNA The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills, and attitudes essential for providing basic care in extended care facilities, hospitals, and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

7168 Principles of Healthcare PRIN HLCR Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

5274 Medical Terminology 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, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

Location	Danielson Center
Industry Certifications	*CPR/AED Professional Rescuer* *Indiana State CNA*

Dual College Credits:	*HLHS 100-Intro to Healthcare*
	HLHS 107-CNA Preparation
	HLHS 101-Medical Terminology
	HLHS 111-Health & Wellness for Life
	HLHS 113-Dementia Care

Health Careers II

7255 Healthcare Specialist Capstone HC SPEC CAP The capstone course will provide Healthcare students with acquiring additional knowledge and skills necessary to work in a variety of healthcare settings beyond a long-term care facility, including hospitals, doctor's offices, and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework.

5218 Principles of Biomedical Sciences PRIN BIOMED Principles of the Biomedical Sciences provide an introduction to this field through "hands-on" projects and problems. Student work involves the study of human medicine, research processes, and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts included in the curriculum are homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. NOTE: This course aligns with the PLTW Principles of Biomedical Sciences curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

5216 Human Body Systems HUMAN SYST 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 complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions. NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

Location	Danielson Center
Industry Certifications	*Patient Care Technician Certificate*
Dual College Credits:	*HLHS 121-Customer Relations*
	HLHS 125-Behavioral Health

ICE

6162 Cooperative Education COOP EDU Cooperative Education is an approach to employee training that spans all career and technical education program areas through school-based instruction and on-the-job training. Time allocations are a minimum of

fifteen hours per week of on-the-job training and approximately five hours per week of school-based instruction, focused on employability skills development. Additionally, all state and federal laws and regulations related to student employment and cooperative education must be followed.

Location	New Castle Career Center and Local Job Sites
Dual College Credits:	*Ivy Y T 111*

Machine Trades
I

7109 Principles of Precision Machining PRIN PREC MACH Principles of Precision Machining will provide students with a basic understanding of the processes used to produce industrial goods. Classroom instruction and labs will focus on shop safety, measurement, layout, blueprint reading, shop math, metallurgy, basic hand tools, milling, turning, grinding, and sawing operations. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Measurement, Materials, & Safety certification that may be required for college dual credit.

7105 Precision Machining Fundamentals MACH FUN Precision Machining Fundamentals will build a foundation in conventional milling and turning. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations. Lab work will consist of the setup and operation of vertical and/or horizontal milling machines and engine lathes. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Milling I certification that may be required for college dual credit.

7107 Advanced Precision Machining PREC MACH Advanced Precision Machining will build upon the Turning and Milling processes learned in Precision Machining Fundamentals and will build a foundation in abrasive process machines. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations associated with abrasives. Lab work will consist of the setup and operation of bench grinders and surface grinders. Additionally, students will be introduced to Computerized Numeric Controlled (CNC) setup, operations, and programming. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Grinding I certification that may be required for college dual credit.

Location	New Castle Career Center
Dual College Credits:	*MTTC 101-Intro to Machining*
	MTTC 102-Turning Processes I
	MTTC 103-Milling Processes II
	MTTC 106-Print Interpretation
	MTTC 105-Abrasive Processes I
	MTTC 110-Turning and Milling Processes

Machine Trades
II

7219 Precision Machining Capstone
PREC MACH CAP Precision Machining Capstone is an in-depth study of skills learned in Precision Machining I, with a stronger focus on CNC setup/operation/programming. Students will be introduced to two-axis CNC lathe programming and three-axis CNC

milling machine programming. Develops the theory of programming in the classroom with applications of the program accomplished on industry-type machines. Studies terminology of coordinates, cutter paths, angle cutting, and linear and circular interpolation. 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 presented.

Location	New Castle Career Center
Industry Certifications	*NIM Certification* *Precision Machining Certificate* *Technical Certificate*
Dual College Credits:	*MTTC 107-CNC Set Up and Operations I*
	MTTC 208-CNC Mill Programming
	MTTC 209-CNC Lathe Programming
	IVY Y T 111

Pre-Engineering I

4802 Introduction to Engineering Design INT ENG DES Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry-standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students begin with completing structured activities and move to solve open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented. NOTE: This course aligns with the PLTW Introduction to Engineering Design curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

5644 Principles of Engineering PRNC ENG Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific, and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. Schools may use the PLTW curriculum to meet the standards for this course. NOTE: This course aligns with the PLTW Principles of Engineering curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

5534 Computer Integrated Manufacturing COMP INT MFG Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction to Engineering Design. Students will use computer-controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes. NOTE: This course aligns with the PLTW Computer Integrated Manufacturing curriculum. Use of the PLTW curriculum may require additional

training and membership in the PLTW network.

Location	New Castle Career Center
Dual College Credits:	*DESN 101-Intro to Design Technology*
	DESN 113-2 D Computer-Aided Design

Pre-Engineering II

5698 Engineering Design and Development ENG DES DEV Engineering Design and Development is an engineering research course in which students work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide the team to reach a solution to the problem. The team and/or individual(s)communicates their solution to a panel of stakeholders at the conclusion of the course. As the capstone course in the Engineering Pathway, EDD engages students in critical thinking, problem-solving, time management, and teamwork skills. NOTE: This course aligns with the PLTW Engineering Design and Development curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

Location	New Castle Career Center
Dual College Credits:	*DESN 104-Mechanical Graphics*

Property and Facilities Management I

7130 Principles of Construction Trades PRIN CON TR Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and use for common hand and power tools, learning the types and basic terminology associated with construction drawings, and basic safety. Additionally, students will study the roles of individuals and companies within the construction industry and reinforce the mathematical and communication skills necessary to be successful in the construction field.

7123 Construction Trades: General Carpentry CON TRD GC Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.

7122 Construction Trades: Framing and Finishing CON TRD FR FIN Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors, and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

Location	New Castle Career Center & Job Sites
Industry Certifications	*OSHA Safety Certification* *NCCER*
Dual College Credits:	*BCTI 100-Intro to Construction Technology*

	BCTI 101-Intro to Carpentry, Part I

Property and Facilities Management II

7242 Construction Trades Capstone CSTR TR CAP The Construction Trades Capstone course covers the basics of electricity and working with concrete. Electrical topics include the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. Students may also gain an understanding of concrete properties, foundations, slab-on-grades, and vertical and horizontal formwork. The course prepares students for the NCCER Carpentry Forms Level 3 and Electrical Level 1 certificates.

Location	New Castle Career Center & Job Sites
Industry Certifications	*OSHA Safety Certification* *NCCER*

Supply Chain/Logistics I

4562 Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

7155 Logistics Management provides students the opportunity to explore how essential managerial functions relate to the various components of a logistics operation. Logistics concepts are approached from a manufacturing perspective with a focus on system integration and automation and lean manufacturing operations. Topics will include logistics systems, supply chain management, order, demand inventory and warehouse management, and automated components of a logistics system. Students will be prepared for the MSSC Certified Logistics Associate (CLA) and MSSC Certified Logistics Technician (CLT) certifications.

7142 Supply Chain Management will build upon the knowledge and skills developed in the Logistics Management course by focusing on specific aspects of Supply Chain Management such as supply chain strategy, planning and design, customer service, purchasing, forecasting, inventory and warehouse management, as well as an in-depth study of transportation systems. Students will examine various modes of transportation and their associated characteristics, economics, and regulations.

Location	Ivy Tech, New Castle
	BOAT 207- Integrated Microsoft Office Applications
	BUSN 105 Principles of Management
	LOGM 127, Introduction to Logistics
	LOGM 227, Supply Chain Management
	LOGM 229, Transportation Systems

Supply Chain/Logistics II

7258 Supply Chain Management Capstone course will build upon the knowledge and skills learned in previous courses by taking a deeper dive into Procurement, Operations Management, Lean Manufacturing Systems.

Vet Science I

5211 Veterinary Careers I VET CRS I Veterinary Careers I is a lab-intensive course that introduces students to animal care and veterinary medicine. Through classroom and field experiences, students will attain the necessary skills to demonstrate standard protocols that are used in veterinary careers. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA or FFA encourages the development of leadership, communication, career-related skills, and opportunities for community service.

Location	New Castle Career Center
Dual College Credits:	*AGR 103-Animal Science*
	HIMT 110-Medical Terminology

Vet Science II

5212 Veterinary Careers II VET CRS II Veterinary Careers II is an extended laboratory experience designed to provide students with the opportunity to assume the role of a veterinary assistant, and practice technical skills previously learned in the classroom; all while working at a qualified clinical site under the direction of licensed veterinarians. These sites may include animal clinics, hospitals, or research laboratories. Throughout this course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare delivery systems, healthcare teams, and legal and ethical considerations; and obtaining the knowledge, skills, and attitudes essential for providing basic care in veterinary clinics, hospitals, and other related locations. Additionally, students will learn essential job-related skills that include; monitoring and caring for animals before and after surgery; maintaining and sterilizing surgical instruments; cleaning and disinfecting kennels and operating rooms; providing emergency first aid to animals; giving medication to animals; appropriate techniques for collecting specimens and performing routine lab tests; and feeding and bathing animals. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA or FFA encourages the development of leadership, communication, and career-related skills, and opportunities for community service.

Location	New Castle Career Center & Job Sites

Industry Certifications	*Vet Assistant Certificate*
Dual College Credits:	*AGR 107-Advanced Animal Science*

Welding I

7110 Principles of Welding Technology PRIN WEL TCH Principles of Welding Technology includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and basic welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Designer, Researcher, or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for postsecondary and career success.

7111 Shielded Metal Arc Welding SHLD MAW Shielded Metal Arc Welding involves the theory and application of the Shielded Metal Arc Welding process. Process theory will include basic electricity, power sources, electrode selection, and all aspects pertaining to equipment operation and maintenance. Laboratory welds will be performed in basic weld joints with a variety of electrodes in the flat, horizontal and vertical positions. Emphasis will be placed on developing the basic skills necessary to comply with AWS industry standards.

7101 Gas Welding Processes GAS WEL PRC Gas Welding Processes is designed to cover the operation of Gas Metal Arc Welding (MIG) equipment. This will include all settings, adjustments, and maintenance needed to weld with a wire feed system. Instruction on both short-arc and spray-arc transfer methods will be covered. Tee, lap, and open groove joints will be done in all positions with solid, flux core, and aluminum wire. Test plates will be made for progress evaluation. Schools may choose to offer the course as a comprehensive MIG Welding course or a combination of introductory MIG and TIG Welding operations.

Location	New Castle Career Center
Industry Certification:	*OSHA*
Dual College Credits:	*WELD 100-Welding Fundamentals*
	WELD 108-Shielded Metal Arc Welding I
	WELD 206-Advanced Shielded Metal Arc Welding II
	WELD 203-Pipe Welding I

Welding II

7226 Welding Technology Capstone WELD TECH CAP The Welding Technology Capstone course builds upon the knowledge and skills developed in Welding Fundamentals, Shielded Metal Arc Welding, and Gas Metal Arc Welding by developing advanced welding skills in Gas Tungsten Arc Welding (TIG), Pipe Welding, and Fabrication. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience.

Location	New Castle Career Center

Industry Certification:	*AWS* *Ivy Tech Welding & Technical Welding Certificate*
Dual College Credits:	*WELD 207-Gas Metal Arc (MIG) Welding*
	WELD 272-Advanced Gas Metal Arc (MIG) Welding
	WELD 210-Welding Fabrication I
	WELD 208-Gas Tungsten Arc (TIG) Welding
	WELD 273-Advanced Gas Tungsten Arc (TIG) Welding
	IVY T Y 111

DUAL CREDIT

KHS has an exciting opportunity to offer Dual High School/College credit classes. These classes are taught by KHS Faculty that have been trained by a college to provide dual credit. There are several courses offered at KHS. These classes are rigorous and taught like college courses. The classes require an application and approval process that will be explained to your child in the course as well as a fee upwards of $25 a credit hour. Dual Credit classes fulfill a requirement for the Academic Honors diploma with 6 credits needed.

KHS currently offers:

- AP Chemistry (Ivy Tech)
- AP Physics (Ivy Tech)

CHEMISTRY, ADVANCED PLACEMENT (L)

3060 (CHEM AP)

Chemistry, Advanced Placement is a course based on the content established by the College Board. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:
http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Advanced Placement (AP) Courses are intended to be the equivalent to the comparable college level course. Most AP courses require instructional time equivalent to two traditional semesters, or one academic year in order to adequately address the course content and prepare students for the associated exam. However, the bulleted items following each course description indicate the AP courses that could conceivably be completed in either one semester or two.
- Recommended Grade Level: 12
- Recommended Prerequisite: Chemistry I, Algebra II, Pre-Calculus/Trigonometry
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD, and THD diploma

PHYSICS 1: ALGEBRA-BASED, ADVANCED PLACEMENT (L)

3080 (PHYS 1 AP*)*

Physics 1: Algebra-based, Advanced Placement is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:
http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

- Recommended Grade Level: 10-11
- Recommended Prerequisite: Algebra I or Integrated Mathematics I
- Credits: A two credit course, 1 credit per semester

- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with
- Technical Honors diplomas
- Qualifies as a Quantitative Reasoning course

ADVANCED PLACEMENT COURSES

The Advanced Placement Program is a course of study designed to give students opportunities similar to those of the college freshman year. It is a rigorous curriculum designed for the most committed students. AP courses require large amounts of outside preparation, yet they offer unique opportunities for college preparation.

At the completion of the AP course, students have the opportunity to take an AP test. This process allows the students to receive college credit for the course. The amount of credit assigned depends upon both the student's score and the guidelines of the specific college the student will attend. In all cases, AP courses are designed for students who plan to enroll in a four-year degree program.

Due to the unique curriculum of the AP program, AP instructors recommend students show high aptitude in each specific AP course area. Qualifiers, similar to those of any Gifted and Talented program, exist. Therefore, because of these qualifiers and because numerous other opportunities for the college-bound student exist, admission to the AP program will be by invitation only. After your child receives an AP invitation letter and after you and your child decides to commit to the rigors of that program, please sign and return the invitation letter. A school-parent-student partnership is essential for success in an AP course.

Current AP opportunities at Knightstown Community High School are:

- **AP Biology**
- **AP Calculus AB**
- **AP Chemistry**
- **AP English Language and Composition**
- **AP English Literature and Composition**
- **AP Physics**
- **AP PreCalculus**
- **AP Studio 2D Art**
- **AP U.S. History**

3020 AP Biology (L) (BIO AP)

AP Biology is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Biology I and Chemistry I
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas

- Qualifies as a quantitative reasoning course
- Laboratory course

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:
https://apstudents.collegeboard.org/courses/ap-biology

2562 AP Calculus AB (CALC AB AP)

AP Calculus AB is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.
Recommended Grade: 11,12

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

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: https://apstudents.collegeboard.org/courses/ap-calculus-ab

3060 AP Chemistry (CHEM AP)

AP Chemistry is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics.
Recommended Grade: 12

- Required Prerequisites: none
- Recommended Prerequisites: Chemistry I, Algebra II, Pre-Calculus Algebra / Pre-Calculus Trigonometry Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning

Course found on the College Board AP Central Course Description web page at:
https://apstudents.collegeboard.org/courses/ap-chemistry

1056 AP English Language and Composition (LNG/COMP AP)

AP English Language and Composition is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts. The course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. There is no prescribed sequence of study.

- Recommended Grade: 11, 12 (College Board does not designate when this course should be offered). Required Prerequisites: none
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Students should be able to read and comprehend college-level texts and apply the conventions of standard written English in their writing.

- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills an English/language arts requirement for grades 11 or 12 for all diplomas

Description web page at:
https://apstudents.collegeboard.org/courses/ap-english-language-and-composition

1058 AP English Literature and Composition (LIT/COMP AP)

AP English Literature and Composition is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills an English/language arts requirement for grades 11 or 12 for all diplomas.

Description web page at: https://apstudents.collegeboard.org/courses/ap-english-literature-and-composition

3080 AP Physics 1: Algebra-Based (PHYS 1 AP)

AP Physics 1 is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP Physics 1: Algebra based is equivalent to a first-semester college course in algebra-based physics. The course includes Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits.

- Recommended Grade: 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Algebra I or Integrated Mathematics I
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: https://apstudents.collegeboard.org/courses/ap-physics-1-algebra-based

2563 AP Precalculus (PreCalc AP)

AP Precalculus is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. This course covers topics including modeling real-world data, exploring multiple representations, and mastering symbolic manipulation. The course teaches students to approach precalculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: Algebra I
- Recommended Prerequisites: Geometry and/or Algebra II
- Credits: 2 semester course, 1 credit per semester
- Counts as a mathematics course for all diplomas.

4050 AP 2-D Art and Design (ART 2D AP)

AP 2-D Design is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Program offers three studio art courses and portfolios: 2-Dimensional Design, 3-Dimensional Design, and Drawing. The AP Art portfolios are designed for students who are seriously interested in the practical experience of art. The portfolios correspond to most college foundation courses. Students submit portfolios for evaluation at the end of the school year. Students may choose to submit any or all of the Drawing, 2-Dimensional Design, or 3-Dimensional design portfolios. AP Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. The portfolio will have two sections: Sustained Investigation and Selected works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Advanced laboratory 2-D visual arts courses
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills the fine arts requirement for the Core 40 with Academic Honors Diploma

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: https://apcentral.collegeboard.org/courses/ap-2-d-art-and-design

1562 AP United States History (US HIST AP)

AP United States History is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP United States History focuses on developing students 'abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester
- Fulfills the US history requirement for all diplomas

A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: https://apstudents.collegeboard.org/courses/ap-united-states-history

Agriculture

FFA

The FFA is the leadership student organization that is an integral part of the instruction and operation of a total agricultural education program. As an intra-curricular organization and essential component of the total program, the local agricultural education teacher(s) serve as the FFA chapter advisors. The many activities of the FFA parallel the methodology of the instructional program and are directly related to the occupational goals and objectives. As an integral part of the instructional program, district and state level FFA activities provide students opportunities to demonstrate their proficiency in the knowledge, skills and aptitudes they have acquired through the agricultural science and agricultural business program(s). Agricultural education students demonstrating a high degree of competence in state level FFA activities are highly encouraged to represent their local communities, districts and state by participating in national FFA activities.

Instructional activities of the FFA require participation by the agricultural science and agriculture business education students as an integral part of an agricultural education course of instruction and, therefore, may be considered an appropriate use and amount of the allotted instructional time.

7117 Principles of Agriculture PRIN AG

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

- Recommended Grade(s): 9, 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: None
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective credits for all diplomas

5008 Animal Science ANML SCI

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

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Agriculture*
- Recommended Prerequisites: Principles of Agriculture
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Fulfills a physical science requirement for General Diploma
- *Principles course is not required until 2024-25 school year because this course is included in Perkins V pathways.

5002 Agribusiness Management AG BUS MGMT

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

- Recommended Grade(s): 11, 12 •Required Prerequisites: none
- Recommended Prerequisites: Principles of Agriculture
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an elective or directed elective for all diplomas.
- Qualifies as a quantitative reasoning course
- Part of Perkins V **(last year offered 23/24)**

5070 Advanced Life Science, Animals (L) ALS ANIML

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

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Agriculture*; or Principles of Veterinary Science*
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources; Animal Science; Biology; Chemistry; Integrated Chemistry Physics
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an elective or directed elective for all diplomas.
- Fulfills a science requirement for all diplomas.
- Qualifies as a quantitative reasoning course
- *Principles course is not required until 2024-25 school year because this course is included in Perkins V pathways

228 Supervised Agricultural Experience (SAE)

SAE Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards-based plan for learning. Students work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

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

BUSINESS

4562 Principles of Business Management PRIN BUS

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

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

4803 INTRODUCTION TO COMPUTER SCIENCE (INTO CS)

Introduction to Computer Science allows students to explore the world of computer science. Students will gain a broad understanding of the areas composing computer science.
Additionally, there is a focus on the areas of computer programming, gaming/mobile development, and artificial intelligence/robotics.

- Recommended Grade Level: 9, 10
- Recommended Prerequisites: None
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

5914 MARKETING FUNDAMENTALS (PRN MRKT)

Marketing Fundamentals provides a basic introduction to the scope and importance of marketing in the global economy. Course topics include the seven functions of marketing: promotion, channel management, pricing, product/service management, market planning, marketing information management, and professional selling skills. Emphasis is marketing content but will involve use of oral and written communications, mathematical applications, problem-solving, and critical thinking skills through the development of an integrated marketing plan and other projects.

- Recommended Grade(s): 11,12
- Required Prerequisites: Principles of Business Management*
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

*Formerly Principles of Marketing; Principles course is not required until 2024-25 school year because this course is included in Perkins V pathways.

5918 STRATEGIC MARKETING (STRT MRKT)

Strategic Marketing builds upon the foundations of marketing and applies the functions of marketing at an advanced level. Students will study the basic principles of consumer behavior and examine the application of theories from psychology, social psychology, and economics. The relationship between consumer behavior and marketing activities will be reviewed.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Business Management*; Marketing Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-2 credits per semester, 4 credits maximum

- Counts as a directed elective or elective for all diplomas
- *Principles course is not required until 2024-25 school year because this course is included in Perkins V pathways.

4540 Personal Financial Responsibility PRSFINRSP

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, savings, and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt. A project-based approach and applications through authentic settings such as work-based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

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

ENGLISH/LANGUAGE ARTS

1002 ENGLISH 9 or HONORS ENGLISH 9 (ENG 9 or HON ENG 9)

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

- Recommended Grade Level: 9
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diploma

1004 E*NGLISH* 10 *or* HONORS ENGLISH 10 (ENG 10 or HON ENG 10)

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

- Recommended Grade Level: 10
- Recommended Prerequisites: English 9 or teacher recommendation
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

1006 ENGLISH 11 or HONORS ENGLISH 11 (ENG 11 or HON ENG 11)

English 11, an integrated English course based on the *Indiana Academic Standards for English/Language Arts* in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on literature with an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

- Recommended Grade Level: 11
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

1092 CREATIVE WRITING (CREAT WRIT)

Creative Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, students demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, the purposes for writing, and the style of their own writing. CREATIVE WRITING PROJECT: Students complete a project, such as a short story, a narrative or epic poem, a persuasive speech or letter, a book review, a script or short play, or other creative compositions, which demonstrates knowledge, application, and writing progress in the Creative Writing course content.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

1046 SHORT STORIES (SHORT STRS)

Short Stories, a course based on the *Indiana Academic Standards for English/Language Arts*, is a study of the distinct features of the short story, such as being tightly focused narrative fiction. The course may be organized by historical periods, themes, or authors. Students examine short stories with modernist and contemporary themes by a variety of authors from the perspective of audience, purpose, and historical development. Students analyze what distinguishes the short story genre from other literary genres, such as the novels, epics, romances, biographies, etc.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

1056 AP English Language and Composition (LNG/COMP AP)

(offered 2024/2025 School year)

AP English Language and Composition is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts. The course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. There is no prescribed sequence of study.

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

1058 ENGLISH LITERATURE AND COMPOSITION, ADVANCED PLACEMENT *(*LIT/COMP AP*) (offered 2023/2024 School year)*

AP English Literature and Composition is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

- Recommended Grade Level: 11,12
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation. Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for grades 11 or 12 all diplomas

ENGLISH ELECTIVES

The following courses are considered English electives at Knightstown High School. Students must take English 9 (2), English 10 (2), English 11 or AP Lit (2), and Creative Writing/ Short Stories or AP Lit. The courses listed below can be taken in conjunction with the above listed requirements but may not replace them.

1060 ETYMOLOGY (ETYMOLOGY)

Etymology, a language studies course based on the *Indiana Academic Standards for English/Language Arts*, is the study and application of the derivation of English words and word families from their roots in ancient and modern languages (*Latin, Greek, Germanic, and Romance Languages*). Students analyze meanings of English words by examining roots, prefixes, and suffixes. Students analyze the connotative and denotative meaning of words in a variety of contexts and the reasons for language change. Students write about word history and semantics in texts that require etymological sensitivity, such as Renaissance poetry or works in translation. ETYMOLOGY PROJECT: Students complete a project, such as doing a case study on specific words or creating an historical timeline of the development of specific words, which demonstrates knowledge, application, and progress in Etymology course content.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: 4 credit in English Language Arts
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

1034 FILM LITERATURE (FILM LIT)

Film Literature, a course based on *Indiana's Academic Standards for English Language Arts and the Common Core State Standards for English Language Arts*, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present. FILM LITERATURE PROJECT: Students complete a project, such as doing an historical timeline and bibliography on the development of film or the creation of a short- subject film, which demonstrates knowledge, application, and progress in the Film Literature course content.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 credit
- Fulfills an English Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

NOTE: Students are strongly encouraged to combine this course with a composition course that they take before, concurrently, or after the course.

1084 YEARBOOK/DIGITAL MEDIA

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester.
- Counts as an elective for all diplomas

1076 SPEECH (SPEECH)

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: None
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

1048 THEMES IN LITERATURE (THEMES LIT)

Themes in Literature, a course based on the *Indiana Academic Standards for English/Language Arts*, is a study of universal themes, such as the journey of the hero, the trials of youth, the search for identity, and other themes appropriate to the level and interests of students. The course may be limited to a few important related themes. Students examine representative works in various genres by authors of diverse eras and nationalities and the way themes may be treated differently in the works because of the cultural context. Students analyze how themes illuminate humanity's struggle to understand the human condition.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

FINE ARTS

APPLIED ARTS

4000 INTRODUCTION TO TWO DIMENSIONAL ART (L) (2D ART)

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

- Recommended Grade Level: 9, 10, 11, or 12
- Recommended Prerequisites: none
- Credits: 1 semester course for 1 credit
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

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

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

- Recommended Grade Level: 9, 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4002 INTRODUCTION TO THREE-DIMENSIONAL ART (L) (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: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course for 1 credit
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4006 ADVANCED THREE-DIMENSIONAL ART (L) (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: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4082 DIGITAL DESIGN (L) (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, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4060 DRAWING I & II (L) (DRAWING I & II)

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, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4064 PAINTING (L) (PAINTING)

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

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4050 AP STUDIO ART: 2-D DESIGN (ART 2D AP)

AP Studio Art 2D Design is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Program offers three studio art courses and portfolios: Two-Dimensional Design, Three-Dimensional Design, and Drawing. The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios — 2-D Design, 3-D Design and Drawing — corresponding to the most common college foundation courses. Students may choose to submit any or all of the Drawing, Two-Dimensional Design, or Three-Dimensional design portfolios. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Advanced laboratory 2-D visual arts courses
- Credits: 2 semester course, 1 credit per semester
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma

PERFORMING ARTS

4186 CONCERT CHORUS (L) (INT CHOR)

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

- Recommended Grade Level: 9, 10, 11, or 12
- Recommended Prerequisites: Intermediate School Choir
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

4168 CONCERT BAND (L) (INT BAND)

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

- Recommended Grade Level: 9, 10, 11, or 12
- Recommended Prerequisites: Intermediate School Concert Band
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

HEALTH AND PHYSICAL EDUCATION

3542 PHYSICAL EDUCATION I (L) (PHYS ED)

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum that provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all 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.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade Level: 9, 10, 11, 12
- Required Prerequisites: Grade 8 Physical Education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.
- Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent in activity

3544 PHYSICAL EDUCATION II (L) (PHYS ED II)

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum that provides students with opportunities to actively participate in four of the following areas that were not covered in Physical Education 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.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade Level: 9, 10, 11, 12
- Required Prerequisites: Physical Education I
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.
- Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent in activity.

3506 HEALTH & WELLNESS EDUCATION (HLTH&WELL)

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

promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: 8th grade health education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills the Health & Wellness requirement for all diploma types

3560 ELECTIVE PHYSICAL EDUCATION (L) (ELECT PE)

Elective Physical Education, a course based on selected standards from *Indiana's Academic Standards for Physical Education,* identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: Physical Education I and II
- Credits: 1 credit per semester, maximum of 8 credits
- Counts as an Elective requirement for all diplomas
- The nature of this course allows for successive semesters of instruction provided defined proficiencies and content standards are utilized
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.

MATHEMATICS

2520 ALGEBRA I (ALG I)

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of 5 strands: Real Numbers and Expressions; Functions; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. These critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade Level: 9
- Recommended Prerequisites: none

- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas
- Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas
- Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

2516 ALGEBRA I LAB (ALG I LAB)

Algebra I Lab is a mathematics support course for *Algebra I*. *Algebra I Lab* is taken while students are concurrently enrolled in Algebra 1. This course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of *Algebra I Lab* align with the critical areas of *Algebra I*: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas *Algebra I* contains exclusively grade-level content, *Algebra I Lab* combines standards from high school courses with foundational standards from the middle grades. **Algebra I Lab is designed as a support for Algebra I. As such, a student taking Algebra I Lab MUST also be enrolled in Algebra I during the same academic year.**

- Recommended Grade Level: 9
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics course for the General Diploma only
- Counts as an Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors

2522 ALGEBRA II OR HONORS ALGEBRA II (ALG II or HON 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
- Recommended Prerequisite: Algebra I (Honors requires an A in Alg. I or teacher recommendation)
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

2532 GEOMETRY or HONORS GEOMETRY (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, 10, 11
- Recommended Prerequisites: Algebra I

- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

2564 PRE-CALCULUS/ALGEBRA (PRECAL AL)

Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. 150 Indiana Department of Education 2021-2022 High School Course Titles and Descriptions

- Recommended Grade: 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

2566 PRE-CALCULUS/TRIGONOMETRY (PRE-CALC TRIG)

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

- Recommended Grade: 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

2563 AP Precalculus (PreCalc AP)

AP Precalculus is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. This course covers topics including modeling real-world data, exploring multiple representations, and mastering symbolic manipulation. The course teaches students to approach precalculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: Algebra I
- Recommended Prerequisites: Geometry and/or Algebra II
- Credits: 2 semester course, 1 credit per semester

- Counts as a mathematics course for all diplomas.

2530 FINITE MATHEMATICS (FINITE)

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

- Recommended Grade Level: 12
- Recommended Prerequisites: Algebra II or Integrated Mathematics III
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum. Due to the level of rigor, it is recommended that Finite Mathematics be offered as a 2 semester, 2 credit course.
- Counts as a Mathematics Course for all diplomas

2546 PROBABILITY & STATISTICS (PROB/STAT)

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Probability and Statistics are made up of three strands: Data Analysis, Experimental Design, and Probability. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing calculators and computer programs is encouraged. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Algebra II or Integrated Mathematics III
- Credits: 1 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas

2562 AP CALCULUS AB (CALC AB AP)

AP Calculus AB is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

- Recommended Grade Level: 11, 12
- Required Prerequisites: Pre-Calculus
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas

2560 MATHEMATICS LAB (MATH LAB)

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

- Recommended Grade Level: 9, 10, 11, 12

- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 8 credits maximum
- Counts as an Elective for all diplomas

MULTIDISICPLINARY

0500 BASIC SKILLS DEVELOPMENT (BAS SKLS)

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: None
- Credits: 1 credit per semester up to 8 semesters, 8 credits maximum
- Counts as an Elective for all diplomas

0524 COMMUNITY SERVICE (COMM SERV)

Community Service is a course created by public law IC 20-30-14, allowing juniors and seniors the opportunity to earn up to two high school credits for completion of approved community service projects or volunteer service that "relates to a course in which the student is enrolled or intends to enroll."

For each student who wishes to earn credit for community service or volunteer service under this law, the student, a teacher of the student, or a community or volunteer service organization must submit an application to the high school principal including:

1. Name of the community service organization or volunteer service organization the student intends to assist.
2. Name, address, and telephone number of the director or supervisor of the community service organization or volunteer service organization and, if different from the director or supervisor, the name, address, and telephone number of the individual assigned by the community or volunteer service organization to supervise the student at the activity site.
3. Nature of the community service or volunteer service performed by the student with a certification that the service performed by the student is voluntary.
4. Total number of hours the student intends to serve the community service organization or volunteer service organization during the school year.
5. Written statement by the director or the supervisor of the community service organization or volunteer service organization certifying that the information included in the application is an accurate reflection of: a. the student's expectations with regard to the number of hours of service contemplated to be performed; and the community service organization's or the volunteer service organization's need to acquire the student's service.
6. Description of: a. the educational or career exploration benefits the student and the school should expect to gain, including the student learning standards to be achieved, from the student's community or volunteer service participation; and b. the service and benefit the community service organization or volunteer service organization expects to gain from the student's participation.
7. Description of how the community or volunteer service activity relates to a course in which the student is enrolled or intends to enroll.
8. Manner and frequency in which the student and the community or volunteer service activity will be evaluated.
9. Name of the certificated school employee who will be responsible for monitoring and evaluating the student's activity and performance and assigning the student a grade for participation under this section.
10. Any other information required by the principal.

- Grade Levels: 11, 12

- Recommended Prerequisites: None
- Credits: 1 to 2 semester course, 1 credit per semester, up to 2 semesters, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Students must submit an application for this course by November 1, 2021
- Go to www.iga.in.gov and search for Code IC 20-30-14 for more information

0522 JAG/CAREER INFORMATION AND EXPLORATION (JAG/CARR INFO)

Career Information and Exploration provides students with opportunities to learn about themselves and about various traditional and nontraditional occupations and careers. Students also gain an awareness of the type of occupational preparation or training needed for various occupations and careers. Students develop skills in: (1) employability, (2) understanding the economic process, and (3) career decision making and planning. Opportunities are provided for students to observe and participate in various job situations through opportunities such as field trips, internships, mock interviews, and guest speakers. Resume development experience and career-related testing are also provided to students.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Preparing for College and Careers
- Credits: 2 semester course, 1 credit per semester
- The nature of this course allows for successive semesters of instruction provided progressively advanced proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas

0520 Peer Tutoring (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 preplanned by the teacher trainer and any cooperating teacher under whom the tutoring is to be provided. It must be conducted under the supervision of a licensed teacher. The course provides a balance of class work relating to the development of and use of: (1) listening skills, (2) communication skills, (3) facilitation skills, (4) decision-making skills, and (5) teaching strategies.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an elective for all diploma

SCIENCE

3024 BIOLOGY I or BIOLOGY I CP (L) (BIO I or BIO I CP)

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
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills the Biology requirement for all diplomas

3108 INTEGRATED CHEMISTRY-PHYSICS (L) (ICP)

Integrated Chemistry-Physics is a course focused on the following core topics: motion and energy of macroscopic objects; chemical, electrical, mechanical and nuclear energy; properties of matter; transport of energy; magnetism; energy production and its relationship to the environment and economy. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures

- Recommended Grade Level: 10,11,12
- Recommended Prerequisite: Algebra I
- Credits: A two credit course
- Counts as an Elective for all diplomas
- Fulfills a Core 40 science (physical) course requirement for all diplomas

3064 CHEMISTRY I (L) (CHEM I)

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisite: Algebra II (can be taken concurrently)
- Credits: 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills a Core 40 science (physical) course requirement for all diplomas
- Qualifies as a quantitative reasoning course

3026 BIOLOGY II (L) (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: 11, 12
- Recommended Prerequisites: Biology I

- Credits: 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills a science course requirement for all diplomas

5276 ANATOMY & PHYSIOLOGY (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. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integumentary, skeletal, muscular, and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields.

- Recommended Grade: 11, 12
- Required Prerequisites: NONE. 169 Indiana Department of Education 2021-2022 High School Course
- Titles and Descriptions
- Recommended Prerequisites: Biology
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas

3020 AP BIOLOGY (L) (BIO AP)

AP Biology is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties.

- Recommended Grade: 11, 12
- Required Prerequisites: Algebra II & CP Biology
- Recommended Prerequisites: Biology I and Chemistry I
- Credits: 2 semester course, 1 credit per semester
- Counts as a Science Course for all diplomas
- Qualifies as a quantitative reasoning course

3060 AP CHEMISTRY (L) (CHEM AP)

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisite: Chemistry I, Algebra II, Pre-Calculus/Trigonometry (may be taking concurrently)
- Credits: 2 semester course, 1 credit per semester
- Counts as a Science Course for all diplomas
- Qualifies as a quantitative reasoning course

3080 AP PHYSICS 1: ALGEBRA-BASED (L) (PHYS 1 AP)

AP Physics1 is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. *AP Physics 1: Algebra-based* is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits.

- Recommended Grade Level: 11, 12
- Recommended Prerequisite: Algebra I & Algebra II
- Credits: 2 semester course, 1 credit per semester
- Counts as a Science Course for all diplomas
- Qualifies as a quantitative reasoning course

SOCIAL STUDIES

1548 WORLD HISTORY AND CIVILIZATION (WLD HST/CVL)

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas

1542 UNITED STATES HISTORY (US HIST)

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

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

1540 UNITED STATES GOVERNMENT (US GOVT)

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills the Government requirement for all diplomas

1514 ECONOMICS *(ECON)*

Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
- Fulfills a Social Studies requirement for the General Diploma only
- Qualifies as a quantitative reasoning course

1512 CURRENT PROBLEMS, ISSUES, AND EVENTS (CPIE)

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. Course may be repeated for credit if the content of the course changes.
- Counts as an Elective for all diplomas

1516 ETHNIC STUDIES (ETH STUDIES)

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

analysis of the political impact of ethnic diversity in the United States.

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit
- Counts as an Elective for all diplomas

1518 INDIANA STUDIES (IN STUDIES)

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an Elective for all diplomas

1532 PSYCHOLOGY (PSYCH)

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas

1538 TOPICS IN HISTORY (TOP HIST)

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: World History and Civilizations
- Credits: 1 semester course, 1 credit per semester. This course may be repeated if the material in the course is different from one semester to the next. Topics in History can address different topics in World History or U.S. History.
- Counts as an Elective all diplomas

1562 AP United States History (US HIST AP) (AP US HIST)

AP United States History is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP United States History focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: World History & Civilizations. Students should be able to read a college level textbook and write grammatically correct, complete sentences.
- Credits: 2 semester course, 1 credit per semester
- Fulfills the US History requirement for all diplomas

WORLD LANGUAGES

French Language Courses are through a Digital Platform

2020 FRENCH I (FREN I)

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

- Recommended Grade Level: 9-12
- Recommended Prerequisites: None
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

2022 FRENCH II (FREN II)

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

- Recommended Grade Level: 9-12
- Recommended Prerequisites: French I
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

2024 FRENCH III (FREN III)

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

- Recommended Grade Level: 9-12
- Recommended Prerequisites: French I and II
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

2026 FRENCH IV *(*FREN IV)

French IV, a course based on *Indiana's Academic Standards for World Languages*, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of French-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 French language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native French speakers.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: French I, II and III
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

Spanish Language Courses

2120 SPANISH I (SPAN I)

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

- Recommended Grade Level: 9-12
- Recommended Prerequisites: None
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

2122 SPANISH II (SPAN II)

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

- Recommended Grade Level: 9-12
- Recommended Prerequisites: Spanish I
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

2124 SPANISH III (SPAN III)

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

and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.

- Recommended Grade Level: 9-12
- Recommended Prerequisites: Spanish I and II
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

2126 SPANISH IV (SPAN IV)

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

- Recommended Grade Level: 9-12
- Recommended Prerequisites: Spanish I, II and III
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma