Greenfield-Central High School
Course of Study Planning Guide
2023-2024

Learning for All, All for Learning
~Every Student, Every Day~

Greenfield-Central High School
810 N. Broadway St.
Greenfield, IN 46140

Phone: 317-462-9211 Fax: 317-467-6723 http://gchs.gcsc.k12.in.us

TABLE OF CONTENTS

The content of this guide is subject to change as a result of new information.

Greenfield-Central High School Personnel

Principal	Mr. Jason Cary	ext. 34102	jcary@gcsc.k12.in.us
Assistant Principal	Ms. Susie Coleman	ext. 34104	scoleman@gcsc.k12.in.us
Assistant Principal	Mr. Nathan Bruck	ext. 34108	nbruck@gcsc.k12.in.us
Assistant Principal	Mr. Steve Wherry	ext. 34101	swherry@gcsc.k12.in.us
Athletic Director	Mr. Jared Manning	ext. 34102	jmanning@gcsc.k12.in.us
Assistant Athletic Director	Ms. Elizabeth Mercer	ext. 34302	emercer@gcsc.k12.in.us
School Counseling Director	Mrs. Sarah Graham	ext. 34201	sagraham@gcsc.k12.in.us
School Counselors:			
Grades 9-12 – A-E	Mrs. Sheleatha Aldridge	ext. 34200	saldridge@gcsc.k12.in.us
Grades 9-12 – F-L	Mrs. Sherri Foster	ext. 34202	sfoster@gcsc.k12.in.us
Grades 9-12 – M-SL	Mrs. Sarah Knecht	ext. 34204	sknecht@gcsc.k12.in.us
Grades 9-12 – SM-Z	Mrs. Sarah Graham	ext. 34201	sagraham@gcsc.k12.in.us
Counseling Secretary	Mrs. Julie Jones	ext. 34351	jajones@gcsc.k12.in.us
Registrar	Mrs. Stacie Sheffield	ext. 34205	ssheffield@gcsc.k12.in.us
School Secretary	Mrs. Amanda Slattery	ext. 34107	aslattery@gcsc.k12.in.us
Treasurer	Mrs. Andrea Sharp	ext. 34111	asharp@gcsc.k12.in.us
Attendance Secretary	Mrs. Jennifer True	ext. 34112	jtrue@gcsc.k12.in.us
Principal's Secretary	Mrs. Connie Entrekin	ext. 34100	centrekin@gcsc.k12.in.us
Athletic Office Secretary	Mrs. Katie Brown	ext. 34300	kbrown@gcsc.k12.in.us
Performing Arts Secretary	Mrs. Jennifer Steele	ext. 34702	jsteele@gcsc.k12.in.us

Greenfield-Central High School
810 N. Broadway St.
Greenfield, IN 46140
Phone: 317-462-9211
Fax: 317-467-6723
http://gchs.gcsc.k12.in.us

Counselor Splits (By Student Last Name)
A-E: Sheleatha Aldridge
F-L: Sherri Foster
M-SL: Sarah Knecht
SM-Z: Sarah Graham, Director
High School CEEB Code – 151350

Community

Greenfield is a community located 12 miles east of Indianapolis on U.S. Highway 40 and Indiana State Road 9. It has access to U.S. Interstate 70. The community's population is approximately 24,000. Greenfield is considered a part of the Indianapolis suburban area and a large number of residents work in the Indianapolis area.

School

Greenfield-Central High School is a public high school accredited by the Indiana State Board of Education. It has an approximate enrollment of 1500 students in grades 9-12. Vocational students are served by Walker Career Center at Warren Central High School. Students follow an eight block schedule.

Grading Scale

A+	99-100	C+	77-79	
A	93-98	C	73-76	
A-	90-92	C-	70-72	
B+	87-89	D+	67-69	
B	83-86	D	63-66	
B-	80-82	D-	60-62	
		F	0-59	

G-CHS Course Retake Policy: Students who earn a D+ or lower in a course may choose to retake the course for a better grade. Both grades will remain on the transcript, but only the better grade will be factored into the student's GPA. Students will not earn credit for the course being taken again.

Marking System – Class Rank and Latin Honors

Class rank is determined by grade point average and ranking all students in descending order on a 4.333 scale.

A+ = 4.333	B+ = 3.333	C+ = 2.333	D+ = 1.333	F = 0.000
A = 4.000	B = 3.000	C = 2.000	D = 1.000	WF = 0.000
A- = 3.667	B- = 2.667	C- = 1.667	D- = 0.667	

Weighted Grades: Advanced Placement and approved dual credit classes will be weighted 0.5 of a letter grade. Students must earn at least a C- to receive the weight of 0.5.

A+ = 4.833	B+ = 3.833	C+ = 2.833
A = 4.500	B = 3.500	C = 2.500
A- = 4.167	B- = 3.167	C- = 2.167

Starting with the class of 2023, G-CHS will implement the Latin Honors system of graduation distinction, ultimately replacing class rank. The classes of 2023 and 2024 will utilize both systems. The classes of 2025 and beyond will only use Latin Honors and will not be subject to class rank. The Latin Honors GPA cutoffs are as follows:

Summa Cum Laude	4.100 +
Magna Cum Laude	3.900 – 4.099
Cum Laude	3.700 – 3.899

Withdrawal/Failure Grades

Anyone who loses credit due to poor attendance, excessive tardiness, non-participation in physical education, or disciplinary reasons will receive a grade of WF (withdrawal failure). The WF grade is counted the same as an F in computing grade point average and in determining extracurricular eligibility. If a student has to drop a class for a medical reason or otherwise, that student may receive a grade of W (withdrawal). The W grade does not factor into GPA.

Class of 2022 Postgraduate Profile

Four Year Colleges	46.9%
Two Year Colleges	14.7%
Vocational/Technical Schools	5.5%
Post-Secondary (Totals)	67.1%
Military	2.8%
Workforce/Undecided	30.1%

Scholastic Aptitude Test (SAT) – Class of 2022

	Reading/Writing	Math
G-CHS Average	568	566

• 32% of the class of 2022 took the SAT

American College Test (ACT) – Class of 2021

	English	Math	Reading	Science	Composite
G-CHS Average	21.3	21.7	22.0	22.1	21.9

• 14% of the class of 2021 took the ACT

Greenfield-Central Community School Corporation does not discriminate on the basis of a protected class including but not limited to race, color, national origin, age, religion, disability or sex (including sexual stereotype nonconformity), in the programs or activities which it operates or the employment therein or admission thereto. The Corporation strictly adheres to all non-discrimination and anti-harassment laws. Discrimination, harassment, hazing, provocation, or intimidation of another person is prohibited and will not be tolerated on school grounds immediately before, during, or immediately after school hours; in any school program or activity taking place in school facilities, on school transportation, or at other off-campus locations, such as at school-sponsored field trips or a training program; or using property or equipment provided by the school, including school-owned computers and the school's computer network.

Schedule Change Policy

The course offerings at Greenfield-Central High School are based upon student requests entered during pre-enrollment. Therefore, it is necessary for students to determine their class choices with a commitment to completion of those classes. Students may ***not*** drop a class at semester if it is a year-long class. **There will be no schedule changes to accommodate a student's choice of instructors. Due to limited classroom space and teacher availability, no schedule changes will be made unless an error has occurred or it is deemed necessary by the administrative team.**

Final Examinations and Semester Grades

At the conclusion of each semester, teachers give final examinations in all classes. Comprehensive testing is encouraged. Teachers check to see whether course objectives have been met and whether students have achieved the minimum competencies for the course. The semester grade is computed using the final examination grade and the cumulative grade, which includes coursework and tests. The cumulative grade counts as 90% of the semester grade, and the final examination counts for 10% of the semester grade.

Early Graduation

Early graduates are to comply with the following policies:

1. Students must be approved for early graduation. They must file a completed request form, properly signed by the parent and student, with the director of school counseling prior to the beginning of the final year.
2. The early graduate's class rank is based on the rank at the end of six or seven semesters, depending on when they graduate. Also, they are ranked with their original cohort, not their graduating class.
3. Students who wish to graduate in six semesters are not eligible for graduation pathway waivers.

Transfer and Out-of-District Student Enrollment

Students transferring to Greenfield-Central High School who will be residing **within** the boundaries of the Greenfield-Central school district are to obtain permission for admission from the administration. Class enrollment and orientation will be completed by the counseling department. Students removed for disciplinary reasons from another high school will be denied admission to Greenfield-Central High School during the semester in which the disciplinary action occurred. Students who reside **outside** of the Greenfield-Central school district must apply to enroll as an out-of-district student, and must contact the principal's office in order to do so. The application process and subsequent interview are ***not*** a guarantee of enrollment. The principal reserves the right to make the enrollment decision.

IHSAA Athletic Eligibility and NCAA Guidelines for College Athletes

For information regarding the IHSAA and high school athletics, go to the G-CHS Athletics website. In order to be eligible for practice, participation in regular season competition, and athletically related financial aid during the first academic year in residence, a student entering a Division I or Division II NCAA member institution directly out of high school must meet certain eligibility requirements. Please visit the NCAA Eligibility Center for a description of these requirements and for further information.

Extracurricular Activities and Clubs

Greenfield-Central High School offers many opportunities to get involved in student life. Student groups include FCA (Fellowship of Christian Athletes), FFA (Future Farmers of America), FCCLA (Family, Career, and Community Leaders of America), SLA (Student Leadership Academy), Interact Club, Student Council, Sunshine Society, Key Club, VOICE, NASA (Neighborhoods Against Substance Abuse), Leadership Hancock County, Mayor's Youth Council, Academic Super Bowl, Spell Bowl, National Honor Society, Spanish Honor Society, French Honor Society, Art Honor Society, VEX Robotics, Drama Club, Comedy Sportz, Cougar Pride Marching Band, Indoor Percussion, Blue Fusion Dance Team, Color Guard, Cougar Review Newspaper, Catamount Yearbook, Bowling Club, Bring Change 2 Mind, and Project ARROW.

GREENFIELD-CENTRAL HIGH SCHOOL GRADUATION PATHWAYS

Students must satisfy **all three** of the Graduation Pathway Requirements by completing at least one of the associated Graduation Pathway Options.

Graduation Pathway Requirements	Graduation Pathway Options
❶ ☐ **High School Diploma**	☐ **Meet the statutorily defined diploma credit and curricular requirements** General _____ Core 40 _____ Core 40 with AHD _____ Core 40 with THD _____
❷ ☐ **Learn and Demonstrate Employability Skills** Students must complete ***at least one*** of the Graduation Pathway Options	☐ **Project-Based Learning Experience**: Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. *This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or another experience as approved by the State Board of Education.* Description/Verification: _____ ☐ **Service-Based Learning Experience**: Integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. *This can include participation in a meaningful volunteer or civic engagement experience, engagement in a school-based activity, such as a co-curricular or extracurricular activity or sport for at least one academic year, or another experience as approved by the State Board of Education.* Description/Verification: _____ ☐ **Work-Based Learning Experience**: Reinforces academic, technical, and social skills learned in the classroom through collaborative activities with employer partners, allowing students to apply classroom theories to practical problems, explore career options, and pursue personal and professional goals. *This can include completion of a course capstone, completion of an internship, obtaining the Governor's Work Ethic Certificate, employment outside of the school day, or another experience as approved by the State Board of Education.* Description/Verification: _____
❸ ☐ **Postsecondary-Ready Competencies** Students must complete ***at least one*** of the Graduation Pathway Options	☐ **Honors Diploma** AHD _____ THD _____ GPA _____ Credits _____ ☐ **ACT College Ready Benchmarks** (18 in English **or** 22 in Reading **and** 22 in Math **or** 23 in Science) English _____ **or** Reading _____ **and** Math _____ **or** Science _____ ☐ **SAT College Ready Benchmarks** (480 in EBRW and 530 in Math) EBRW _____ Math _____ ☐ **ASVAB** (minimum score of 31) AFQT score _____ ☐ **State and Industry Recognized Credential or Certification** _____ ☐ **Federally Recognized Apprenticeship** _____ ☐ **CTE Concentrator** (earn C- average in Principles, Concentrator A, and Concentrator B courses for NLPS or C- average in Concentrator 1 and Concentrator 2 courses for Perkins V) _____ _____ _____ _____ _____ _____ Total Average Grade _____ ☐ **AP/Dual Credit**** (earn C- average in at least 3 courses) _____ _____ _____ Total Average Grade _____ AP Exam scores _____ ☐ **CLEP Exams** (minimum score of 50 on at least 3 subject area exams with at least one being in core content) ☐ **Locally Created Pathway** that earns approval of State Board of Education _____ ☐ **Waiver Eligible** (must meet criteria for Postsecondary Readiness Competency Waiver)

**At least one AP/Dual Credit course must be in a core content area (e.g. English, math, science, or social studies). Students must take any corresponding AP exams for their courses. A score of 3 or higher on an AP exam may satisfy the C- requirement for a particular course.

INDIANA CORE 40

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 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 Electives	**5 credits** World Languages Fine Arts Career and Technical Education
Physical Education	**2 credits**
Health and Wellness	**1 credit**
Electives*	**6 credits** (College and Career Pathway courses recommended)
40 Total State Credits Required	

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

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

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 "C" or better in courses that will count toward the diploma
- Have a grade point average of "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 "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.

2023-24 Greenfield-Central High School Box 2 Employability Skills

G-CHS list of learning experiences that count for each category
(to be completed July 1st prior to 9th grade year - Sept. 30th after 12th grade year & submission of Graduate Report)

Project-Based Learning Experience	Service-Based Learning Experience	Work-Based Learning Experience
AP Psychology*	Project Arrow**	Automotive Collision NLPS (Walker)*
AP 2D Art & Design (must submit portfolio)*	4-H**	Automotive Service NLPS (Walker)*
AP 3D Art & Design (must submit portfolio)*	Band/Color Guard*	Aviation (Mt. Vernon)*
AP Drawing (must submit portfolio)*	Choir*	Career Start + Career Exploration Intern*
Design Technology NLPS Pathway*	Community Service*	Construction Trades: Carpentry NLPS (Walker)*
PLTW Aerospace Engineering*	Dance/Blue Fusion*	Cosmetology NLPS (Walker)*
PLTW Biomedical Innovations*	Drama/Theater*	Criminal Justice NLPS (Walker)*
PLTW Civil Engineering & Architecture*	Eagle Scouts/Boy Scouts/Girl Scouts**	Culinary Arts & Hospitality NLPS*
PLTW Digital Electronics*	Family, Career, Community Leaders of America (FCCLA)**	Dental Careers NLPS (Walker)*
PLTW Engineering Design and Dev*	Future Farmers of America (FFA)**	Digital Design NLPS*
Psychology*	Interact Club**	Early Childhood Education NLPS*
Robotics and Innovation*	National Honor Society**	Education Professions NLPS*
Student Media Newspaper*	Office Cadet**	Employment-(Must complete 75 hrs)**
Student Media Yearbook*	Orchestra*	Governor's Work Ethic Certificate*
	Peer Tutoring*	HVAC NLPS*
	Sports/Athletics (completion of a full season in good standing)**	Jobs for America's Graduates (JAG)*
	Student Council**	Precision Machining NLPS (Walker)*
	Student Leadership Academy**	Pre-Nursing NLPS (Walker)*
	Youth Leadership Hancock County**	Radio & Television I & II and NLPS*
	Y-Give**	Supervised Agriculture Experience*
		Welding Technology NLPS (Walker)*
***Transcripted Course: Documents teacher verification with a passing grade as well as a student product**	***Transcripted Course: Documents teacher verification and student demonstration of employability skills through course completion** ****Non-Transcripted Experience: Requires supervisor verification and a student reflection form to be submitted**	***Transcripted Course: Documents teacher verification with a passing grade as well as a student product** ****Non-Transcripted Experience: Requires supervisor verification and a student reflection form to be submitted**

Next Level Programs of Study (NLPS) Pathways
Offered at Greenfield-Central (GC), Walker Career Center (WCC), Mount Vernon (MV), & Eastern Hancock (EH)

For more information and to see how NLPS can help fulfill graduation pathway requirements, visit the Governor's Workforce Cabinet's Office of Career and Technical Education

Earn CTE Concentrator Status by completing these 3 courses with a C- average or better

Career Pathway	Principles Course	CTE Concentrator A	CTE Concentrator B	Pathway Capstone
Agriscience – Plants or Animals (GC)	Principles of Agriculture 7117	Animal Science 5008	Advanced Life Science: Animals (L) 5070	Agricultural Research Capstone 7262
Agriscience – Plants or Animals (GC)	Principles of Agriculture 7117	Animal Science 5008	*Advanced Life Science: Foods 5072	Agricultural Research Capstone 7262
Agriscience – Plants or Animals (GC)	Principles of Agriculture 7117	Plant & Soil Science 5170	Advanced Life Science: Animals (L) 5070	Agricultural Research Capstone 7262
Agriscience – Plants or Animals (GC)	Principles of Agriculture 7117	Plant & Soil Science 5170	*Advanced Life Science: Foods 5072	Agricultural Research Capstone 7262
Business Administration (GC)	Principles of Business Management 4562	Marketing Fundamentals 5914	Accounting Fundamentals 4524	*Business Administration Capstone 7256
Marketing & Sales (GC)	Principles of Business Management 4562	Marketing Fundamentals 5914	Digital Marketing 7145	*Business Management Capstone 7201
Education Professions (GC)	Principles of Teaching 7161	Child & Adolescent Development 7157	Teaching & Learning 7162	*Education Professions Capstone 7267
Biomedical Sciences (GC)	Principles of Biomedical Sciences 5218	Human Body Systems 5216	Medical Interventions 5217	Biomedical Innovations 5219
Engineering (GC)	Introduction to Engineering Design 4802	Principles of Engineering 5644	Digital Electronics 5538	Engineering Design & Development 5698
Engineering (GC)	Introduction to Engineering Design 4802	Principles of Engineering 5644	Civil Engineering & Architecture 5650	Engineering Design & Development 5698
Engineering (GC)	Introduction to Engineering Design 4802	Principles of Engineering 5644	Aerospace Engineering 5518	Engineering Design & Development 5698
HVAC (GC)	Principles of HVAC 7131	HVAC Fundamentals 7125	HVAC Service 7126	HVAC Capstone 7244
Culinary Arts (GC + WCC)	Principles of Culinary & Hospitality 7173	Nutrition 7171	Culinary Arts 7169	Culinary Capstone 7233
Culinary Arts (GC + WCC)	Principles of Culinary & Hospitality 7173	Nutrition 7171	Culinary Arts 7169	Baking & Pastry Capstone 7235

Fashion & Textiles (GC + WCC)	Principles of Fashion & Textiles 7301	Textiles, Apparel, & Merchandising 7302	Advanced Textiles 7303	Fashion & Textiles Capstone 7304
Construction Trades: Carpentry (GC + WCC)	Principles of Construction Trades 7130	Construction Trades: General Carpentry 7123	Construction Trades: Framing & Finishing 7122	Construction Trades Capstone 7242
Radio & Television (GC + WCC)	Principles of Broadcasting 7139	Audio & Video Production Essentials 7306	Mass Media Production 7307	Radio & TV Broadcasting Capstone 7308
Computer Science (WCC + EH)	Principles of Computing 7183	Topics in Computer Science 7351	Computer Science 7352	Computer Science Capstone 7353
Early Childhood Education (WCC)	Principles of Early Childhood Education 7160	Early Childhood Education Curriculum 7158	Early Childhood Education Guidance 7159	Early Childhood Education Capstone 7259
Design Technology (WCC)	Introduction to Engineering Design 4802	Mechanical & Architectural Design 7196	BIM Architecture 7197	Architectural Design Capstone 7225
Automotive Collision Repair (WCC)	Principles of Collision Repair 7215	Automotive Body Repair 7204	Plastic Body Repair & Painting Fundamentals 7206	Collision Repair Capstone 7380
Automotive Services (WCC)	Principles of Automotive Services 7213	Brake Systems 7205	Steering & Suspensions 7212	Automotive Service Capstone 7375
Cosmetology (WCC)	Principles of Barbering & Cosmetology 7330	Barbering & Cosmetology Fundamentals 7331	Advanced Cosmetology 7332	Barbering & Cosmetology Capstone 7334
Criminal Justice (WCC + MV)	Principles of Criminal Justice 7193	Law Enforcement Fundamentals 7191	Corrections & Cultural Awareness 7188	Criminal Justice Capstone 7231
Pre-Nursing (WCC + MV)	Principles of Healthcare 7168	Medical Terminology 5274	Healthcare Specialist: CNA 7166	Healthcare Specialist Capstone 7255
Pre-Nursing (WCC + MV)	Principles of Healthcare 7168	Medical Terminology 5274	Certified Clinical Medical Assistant (CCMA) 7164	Healthcare Specialist Capstone 7255
Dental Careers (WCC)	Principles of Dental Careers 7315	Dental Careers Fundamentals 7316	Advanced Dental Careers 7317	Dental Careers Capstone 7318
Digital Design (WCC)	Principles of Digital Design 7140	Digital Design Graphics 7141	Graphic Design & Layout 5550	Digital Design Capstone 7246
Digital Design (WCC)	Principles of Digital Design 7140	Digital Design Graphics 7141	Professional Photography & Videography 7136	Digital Design Capstone 7246
Precision Machining (WCC)	Principles of Precision Machining 7109	Precision Machining Fundamentals 7105	Advanced Precision Machining 7107	Precision Machining Capstone 7219
Welding Technology (WCC)	Principles of Welding Technology 7110	Shielded Metal Arc Welding 7111	Gas Welding Processes 7101	Welding Technology Capstone 7226
Aviation Management (MV)	Principles of Aviation Management 7214	Private Pilot Theory 7217	Aviation Safety & Operations 7207	*Aviation Management Capstone 7218

***Not offered 2023-24**

QUANTITATIVE REASONING COURSES

- For the Core 40, Academic Honors, and Technical Honors diplomas, students must take a mathematics course or a quantitative reasoning (applied mathematics) course each year they are enrolled in high school.
- For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning (applied mathematics) course during their junior or senior year.
- A quantitative reasoning (applied math) course is a high school course that "advances a student's ability to apply math in real world situations and contexts" and that "deepens a student's understanding of high school math standards."

AGRICULTURE

5072 Advanced Life Science, Foods
5002 Agribusiness Management
5136 Landscape Management I
5070 Advanced Life Science, Animals
7262 Agricultural Research Capstone

BUSINESS, MARKETING, IT, & ENTREPRENEURSHIP

4512 Business Math
4801 Computer Science I
4540 Personal Financial Responsibility

ENGINEERING AND TECHNOLOGY

5644 Principles of Engineering
5538 Digital Electronics
4728 Robotics Design and Innovation
5518 Aerospace Engineering
5650 Civil Engineering and Architecture
5698 Engineering Design & Development

TRADE AND INDUSTRY

7183 Principles of Computing
7351 Topics in Computer Science
7352 Computer Science
7242 Construction Trades Capstone
7197 BIM Architecture
7105 Precision Machining Fundamentals
7107 Advanced Precision Machining
7219 Precision Machining Capstone
7244 HVAC Capstone

SCIENCE

3108 Integrated Chemistry-Physics
3064 Chemistry I
3064 Honors Chemistry I
3066 Chemistry II – ACP Chemistry
3060 AP Chemistry
3084 Physics I
3080 AP Physics 1: Algebra-Based
3081 AP Physics 2: Algebra-Based
3088 AP Physics C

SOCIAL STUDIES

1514 Economics

Advanced Placement® Courses

Greenfield-Central High School currently offers 17 Advanced Placement® courses. These are college level courses with curriculum designed by College Board®. At Greenfield-Central, these are year-long courses and the students are expected to participate in the course for the full year. Students are also expected to prepare for and take the Advanced Placement® exam that is given in May. Students can potentially earn college credit, advanced course placement, or both for coursework completed in high school, based upon their AP® exam results. If the student earns a grade of C- or better in the course, the grade will be weighted.

Advanced Placement® courses are academically rigorous and involve more work outside of class than regular courses. Some AP® courses have required assignments that must be completed prior to the start of the school year. Students and parents should carefully consider these factors before making a commitment to an AP® course. The student's counselor is a valuable resource in the decision-making process.

Below is a list of the Advanced Placement® course offerings. Full course descriptions and prerequisites are listed in the appropriate department course listings.

2-D Art and Design
3-D Art and Design
Art History
Calculus AB
Calculus BC
Chemistry
Drawing
English Language & Composition
European History
Music Theory
Physics 1: Algebra-Based
Physics 2: Algebra-Based
Physics C: Electricity & Magnetism
Physics C: Mechanics
Psychology
Statistics
United States History

Dual Credit Course Summary

Greenfield-Central High School provides many opportunities for students to earn both high school and college credits simultaneously. Dual credit courses are considered college-level courses and are treated as such. They are more academically rigorous than regular high school courses and prepare students for entry to post-secondary school. These courses are offered by the colleges listed and are taught by Greenfield-Central High School faculty in the high school classroom. There are no fees associated with these courses. Students will register with the university to earn the college credits and have them put on a college transcript. Most of these credits are transferable between colleges, but there are exceptions. Students and their families are strongly encouraged to contact the college they wish to attend to be sure they will accept these credits.

Please note: just taking the course at G-CHS is not enough to earn college credit. Students must register with the associated college/university and sign up for the appropriate course. Students will be considered "dual enrolled" in high school and college simultaneously. Indiana University courses run through the ACP (Advance College Project) program and require a minimum 2.7 cumulative GPA to qualify for earning college credits. Ivy Tech courses have varying prerequisites that are detailed in the following section. Ivy Tech's registration process is different and involves creating a DualEnroll account (requires student's Social Security Number) and registering for the courses in DualEnroll. **If students do not complete the requisite steps, they will not earn college credits.** If there are any questions regarding dual credit courses, feel free to reach out to your student's counselor.

G-CHS Course	Priority Dual Credit Course (counts toward AHD and THD)	Weighted Grade	Core Transfer Library Course Title	Post-Secondary School to Award Credit	Post-Secondary School Course Title	Potential College Credit Hours to be Earned
ACP Biology *3090*	Yes	Yes	Human Biology	Indiana Univ-Bloomington	BIOL L100 Humans & Biological World	5
ACP Chem C101/C121 *3066*	Yes	Yes	Elementary General Chem w/Lab	Indiana Univ-Bloomington	CHEM C101/C121 Elementary Chem I/ Elementary Chem Lab I	5
ACP US History *1542*	Yes	Yes	Amer Hist 1 Amer Hist 2	Indiana Univ-Bloomington	H105 American History I (to 1865) H106 US History II: 1865-Present	6
Speech P155 *1078*	Yes	Yes	Intro Public Speaking	Indiana Univ-Bloomington	COLL-P155 Public Oral Communication	3
Adv Comp W131 *1098*	Yes	Yes	English Comp 1	Indiana Univ-Bloomington	ENG-W131 Reading, Writing, & Inquiry I	3
Literary Int L202 *1124*	Yes	Yes	Appreciation of Literature	Indiana Univ-Bloomington	ENG-L202 Literary Interpretation	3
Eng 12 DC ENGL 111 *1008*	Yes	Yes	English Comp 1	Ivy Tech Comm College	ENGL 111 English Composition	3
Adv Life Sci: Animals *5070*	Yes	No		Ivy Tech Comm College	AGRI 107 Advanced Animal Science	3
Agribusiness Mgmt *5002*	Yes	No		Ivy Tech Comm College	AGRI 102 Agribusiness & Farm Mgmt	3
Ag Power Tech *5088*	Yes	No		Ivy Tech Comm College	AGRI 106 Agriculture Mechanization	3
Animal Science *5008*	Yes	No		Ivy Tech Comm College	AGRI 103 Animal Science	3
Horticulture Science *5132*	Yes	No		Ivy Tech Comm College	AGRI 116 Survey of Horticulture	3
Landscape Mgmt I *5136*	Yes	No		Ivy Tech Comm College	AGRI 164 Landscape Design I	3
Plant & Soil Science *5170*	Yes	No		Ivy Tech Comm College	AGRI 105 Plant & Soil Science	3
Principles Agriculture *7117*	Yes	No		Ivy Tech Comm College	AGRI 100 Introduction to Agriculture	3

Drawing I + II *4060*	No	Yes	Drawing	Ivy Tech Comm College	ARTS 100 Life & Object Drawing I	3
AP 2-D Art & Design *4050*	No	Yes		Ivy Tech Comm College	ARTS 102 Color & Design Theory	3
AP Art History *4025*	No	Yes	Art History I	Ivy Tech Comm College	ARTH 101 Survey of Art & Culture I	3
Visual Communication I *4086*	No	No		Ivy Tech Comm College	VISC 115 Intro to Computer Graphics	3
Visual Communication II *4086*	No	No		Ivy Tech Comm College	VISC 102 Fundamentals of Imaging	3
Principles of Culinary *7173*	Yes	No		Ivy Tech Comm College	HOSP 101 Sanitation & Safety HOSP 102 Basic Food Theory & Skills	2 3
Nutrition *7171*	Yes	No		Ivy Tech Comm College	HOSP 104 Nutrition	3
Culinary Arts *7169*	Yes	No		Ivy Tech Comm College	HOSP 103 Soups, Stocks, and Sauces HOSP 105 Introduction to Baking	3 3
Education Professions II *5404*	Yes	No		Ivy Tech Comm College	EDUC 233 Literacy Development through Children's Literature	3
Principles of Teaching *7161*	Yes	No		Ivy Tech Comm College	EDUC 101 Introduction to Teaching	3
Teaching & Learning *7162*	Yes	No		Ivy Tech Comm College	EDUC 201 Technology in Education	2
Principles Business Mgmt *4562*	Yes	No		Ivy Tech Comm College	BUSN 101 Introduction to Business	3
Marketing Fundamentals *5914*	Yes	No		Ivy Tech Comm College	MKTG 101 Principles of Marketing	3
Principles of HVAC *7131*	No	No		Ivy Tech Comm College	BCTI 130 Intro to Electrical HVAC 100 Intro to HVAC Technology	4 3
HVAC Fundamentals *7125*	No	No		Ivy Tech Comm College	HVAC 101 Heating Fundamentals HVAC 103 Refrigeration I	3 3
HVAC Service *7126*	No	No		Ivy Tech Comm College	HVAC 202 Electrical Controls & Circuits HVAC 211 Refrigeration II	3 3
HVAC Capstone *7244*	No	No		Ivy Tech Comm College	HVAC 208 Heating Service	3
Principles Aviation Mgmt *7214*	Yes	No		Ivy Tech Comm College	AVIT 111 Intro to Aviation Technology	2
Private Pilot Theory *7217*	Yes	No		Ivy Tech Comm College	AVIT 120 Private Pilot Theory	3
Aviation Safety & Oper *7207*	Yes	No		Ivy Tech Comm College	AVIT 132 Aviation Operations	3
Aviation Mgmt Capstone *7385*	Yes	No		Ivy Tech Comm College	AVIT 135 Aviation Safety Mgmt Systems	3
Introduction to Engineering Design (IED) *4802*	Yes	Yes		Ivy Tech Comm College	DESN 101 (IED) Intro Design Tech DESN 113 (IED) 2D Computer-Aided Design	3 3
Principles Engineering (POE) *5644*	Yes	Yes		Ivy Tech Comm College	DESN 104 (POE) Mechanical Graphics	3
Digital Electronics (DE) *5538*	Yes	Yes		Ivy Tech Comm College	EECT 112 (DE) Digital Fundamentals	3
Civil Eng & Arch (CEA) *5650*	Yes	Yes		Ivy Tech Comm College	DESN 105 (CEA) Architectural Design I	3

Credits may not be transferable. Students should contact the university directly for more information.

The Purdue Polytechnic Institute at Purdue University awards elective credits for the completion of certain PLTW courses with semester grades of B or better. Please see the PLTW Course Mapping reference sheet for further details.

For questions regarding college credits earned or to have the credits transferred to the college/university of the student's choice, students must contact the registrar's office at the university associated with the course.

IVY TECH COMMUNITY COLLEGE DUAL CREDIT COURSES

To earn dual credit, students must meet the college entry level scores in designated placement tests.

PROGRAM READY WRITING (Student must meet at least one of the following):

- Knowledge Assessment – 70 Reading/Writing
- NextGen ACCUPLACER – 257 Writing **OR** 250+ **AND** Writeplacer 5
- ITCC ACCUPLACER – Writeplacer 4
- ACT – 17 English
- SAT – 27 Writing & Language
- SAT – 460 Evidence-Based Reading & Writing
- PSAT – 26 Writing
- PSAT – 430 Evidence-Based Reading & Writing
- Cumulative High School GPA 2.6 on 4.0 Scale, Core 40, four semesters completed

PROGRAM READY READING (Student must meet at least one of the following):

- Knowledge Assessment – 70 Reading/Writing
- NextGen ACCUPLACER – 257 Reading
- ITCC ACCUPLACER – 69 Reading
- ACT – 18 Reading
- SAT – 25 Reading
- SAT – 460 Evidence-Based Reading & Writing
- PSAT – 25 Critical Reading
- PSAT – 430 Evidence-Based Reading & Writing
- Cumulative High School GPA 2.6 on 4.0 Scale, Core 40, four semesters completed

PROGRAM READY MATH (Student must meet at least one of the following):

- Knowledge Assessment – 55 QR, 50 STEM for Marketing; 50 STEM, 95+ CALC for Digital Electronics
- NextGen ACCUPLACER – 250 QAS for Marketing; 250 AAF for Digital Electronics
- ITCC ACCUPLACER – 45 Elementary Algebra for Marketing; 70 Elementary Algebra for Digital Electronics
- ACT – 18 Math for Marketing; 20 for Digital Electronics
- SAT – 500 Math for Marketing; 510 for Digital Electronics
- PSAT – 24.5 Mathematics for Marketing; 25 for Digital Electronics
- Cumulative High School GPA 2.6 on 4.0 Scale, Core 40, four semesters completed

NOTES:

- To qualify for earning college credit for many of these courses, students must be considered program ready in **Writing** and **Reading**. Some courses also require **Math** program readiness and are designated as such below.
- If you do not currently meet these prerequisites, testing will be completed in the fall. You may take the class even if you do not meet the requirements after the fall testing; however, you will not earn college credit for the class.
- All of these scores are only accepted for 4 years after a test was taken.

G-CHS Course	Ivy Tech Course	Prerequisites/Corequisites
AGH104/105 Principles of Agriculture *7117*	AGRI 100 Introduction to Agriculture	None
AGH211/212 Horticulture Science *5132*	AGRI 116 Survey of Horticulture	None
AGH220/221 Animal Science *5008*	AGRI 103 Animal Science	None
AGH300/301 Agribusiness Mgmt *5002*	AGRI 102 Agribusiness & Farm Mgmt	None
AGH310/311 Landscape Management *5136*	AGRI 164 Landscape Design I	None
AGH322/323 Agriculture Power, Structure & Tech *5088*	AGRI 106 Agriculture Mechanization	None
AGH334/335 Plant and Soil Science *5170*	AGRI 105 Plant and Soil Science	None
AGH340/341 ALS: Animals *5070*	AGRI 107 Advanced Animal Science	None
ARH202/206 Drawing I + II *4060*	ARTS 100 Life and Object Drawing I	Program Ready Writing **and** Reading
ARH300 Visual Communication I *4086*	VISC 115 Intro to Computer Graphics	Program Ready Writing **and** Reading
ARH301 Visual Communication II *4086*	VISC 102 Fundamentals of Imaging	Program Ready Writing **and** Reading
ARH602/603 AP 2-D Art & Design *4050*	ARTS 102 Color & Design Theory I	Program Ready Writing **and** Reading
ARH606/607 AP Art History *4025*	ARTH 101 Survey of Art & Culture I	Program Ready Writing **and** Reading
BUH260/261 Principles Business Management *4562*	BUSN 101 Introduction to Business	Program Ready Writing **and** Reading
BUH250/251 Marketing Fundamentals *5914*	MKTG 101 Principles of Marketing	Program Ready Writing **and** Reading **MATH –** KAQR 55; KASTEM 50; Accuplacer Next Gen: QAS 250; ITCC Accuplacer: Elementary Algebra 45; ACT: Math 18; SAT: Math 500; PSAT: Math 24.5; Cumulative GPA 2.6 on a 4-point scale. Must be Core 40 and have 4 semesters completed.
ENH410 English 12, Dual Credit *1008*	ENGL 111 English Composition	Program Ready Writing **and** Reading
FCH124/125 Principles of Culinary *7173*	HOSP 101 Sanitation & Safety HOSP 102 Basic Food Theory & Skill	Program Ready Writing **and** Reading HOSP 101 Sanitation & Safety
FCH324/325 Nutrition *7171*	HOSP 104 Nutrition	Program Ready Writing **and** Reading
FCH326/327 Culinary Arts *7169*	HOSP 103 Soups, Stocks, and Sauces HOSP 105 Introduction to Baking	HOSP 101 **and** HOSP 102 HOSP 101 Sanitation & Safety
FCH352/353 Education Professions II *5404*	EDUC 233 Literacy Development through Children's Literature	EDUC 101 Introduction to Teaching
FCH114/115 Principles of Teaching *7161*	EDUC 101 Introduction to Teaching	Program Ready Writing **and** Reading **OR** KARW 1+ (only requirement is KA is completed)
FCH216/217 Teaching & Learning *7162*	EDUC 201 Technology in Education	EDUC 101 Introduction to Teaching
TEH160/161 Intro to Engineering Design (IED) *4802*	DESN 101 Intro to Design Technology DESN 113 2D Computer-Aided Design	None DESN 101 Intro to Design Technology
TEH260/261 Principles of Engineering (POE) *5644*	DESN 104 Mechanical Graphics	DESN 101 Intro to Design Technology

TEH350/351 Digital Electronics (DE) *5538*	EECT 112 Digital Fundamentals	**MATH** – KASTEM 50; KACALC 95; Accuplacer Next Gen: AAF 250; ITCC Accuplacer: Elementary Algebra 70; ACT: Math 20; SAT: Math 510; PSAT: Math 25; Cumulative GPA 2.6 on a 4-point scale. Must be Core 40 and have 4 semesters completed.
TEH500/501 Civil Engineering Architecture (CEA) *5650*	DESN 105 Architectural Design I	DESN 101 Intro to Design Technology
VOH504/505 Principles of HVAC *7131*	BCTI 130 Intro to Electrical HVAC 100 Intro to HVAC Technology	None None
VOH506/507 HVAC Fundamentals *7125*	HVAC 101 Heating Fundamentals HVAC 103 Refrigeration I	None None
VOH508/509 HVAC Service *7126*	HVAC 202 Electrical Controls & Circuits HVAC 211 Refrigeration II	HVAC 101 **and** HVAC 103 **and** BCTI 130 HVAC 103 **and** BCTI 130
VOH610/611 HVAC Capstone *7244*	HVAC 208 Heating Service	HVAC 101 **and** BCTI 130
VOH614/615 Principles Aviation Mgmt *7214*	AVIT 111 Intro to Aviation Technology	None
VOH616/617 Private Pilot Theory *7217*	AVIT 120 Private Pilot Theory	None
VOH618/619 Aviation Safety & Operations *7207*	AVIT 132 Aviation Operations	AVIT 111 Intro to Aviation Technology
VOH620/621 Aviation Management Capstone *7385*	AVIT 135 Aviation Safety Mgmt Systems	AVIT 111 Intro to Aviation Technology

HIGH SCHOOL PROJECT LEAD THE WAY COURSES = PURDUE UNIVERSITY CREDITS

Students enrolled in one of 14 majors within the Purdue Polytechnic Institute can receive up to 12 credit hours of elective credits (equivalent of four courses) toward their Purdue University degree.

PLTW credits apply to Purdue's majors that focus on engineering technologies, construction management and technology management offered on the West Lafayette campus and nine other locations around Indiana. The Purdue Polytechnic Institute is the ONLY college at Purdue University that awards credit for PLTW coursework.

HOW IT **WORKS**

If you enroll in one of these 14 Purdue Polytechnic majors	And you've completed any of these courses from a PLTW high school with semester grades of B or better	You can be awarded elective credits for these Purdue courses
Audio Engineering Technology	Aerospace Engineering (AE)	ENGT 10200: Aerospace Studies
Automation and Systems Integration Engineering Technology	Civil Engineering & Architecture (CEA)	ENGT 10300: Exploring Civil Engineering & Architecture
Computer Engineering Technology	Introduction to Engineering Design (IED)	ENGT 10500: Introduction to Engineering Design
Construction Management Technology	Digital Electronics (DE)	ENGT 10600: Digital Electronics
Electrical Engineering Technology	Principles of Engineering (POE)	ENGT 10700: Principles of Engineering
Energy Engineering Technology	Computer-Integrated Manufacturing (CIM)	ENGT 10800: Computer Integrated Manufacturing
Engineering Technology (at select Polytechnic locations*)		
Engineering/Technology Teacher Education		
Industrial Engineering Technology		
Mechanical Engineering Technology		
Mechatronics Engineering Technology		
Organizational Leadership		
Robotics Engineering Technology		
Supply Chain and Sales Engineering Technology		

The Purdue Polytechnic Institute at Purdue University approaches learning similarly to Project Lead The Way. The college uses innovative learning methods, real-world experiences, and industry partnerships to produce graduates who are uniquely qualified for technology-driven careers.

** In addition to Purdue University's main campus in West Lafayette, Indiana, the Polytechnic offers degree programs in nine Indiana communities: Anderson, Columbus, Indianapolis, Kokomo, Lafayette, New Albany, Richmond, South Bend, and Vincennes.*

2023-24 Course Summary

INTERDEPARTMENTAL	
ADH100/101	*0520* Peer Tutoring F/S **§**
ADH210/211	*0524* Community Service F/S **§**
ADH330/331	*0509* Jobs for America's Grads (JAG I) F/S **§**
ADH340/341	*0509* Jobs for America's Grads (JAG II) F/S **§**
ADH350/351	*0530* Career Start F/S **§**
ADH400/401	Office Cadet F/S **§**
ADH450/451	*0530* Career Exploration Internship F/S **§**
ADH800	*0547* Project-Based Learning
ADH801	*0539* Service-Based Learning
ADH802	*0543* Work-Based Learning

AGRICULTURE	
AGH104/105	*7117* Principles of Agriculture F/S *
AGH211/212	*5132* Horticulture Sci F/S *
AGH220/221	*5008* Animal Science F/S *
AGH250	*5228* Supervised Agricultural Experience **§**
AGH300/301	*5002* Agribusiness Mgmt F/S *
AGH310/311	*5136* Landscape Management I F/S *
AGH322/323	*5088* AgPowerTech F/S * (not offered 23-24)
AGH334/335	*5170* Plant and Soil Science F/S *
AGH340/341	*5070* Advanced Life Science: Animals F/S *
AGH360/361	*7262* Ag Research Capstone F/S

BUSINESS, MARKETING, & IT	
BUH153	*4528* Digital Apps & Responsibility
BUH200/201	*4512* Business Math F/S
BUH222/223	*4524* Accounting Fundamentals F/S
BUH250/251	*5914* Marketing Fundamentals F/S *
BUH260/261	*4562* Principles Business Mgmt F/S *
BUH270/271	*7145* Digital Marketing F/S
BUH354/355	*4801* Computer Science I F/S
BUH402	*4540* Personal Finance

ENGINEERING & TECHNOLOGY	
TEH111/112	*4790* Introduction to Communications F/S
TEH121/122	*4798* Introduction to Transportation F/S
TEH210/211	*7130* Principles Construction Trades F/S
TEH604/605	*4796* Intro Advanced Manufacturing F/S
TEH370/371	*4728* Robotics Design & Innovation F/S **§**
TEH430/431	*4800* Computers in Design & Production F/S
TEH160/161	*4802* PLTW Intro to Engineering Design F/S *‡
TEH260/261	*5644* PLTW Principles of Engineering F/S *‡
TEH350/351	*5538* PLTW Digital Electronics F/S *‡§
TEH460/461	*5518* PLTW Aerospace Engineering F/S *‡§
TEH500/501	*5650* PLTW Civil Engineering Arch F/S *‡§
TEH660/661	*5698* PLTW Engineering Design & Dev F/S ‡§

ENGLISH	
ENH110/111	*1002* English 9 F/S
ENH120/121	*1002* Honors English 9 F/S
ENH624/625	*1002* Honors English 9 (High Ability) F/S
ENH130	*1080* Journalism
ENH210/211	*1004* English 10 F/S
ENH220/221	*1004* Honors English 10 F/S
ENH626/627	*1004* Honors English 10 (High Ability) F/S
ENH230	*1060* Etymology
ENH300	*1078* Speech P155 (IU) *‡
ENH312/313	*1006* English 11 F/S
ENH322/323	*1006* Honors English 11 F/S
ENH330/331	*1086* Student Media Newspaper F/S **§**
ENH340/341	*1086* Student Media Yearbook F/S **§**
ENH410	*1008* English 12 DC (ENG 111 Ivy Tech) *‡
ENH420	*1098* Adv Comp W131 (IU) *‡
ENH430	*1034* Film Literature
ENH432	*1042* Novels (Contemporary YA Lit.)
ENH440	*1092* Creative Writing
ENH450	*1096* Technical Communication
ENH460	*1048* Themes in Lit: Epic Heroes
ENH461	*1048* Themes in Lit: Sports Lit
ENH462	*1036* Genres of Lit: Sci Fi & Fantasy
ENH463	*1084* Digital Media
ENH464	*1074* Critical Thinking
ENH540	*1124* Literary Int L202 *‡
ENH660/661	*1056* AP English Language & Comp F/S ‡

FAMILY & CONSUMER SCIENCE	
FCH114/115	*7161* Principles Teaching F/S *
FCH214/215	*7157* Child & Adolescent Development F/S
FCH216/217	*7162* Teaching & Learning F/S *
FCH124/125	*7173* Principles Culinary & Hosp F/S *
FCH324/325	*7171* Nutrition F/S *
FCH326/327	*7169* Culinary Arts F/S *
FCH130	*5364* Interpersonal Relationships
FCH150/151	*7301* Principles of Fashion & Textiles F/S
FCH301	*5340* Advanced Nutrition International
FCH310/311	*5366* Human Development & Wellness F/S
FCH352/353	*5404* Education Professions II F/S *

* Dual Credit ‡ Weighted § Box 2 Course

FINE & VISUAL ARTS	
ARH100	*4000* Introduction to 2D Art
ARH101	*4004* Advanced 2D Art
ARH110	*4002* Introduction to 3D Art
ARH111	*4006* Advanced 3D Art
ARH200	*4062* Photography
ARH202/206	*4060* Drawing I/II *
ARH314/316	*4060* Drawing III/IV
ARH212/214	*4040* Ceramics I/II
ARH312/	*4040* Ceramics III/IV
ARH213/215	*4044* Sculpture I/II
ARH220	*4042* Jewelry
ARH300	*4086* Visual Communication I *
ARH301	*4086* Visual Communication II *
ARH315/317	*4064* Painting I/II
ARH319/321	*4064* Painting III/IV
ARH600/601	*4048* AP Drawing F/S ‡§
ARH602/603	*4050* AP 2-D Art & Design F/S *‡§
ARH604/605	*4052* AP 3-D Art & Design F/S ‡§
ARH606/607	*4025* AP Art History F/S *‡

MATHEMATICS	
MAH102/103	*2560* Math Lab-Geometry F/S
MAH152/153	*2516* Algebra I Lab F/S
MAH200/201	*2520* Algebra I F/S
MAH210/211	*2532* Geometry F/S
MAH220/221	*2532* Honors Geometry F/S
MAH300/301	*2522* Algebra II F/S
MAH320/321	*2522* Honors Algebra II F/S
MAH406	*2564* Pre-Calculus: Algebra
MAH407	*2566* Pre-Calculus: Trigonometry
MAH408	*2564* Honors Pre-Calculus: Algebra
MAH409	*2566* Honors Pre-Calculus: Trigonometry
MAH310	*2546* Probability and Statistics
MAH430	*2530* Finite Mathematics
MAH440/441	*2514* CCR Bridge: Math Ready F/S
MAH500/501	*2527* Calculus F/S
MAH530/531	*2570* AP Statistics F/S ‡
MAH630/631	*2562* AP Calculus AB F/S ‡
MAH632/633	*2572* AP Calculus BC F/S ‡

PERFORMING ARTS	
MUH050/051	*4160* Beginning Concert Band F/S §
MUH100/101	*4168* Intermediate Concert Band F/S §
MUH200/201	*4170* Advanced Concert Band F/S §
MUH140/141	*4172* Intermediate Orchestra F/S §
MUH150/151	*4174* Advanced Orchestra F/S §
MUH110/111	*4164* Jazz Ensemble I F/S §
MUH112/113	*4164* Jazz Ensemble II F/S §
MUH132/133	*4182* Beginning Chorus-Tenor/Bass F/S §
MUH130/131	*4182* Beginning Chorus-Treble F/S §
MUH220/221	*4186* Intermediate Chorus-Bella Voce F/S §
MUH312/313	*4186* Intermediate Chorus-Concert Choir F/S §
MUH300/301	*4184* Vocal Jazz-Legacy Choir F/S §
MUH320/321	*4188* Advanced Chorus-Madrigal F/S §
MUH210/211	*4208* Music Theory and Composition F/S
MUH510/511	*4210* AP Music Theory F/S ‡
MUH230/231	*4142* Dance Choreography (Color Guard) F/S §
MUH402/403	*4146* Dance Performance (Blue Fusion) F/S §
MUH410	*4242* Theater Arts §
MUH411	*4240* Adv Theater § (not offered 2022-23)
MUH420	*4244* Tech Theater §
MUH421	*4248* Theater Production §

PHYSICAL EDUCATION & HEALTH	
PHH100	*3542* Physical Education I
PHH101	*3544* Physical Education II
PHH102	*3560* Elective PE - Aquatics
PHH110	*3506* Health and Wellness Education
PHH600/601	*3560* Elective PE - Strength & Fitness F/S

SCIENCE	
SCH100/101	*3024* Biology I F/S
SCH200/201	*3026* Biology II F/S
SCH630/631	*3090* Adv Sci, CC: ACP Bio (IU) F/S *‡
SCH230/231	*3108* Integrated Chemistry & Physics F/S
SCH300/301	*3064* Chemistry I F/S
SCH304/305	*3064* Honors Chemistry I F/S
SCH672/673	*3066* Chem II-ACP Chem C101/C121 (IU) F/S *‡
SCH650/651	*3060* AP Chemistry F/S ‡
SCH400/401	*5276* Anatomy and Physiology F/S
SCH350/351	*3044* Earth & Space Science I F/S
SCH420/421	*3084* Physics I F/S
SCH662/663	*3080* AP Physics 1 F/S ‡
SCH664/665	*3081* AP Physics 2 F/S ‡
SCH668/669	*3088* AP Physics C F/S ‡
SCH250/251	*5218* PLTW Principles of Biomedical Sci F/S ‡
SCH310/311	*5216* PLTW Human Body Systems F/S ‡
SCH430/431	*5217* PLTW Medical Interventions F/S ‡
SCH450/451	*5219* PLTW Biomedical Innovations F/S ‡§

SOCIAL STUDIES	
SOH200/201	*1548* World History & Civilization F/S
SOH220/221	*1570* Geography & History of the World F/S

* Dual Credit ‡ Weighted § Box 2 Course

SOH300/301	*1542* United States History F/S
SOH640/641	*1542* ACP U.S. History H105/H106 (IU) F/S ***‡**
SOH660/661	*1562* AP U.S. History F/S **‡**
SOH400	*1540* United States Government
SOH420	*1514* Economics
SOH410	*1534* Sociology
SOH430	*1532* Psychology **§**
SOH440	*1518* Indiana Studies
SOH450	*1516* Ethnic Studies
SOH650/651	*1556* AP European History F/S **‡**
SOH670/671	*1558* AP Psychology F/S **‡§**

WORLD LANGUAGE	
FFH100/101	*2020* French I F/S
FFH200/201	*2022* French II F/S
FFH300/301	*2024* French III F/S
FFH400/401	*2026* French IV F/S
FGH100/101	*2040* German I F/S
FGH200/201	*2042* German II F/S
FGH300/301	*2044* German III F/S
FGH400/401	*2046* German IV F/S
FSH100/101	*2120* Spanish I F/S
FSH200/201	*2122* Spanish II F/S
FSH210/211	*2122* Honors Spanish II F/S
FSH300/301	*2124* Spanish III F/S
FSH310/311	*2124* Honors Spanish III F/S
FSH400/401	*2126* Spanish IV F/S
FSH500/501	*2128* Spanish V F/S

CAREER & TECHNICAL EDUCATION	
GCH100/101	*7139* Principles of Broadcasting F/S **§**
GCH102/103	*7306* Audio Video Prod Ess F/S **§**
GCH414/415	*5992* Radio and Television II (Sports) F/S **§**
VOH504/505	*7131* Principles of HVAC F/S ***§**
VOH506/507	*7125* HVAC Fundamentals F/S ***§**
VOH508/509	*7126* HVAC Service F/S ***§**
VOH610/611	*7244* HVAC Capstone F/S ***§**
VOH216/217	*7215* Principles of Collision Repair F/S ***§**
VOH230/231	*7204* Automotive Body Repair F/S ***§**
VOH510/511	*7206* Plastic Body Repair & Paint F/S
VOH512/516	*7380* Collision Repair Capstone F/S ***§**
VOH218/219	*7213* Principles of Auto Services F/S ***§**
VOH232/233	*7205* Brake Systems F/S ***§**
VOH514/515	*7212* Steering & Suspensions F/S ***§**
VOH516/517	*7375* Auto Service Capstone F/S ***§**
VOH518/519	*7183* Principles of Computing F/S *****
VOH520/521	*7351* Topics in Computer Science F/S
VOH522/523	*7352* Computer Science F/S
VOH524/525	*7353* Computer Science Capstone F/S
VOH550/551	*7310* Principles of Construction Trades F/S ***§**
VOH526/527	*7123* Construction: Gen Carpentry F/S ***§**
VOH528/529	*7122* Construction: Framing & Finishing F/S ***§**
VOH530/531	*7242* Construction Trades Capstone F/S ***§**
VOH532/533	*7330* Principles Barber & Cosmetology F/S **§**
VOH534/535	*7331* Barber & Cosmetology Fund F/S ***§**
VOH536/537	*7332* Advanced Cosmetology F/S ***§**
VOH538/539	*7156* Technical Skills Development F/S
VOH540/540	*7334* Barber & Cosmetology Capstone F/S ***§**
VOH220/221	*7193* Principles of Criminal Justice F/S ***§**
VOH234/235	*7191* Law Enforcement Fundamentals F/S ***§**
VOH542/543	*7188* Corrections & Cultural Awareness F/S ***§**
VOH544/545	*7231* Criminal Justice Capstone F/S **§**
VOH212/213	*7173* Principles Culinary & Hospitality F/S ***§**
VOH224/225	*7171* Nutrition F/S **§**
VOH226/227	*7169* Culinary Arts F/S ***§**
VOH546/547	*7233* Culinary Arts Capstone F/S ***§**
VOH548/549	*7235* Baking & Pastry Capstone F/S ***§**
VOH552/553	*7315* Principles of Dental Careers F/S **§**
VOH554/555	*7316* Dental Careers Fundamentals F/S **§**
VOH556/557	*7317* Advanced Dental Careers F/S **§**
VOH558/559	*7318* Dental Careers Capstone F/S **§**
VOH560/561	*7196* Mechanical & Architectural Design F/S ***§**
VOH562/563	*7107* BIM Architecture F/S ***§**
VOH564/565	*7225* Architectural Design Capstone F/S **§**
VOH566/567	*7140* Principles of Digital Design F/S ***§**
VOH568/569	*7141* Digital Design Graphics F/S ***§**
VOH372/373	*5550* Graphic Design & Layout F/S **§**
VOH570/571	*7136* Professional Photo & Video F/S ***§**
VOH572/573	*7246* Digital Design Capstone F/S ***§**
VOH574/575	*7160* Principles of Early Childhood Ed F/S ***§**
VOH576/577	*7158* Early Childhood Ed Curriculum F/S ***§**
VOH578/579	*7159* Early Childhood Ed Guidance F/S **§**
VOH580/581	*7259* Early Childhood Ed Capstone F/S ***§**
VOH582/583	*7301* Principles of Fashion & Textiles F/S ***§**
VOH584/585	*7302* Textiles, Apparel & Merch F/S ***§**
VOH586/587	*7303* Advanced Textiles F/S ***§**
VOH588/589	*7304* Fashion & Textiles Capstone F/S ***§**
VOH590/591	*7109* Principles of Precision Machining F/S ***§**
VOH592/593	*7105* Precision Mach Fundamentals F/S ***§**
VOH594/595	*7107* Advanced Precision Machining F/S ***§**
VOH596/597	*7219* Precision Machining Capstone F/S ***§**
VOH214/215	*7168* Principles of Healthcare F/S ***§**
VOH356/357	*5274* Medical Terminology F/S ***§**
VOH598/599	*7166* Healthcare Specialist: CNA F/S ***§**

VOH612/613	*7164* CertClinMedAssist (CCMA) F/S **§**
VOH604/605	*7255* Healthcare Specialist Capstone F/S ***§**
VOH210/211	*7110* Principles of Welding Technology F/S ***§**
VOH222/223	*7111* Shielded Metal Arc Welding F/S ***§**
VOH606/607	*7101* Gas Welding Processes F/S ***§**
VOH608/609	*7226* Welding Technology Capstone F/S ***§**
VOH614/615	*7214* Principles Aviation Management F/S ***§**
VOH616/617	*7217* Private Pilot Theory F/S ***§**
VOH618/619	*7207* Aviation Safety & Operations F/S ***§**
VOH620/621	*7385* Aviation Management Capstone F/S ***§**

INTERDEPARTMENTAL COURSES

Career Exploration Internship *0530*
ADH450/451
- Grade 12
- 2 credits per semester; 6 credits maximum
- Prerequisite: Application process and must have employment secured
- A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction. Schools on block schedules may proportionately adjust the total number of hours per week to meet the local standard, provided that students spend at least one hour a week in classroom activities
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as WBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Career Start *0530*
ADH350/351
- Grade 11
- 1 credit per semester; 2 credits maximum
- Prerequisite: Application process
- Counts as a Directed Elective or Elective for all diplomas

Career Start is an opportunity for students to learn employment skills through both classroom and on-the-job training. Work ethics including promptness, attendance, team skills, loyalty, etc., will be emphasized. Students will be permitted to leave school to go to work for two blocks every other day. Students will meet with the Career Start teacher once every two weeks for discussion and skill building. Employers must be pre-approved. To qualify, a student must be eligible for a work permit and have a satisfactory attendance and discipline record. Employers must agree to regular evaluation of students and constant communication with the school.

Community Service *0524*
ADH210/211
- Grade 12
- 2 semesters, 2 credits; 2 credits maximum
- This course is invite-only. Students will receive an invitation and will have to fill out an application in order to take this class. There is an enrollment cap of 20 students.
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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. The name of the community service organization or volunteer service organization the student intends to assist.
2. The 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. The 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. The total number of hours the student intends to serve the community service organization or volunteer service organization during the school year.
5. A written statement by the director or the supervisor of the community service organization or volunteer service organization certifying that the information included in the application is an accurate reflection of:
   a. the student's expectations with regard to the number of hours of service contemplated to be performed; and
   b. the community service organization's or the volunteer service organization's need to acquire the student's service.
6. A 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
   b. the service and benefit the community service organization or volunteer service organization expects to gain from the student's participation.
7. A description of how the community or volunteer service activity relates to a course in which the student is enrolled or intends to enroll.
8. The manner and frequency in which the student and the community or volunteer service activity will be evaluated.
9. The name of the certificated school employee who will be responsible for monitoring and evaluating the student's activity and performance, including assigning to the student a grade for participation under this section.
10. Any other information required by the principal.

Jobs for America's Graduates (JAG) *0509*

ADH330/331 (JAG I)
ADH340/341 (JAG II)

- Grades 11-12
- 2 semesters, 2 credits; 4 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as WBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Jobs for America's Graduates (JAG) is a state-based, national non-profit organization dedicated to preventing dropouts among young people who are most at-risk. JAG's mission is to keep young people in school through graduation and provide work-based learning experiences that will lead to career advancement opportunities or to enroll in a postsecondary institution that leads to a rewarding career. JAG students receive adult mentoring while in school and one year of follow-up counseling after graduation. The JAG program is funded through grants provided by the Indiana Department of Workforce Development.

Office Cadet

ADH400/401

- Grades 9-12
- 0 credits
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Successful demonstration of skills is evidenced by supervisor verification and a student reflection form.

Being an office cadet provides an opportunity for service both inside and outside of school. Students serve as office assistants during school hours. They also serve as student ambassadors outside of school and assist with one activity each semester, such as Meet the

Teacher Night, awards ceremonies, concerts, competitions or contests, or any other school function. The minimum GPA for students enrolling is 2.5, and this is a non-credited and non-graded course. Students can take this course in place of an enrichment block.

Peer Tutoring *0520*

ADH100/101

- Grades 10-12
- 1 credit per semester; 2 credits maximum
- Prerequisite: Application and interview process
- Course requirements: GPA 2.5 or higher, must be passing all classes
- Counts as an Elective for all diplomas
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Peer Tutoring provides high school students with an organized exploratory experience to assist students in grades 9-12, 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.

Project Based Learning *0547*

ADH800

- Grades 9-12
- 0 credits, the experience may stretch over multiple semesters & should not be marked as passing until the designated person responsible for approving the project-based learning experience validates the PBL work product
- Qualifies as the employability skills requirement for all diplomas

Project-based learning allows students to gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging and complex question, problem, or challenge. The project is framed by a meaningful problem to solve or a question to answer, at the appropriate level of challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make their project work public by explaining, displaying and/or presenting it to people beyond the classroom. This course code is used to denote completion of the Graduation Pathways Employability Skills experience.

Service Based Learning *0539*

ADH801

- Grades 9-12
- 0 credits, the experience may stretch over multiple semesters & should not be marked as passing until the designated person responsible for approving the service-based learning experience validates the SBL work product
- Qualifies as the employability skills requirement for all diplomas

Service-based learning integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility (and other employability skills), and strengthen communities. SBL can be classified by three core indicators: integrating academic study with service experience; reflecting larger social, economic, and societal issues; and collaborative efforts between students, schools, and community partners. This course code is used to denote completion of the Graduation Pathways Employability Skills experience.

Work-Based Learning Level 1: Basic WBL Experience *0543*

ADH802

- Grades 9-12
- 0 credits, the experience may stretch over multiple semesters & should not be marked as passing until the designated person responsible for approving the work-based learning experience validates the WBL work product

• Qualifies as the employability skills requirement for all diplomas

Work-based learning (WBL) is a strategy to reinforce academic, technical, and social skills learned in the classroom through collaborative activities with employer partners. Work-based learning experiences allow students to apply classroom theories to practical problems, to explore career options, and pursue personal and professional goals. WBL includes activities that can occur in workplaces or school-based enterprises and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. It supports entry or advancement in a career field and can serve as the culminating course or event in a student's chosen career pathway. Through WBL, students have the opportunity to apply the concepts, skills, and dispositions learned in previous coursework in real world settings. This course code is used to denote completion of the Graduation Pathways Employability Skills experience.

AGRISCIENCE DEPARTMENT

Principles of Agriculture *7117*
AGH104/105
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Principles of Agriculture covers 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.

Animal Science *5008*
AGH220/221
CIP Code 01.0901
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Agriculture
• Fulfills a Science course requirement for all diplomas (Core 40 Science Course)
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Animal Science provides students with an overview of the animal agriculture industry. Students participate in a 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 agriculture experiences relating to animal agriculture.

Plant and Soil Science *5170*
AGH334/335
CIP Code 01.1102
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Agriculture
• Fulfills a Science course requirement for all diplomas (Core 40 Science Course)
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Plant and Soil Science provides students with opportunities to participate in a variety of activities including laboratory and field work.

Coursework includes hands-on learning activities that encourage students to investigate areas of plant and soil science. Students are introduced to the following areas of plant and soil science: plant growth, reproduction and propagation, photosynthesis and respiration, diseases and pests of plants and their management, biotechnology, the basic components and types of soil, soil tillage, and conservation.

Advanced Life Science: Animals (L) *5070*

AGH340/341
CIP Code 26.0701
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Agriculture
• Recommended Prerequisites: Animal Science; Biology; Chemistry; Integrated Chemistry-Physics
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as an Elective or Directed Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Advanced Life Science: Animals 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.

Agricultural Research Capstone *7262*

AGH360/361
• Grades 11-12
• 2 semesters required, 2 credits; 6 credits maximum
• Required Prerequisite: Any Agriculture concentrator sequence
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

Agricultural Research Capstone course includes extended laboratory, field, and literature investigations in one or more specialized agricultural science disciplines, such as animal, plant, food, natural resources, biotechnology, engineering, etc. Students enrolled in this course will apply scientific applications, concepts, principles, and design processes to solve complex, real-world issues in agriculture. Students will become familiar with laboratory procedures used in an educational, research, or industrial setting. Students will complete an end-of-course project and presentation, such as a scientific research paper, agriscience fair project, or some other suitable presentation of their findings.

Horticultural Science *5132*

AGH211/212
CIP Code 01.0603
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Agriculture
• Fulfills a Life Science or Physical Science requirement for the General Diploma only
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Landscape Management I *5136*
AGH310/311
CIP Code 01.0605
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Agribusiness Management *5002*
Not offered 2023-24
AGH300/301
CIP Code 01.0102
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Agribusiness Management provides foundational concepts in agricultural business. This course introduces students to the principles of business organization and management from a local and global perspective while incorporating technology. Concepts covered in the course include 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) program.

Agriculture Power, Structure, and Technology *5088*
Not offered 2023-24
AGH322/323
CIP Code 01.0201
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Agriculture
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Supervised Agricultural Experience (SAE) *5228*
AGH250
• Grades 10-12
• 1 semester, 1 credit; 8 credits maximum
• This course is also offered during the summer session
• Qualifies as WBL course for Graduation Pathways Box 2

• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

BUSINESS, MARKETING, & INFORMATION TECHNOLOGY DEPARTMENT

Principles of Business Management *4562*
BUH260/261
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Weighted Grade
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Marketing Fundamentals *5914*
BUH250/251
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Business Management
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Digital Marketing *7145*
BUH270/271
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Business Management, Marketing Fundamentals
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Digital Marketing provides an introduction to the world of e-commerce and digital marketing media. The course covers how to integrate digital media and e-commerce into organizational and marketing strategy. Students will explore e-commerce applications and the most popular digital marketing tactics and tools. Emphasizes familiarity with executing digital media, understanding the marketing objectives that digital media can help organizations achieve, and establishing and enhancing an organization's digital marketing presence.

Accounting Fundamentals *4524*
BUH222/223
CIP Code 52.0304
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Business Management
• Counts as a Directed Elective or Elective for all diplomas

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

Personal Financial Responsibility *4540*
BUH402
CIP Code 52.0804
• Grades 9-12
• 1 semester, 1 credit; 1 credit maximum
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

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

Digital Applications and Responsibility *4528*
BUH153
• Grades 9-12
• 1 semester, 1 credit; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

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

Computer Science I *4801*
BUH354/355
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits required
• Counts as a Directed Elective or Elective for all diplomas
• Fulfills a Science course requirement for all diplomas (Core 40 Science Course)
• Qualifies as a Quantitative Reasoning course

Computer Science I introduces the structured techniques necessary for the efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. The fundamental concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce accurate outputs. Topics include program flowcharting, pseudo coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, control breaks, and offers students an opportunity to apply skills in a laboratory environment.

Business Math *4512*
BUH200/201
• Grades 11-12
• 2 semesters, 2 credits; 2 credits maximum
• Required Prerequisite: Algebra I
• Fulfills a Math requirement for the General Diploma or Certificate of Completion only
• Counts as an Elective or Directed Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

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

ENGINEERING AND TECHNOLOGY DEPARTMENT

Principles of Construction Trades *7130*
TEH210/211
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

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

Introduction to Advanced Manufacturing and Logistics *4796*
TEH604/605
• Grades 9-12
• 2 semesters, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective all diplomas

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

Introduction to Communications *4790*
TEH111/112
• Grades 9-12
• 2 semesters, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective all diplomas

Introduction to Communications is a course designed to provide a foundational knowledge of identifying and using modern communication to exchange messages and information. This course explores the application of the tools, materials, and techniques used to design, produce, use, and assess systems of communication. Students will produce graphic and electronic media as they apply

communication technologies. This course will also explore the various technical processes used to link ideas and people through the use of electronic and graphic media. Major goals of this course include an overview of communication technology; the way it has evolved, how messages are designed and produced, and how people may profit from creating information services and products. Students will explore mass media communication processes including radio and television broadcasting, publishing and printing activities, telecommunication networks, recording services, computer and data processing networks, and other related systems. Student will use the design process to solve design projects in each communication area.

Introduction to Transportation *4798*

TEH121/122

- Grades 9-12
- 2 semesters, 2 credits; 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

Introduction to Transportation is an introductory course designed to help students become familiar with fundamental principles in modes of land, sea, air, and space transportation, including basic mechanical skills and processes involved in transportation of people, cargo, and goods. Students will gain and apply knowledge and skills in the safe application, design, production, and assessment of products, services, and systems as it relates to the transportation industries. Content of this course includes the study of how transportation impacts individuals, society, and the environment. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant transportation related activities, problems, and settings.

Computers in Design and Production *4800*

TEH430/431

- Grades 9-12
- 2 semesters, 2 credits; 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

Computers in Design and Production is a course that specializes in using modern technological processes, computers, design, and production systems in the production of products and structures through the use of automated production systems. Emphasis is placed on using modern technologies and on developing career related skills for electronics, manufacturing, precision machining, welding, and architecture career pathways. Students apply ingenuity using tools, materials, processes, and resources to create solutions as it applies in the electronics, manufacturing, precision machining, welding, and architecture. The content and activities should be developed locally in accordance with available advanced technologies in the school. Course content should address major technological content related to topics such as: architectural drawing and print design; design documentation using CAD systems; assignments involving the interface of CAD, CNC, CAM, and CIM technologies; computer simulation of products and systems; publishing of various media; animation and related multimedia applications; 3-D modeling of products or structures; digital creation and editing of graphics and audio files; control technologies; and automation in the modern workplace.

Robotics Design and Innovation *4728*

TEH370/371

- Grades 9-12
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisite: Principles of Industry 4.0 – Smart Manufacturing
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a Quantitative Reasoning course
- Qualifies as PBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

The Robotics Design and Innovation course is designed to introduce students to technology that is revolutionizing modern manufacturing and logistics centers across global markets. Students will explore careers that are related to the fourth industrial revolution and be introduced to the emerging technologies that make the manufacturing world ever changing. These technologies include mechatronics, CAD/CAM, robots, programmable automation, cloud technologies, networking, big data, and analytics. Students will design a part to be mass produced using processes such as additive and subtractive manufacturing, while utilizing lean manufacturing concepts.

PROJECT LEAD THE WAY – ENGINEERING ACADEMY

Affordable housing design. Biofuel production. App development. These are all hands-on, real-world challenges students face in their PLTW Engineering courses. Throughout the program, students step into the varied roles engineers play in our society, discover new career paths and possibilities, and develop engineering knowledge and skills. In addition, as students work in teams to design and test solutions, they're empowered to develop in-demand, transportable skills like collaboration, critical thinking, and communication.

Required courses:

9th Grade: IED – Introduction to Engineering Design
10th Grade: POE – Principles of Engineering
11th Grade: DE – Digital Electronics *and* one of the following:
AE – Aerospace Engineering
CEA – Civil Engineering and Architecture
12th Grade: EDD – Engineering Design and Development

Introduction to Engineering Design *4802*

TEH160/161
• Grades 9-10
• 2 semesters required, 2 credits; 2 credits maximum
• Weighted Grade
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Principles of Engineering *5644*

TEH260/261
• Grades 10-11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Introduction to Engineering Design
• Weighted Grade
• Fulfills a Science course requirement for all diplomas (Core 40 Science Course)
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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. 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.

Digital Electronics *5538*

TEH350/351
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum

- Required Prerequisites: Introduction to Engineering Design and Principles of Engineering
- Weighted Grade
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a Quantitative Reasoning course
- Students may be eligible to earn college credits for this course through Ivy Tech Community College
- Qualifies as PBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Digital Electronics is a course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities should provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry software that will be used to develop and evaluate the product design. This course engages students in critical thinking and problem-solving skills, time management and teamwork skills. This course aligns with the PLTW Digital Electronics curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

Aerospace Engineering *5518*

TEH460/461

- Grades 11-12
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisites: Introduction to Engineering Design and Principles of Engineering
- Weighted Grade
- Fulfills a Science course requirement for all diplomas (Core 40 Science Course)
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a Quantitative Reasoning course
- Qualifies as PBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Civil Engineering and Architecture *5650*

TEH500/501

- Grades 11-12
- 2 semesters required, 2 credits
- Required Prerequisite: Introduction to Engineering Design and Principles of Engineering
- Weighted Grade
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a Quantitative Reasoning course
- Students may be eligible to earn college credits for this course through Ivy Tech Community College
- Qualifies as PBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

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

Engineering Design and Development *5698*
TEH660/661
• Grade 12
• 2 semesters required, 2 credits; 6 credits maximum
• Required Prerequisites: Introduction to Engineering Design, Principles of Engineering, and one pre-engineering specialty course
• Weighted Grade
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as PBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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. 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.

ENGLISH DEPARTMENT

English 9 *1002*
ENH110/111
• Grade 9
• 2 semesters, 2 credits
• Fulfills an English/Language Arts requirement for all diplomas

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.

Honors English 9 *1002*
ENH120/121
Honors English 9 (High Ability) *1002*
ENH624/625
• Grade 9
• 2 semesters, 2 credits
• Fulfills an English/Language Arts requirement for all diplomas
• The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

Honors 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.

Honors English 9 (High Ability) is designed for the verbally talented. Students will explore significant literary works by world authors. The emphasis at this level is on academic and creative writing of various types, including expository and persuasive writing. There will be rigorous study of vocabulary and self-directed learning in grammar and syntax. Working individually or as part of the group process, students will develop problem-solving and critical thinking skills by completing projects related to the curriculum.

English 10 *1004*
ENH210/211
• Grade 10
• 2 semesters, 2 credits
• Prerequisite: English 9
• Fulfills an English/Language Arts requirement for all diplomas

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.

Honors English 10 *1004*
ENH220/221
Honors English 10 (High Ability) *1004*
ENH626/627
• 2 semesters, 2 credits
• Prerequisite: Honors English 9, Honors English 9 (HAE), and/or approval of instructor/department chair
• Fulfills an English/Language Arts requirement for all diplomas
• The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

Honors 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.

Honors English 10 (HAE) is designed for the verbally talented. Writing is the main focus in this course. Students must master the fine points of a good prose style that will enable them to communicate clearly and effectively whether expressing personal ideas or writing to investigate and propose solutions to social problems. Two research papers assigned during the year will improve the student's grasp of research skills. In addition to a good prose style, student writing must exemplify critical thinking and a logical synthesis of ideas and literary concepts.

English 11 *1006*
ENH312/313
• Grade 11
• 2 semesters, 2 credits
• Prerequisites: English 9 and English 10
Honors English 11 *1006*
ENH322/323
• Grade 11

- 2 semesters, 2 credits
- Prerequisites: Honors English 9 and Honors English 10
- Fulfills an English/Language Arts requirement for all diplomas
- The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

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.

AP English Language and Composition *1056*

ENH660/661

- Grades 11-12
- 2 semesters, 2 credits; 2 credits maximum
- Weighted Grade
- Prerequisites: High Ability/Honors English 9 and High Ability/Honors English 10, other literature, language, composition, and speech courses, 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.
- Fulfills an English/Language Arts requirement for all diplomas

AP English Language and Composition is a course based on content established and copyrighted by the College Board. 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.

Creative Writing *1092*

ENH440

- Grades 11-12
- 1 semester, 1 credit
- Fulfills an English/Language Arts requirement for all diplomas

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. The course can be offered in conjunction with a literature course or schools may embed Indiana Academic Standards for English/Language Arts reading standards within the curriculum.

Critical Thinking and Argumentation *1074*

ENH464

- Grades 11-12
- 1 semester, 1 credit
- Recommended Prerequisites: English 9 and English 10
- Fulfills an English/Language Arts requirement for all diplomas

Critical Thinking and Argumentation, a course based on the Indiana Academic Standards for English/Language Arts, is a study of deductive and inductive logic, including logical fallacies, and should challenge students to think critically, analytically, and philosophically. Students learn to formulate thoughtful inquiry questions, connect ideas or concepts, challenge ideas and concepts, and rephrase ideas when appropriate. Active class participation is essential, including persistent questioning, rational discussion, and

reasoned argumentation. Students make comments that reflect the development of logic (a line of reasoning), represent a clear point of view, and involve evidence of support (data, examples, anecdotes, documents, information from a variety of sources). Students use the same Standard English conventions for oral speech that they use in their writing.

Digital Media *1084*
ENH463
• Grades 11-12
• 1 semester, 1 credit
• Recommended Prerequisites: English 9 and English 10
• Counts as an elective for all diplomas
• Fulfills an English/Language Arts requirement for all diplomas

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 changes in 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. 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 media projects.

Etymology *1060*
ENH230
• Grades 11-12
• 1 semester, 1 credit
• Recommended Prerequisites: English 9 and English 10
• Fulfills an English/Language Arts requirement for all diplomas

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.

Film Literature *1034*
ENH430
• Grades 11-12
• 1 semester, 1 credit
• Recommended Prerequisites: English 9 and English 10
• Fulfills an English/Language Arts requirement for all diplomas
• Cannot be used for NCAA initial-eligibility certification

Film Literature, a course based on the Indiana Academic 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.

Genres of Literature: Science Fiction and Fantasy *1036*
ENH462
• Grades 11-12
• 1 semester, 1 credit
• Recommended Prerequisites: English 9 and English 10
• Fulfills an English/Language Arts requirement for all diplomas

Genres of Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of various literary genres, such as poetry, dramas, novels, short stories, biographies, journals, diaries, essays, and others. Students examine a set or sets of literary works written in different genres that address similar topics or themes. Students analyze how each genre shapes literary understanding or experiences differently, how different genres enable or constrain the expression of ideas, how certain genres have had a stronger impact on the culture than others in different historical time periods, and what the most influential genres are in contemporary times. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

Novels (Contemporary Young Adult Literature) *1042*

ENH432
- Grades 11-12
- 1 semester, 1 credit
- Recommended Prerequisites: English 9 and English 10
- Fulfills an English/Language Arts requirement for all diplomas

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

Technical Communication *1096*

ENH450
- Grades 11-12
- 1 semester, 1 credit
- Recommended Prerequisites: English 9 and English 10
- Fulfills an English/Language Arts requirement for all diplomas
- Cannot be used for NCAA initial-eligibility certification

Technical Communication, a course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the processes and conventions needed for effective technical writing-communication. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style.

Themes in Literature: Epic Heroes in Literature *1048*

ENH460
- Grades 11-12
- 1 semester, 1 credit
- Recommended Prerequisites: English 9 and English 10
- Fulfills an English/Language Arts requirement for all diplomas

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. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

Themes in Literature: Sports Literature *1048*

ENH461
- Grades 11-12
- 1 semester, 1 credit
- Recommended Prerequisites: English 9 and English 10

• Fulfills an English/Language Arts requirement for all diplomas

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. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

Advanced Speech and Communication *1078*
COLL-P155: Public Oral Communication
ENH300
• Grade 12
• 1 semester, 1 credit
• Weighted Grade
• Fulfills an English/Language Arts requirement for all diplomas
• Students may be eligible to earn college credits for this course through Indiana University-Bloomington. Students must have a minimum 2.7 GPA to earn the college credit. The expectation is for the student to take this course for dual credit and officially register for the course with Indiana University.

Advanced Speech and Communication, a course based on the Indiana Academic Standards for English/Language Arts and emphasizing the High School Speech and Communication Standards, is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multimedia presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery. This course is dual credit through Indiana University-Bloomington and prepares students to communicate effectively with public audiences. The course emphasizes oral communication as practiced in public contexts, including how to advance reasoned claims in public, how to adapt public oral presentations to particular audiences, how to listen to, interpret, and evaluate public discourse, and how to formulate a clear response.

English 12, Dual Credit *1008*
ENGL 111: English Composition
ENH410
• Grade 12
• 1 semester, 1 credit
• Prerequisites: A grade of "C" or better in Honors English 11 or AP English Language & Comp, 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.
• Weighted Grade
• Fulfills an English/Language Arts requirement for all diplomas
• Students may be eligible to earn college credits from Ivy Tech Community College

This course is dual credit through Ivy Tech Community College. English Composition is designed to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. This course incorporates critical reading, critical thinking, and the writing process, as well as research and the use of sources in writing for the academic community. Extended essays, including a synthesis paper, are required.

Advanced Composition *1098*
W131: Reading, Writing, and Inquiry I (ACP)
ENH420
• Grade 12
• 1 semester, 1 credit
• Prerequisites: A grade of "C" or better in Honors English 11 or AP English Language & Comp, 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.
• Weighted Grade
• Fulfills an English/Language Arts requirement for all diplomas

• Students may be eligible to earn college credits for this course through Indiana University-Bloomington. Students must have a minimum 2.7 GPA to earn the college credit. The expectation is for the student to take this course for dual credit and officially register for the course with Indiana University.

This course is dual credit through Indiana University-Bloomington. W131 teaches the skills of critical reading, thinking, and writing to help students meaningfully engage artifacts, events, and issues in our world. The course builds students' abilities to read written and cultural texts critically, to analyze those texts in ways that engage both students' own experiences and the perspectives of others, and to write about those texts for a range of audiences and purposes as a means of participating in broader conversations. Students complete reading and writing work to develop summary, critique, and inquiry skills. There are 3 essays and 4 microthemes assigned in the class.

Advanced English/Language Arts, College Credit *1124*
ENG-L202: Literary Interpretation
ENH540
• Grade 12
• 1 semester, 1 credit
• Required Prerequisite: W131 with grade of C or better
• Weighted Grade
• Fulfills an English/Language Arts requirement for all diplomas
• Students may be eligible to earn college credits for this course through Indiana University-Bloomington. Students must have a minimum 2.7 GPA to earn the college credit. The expectation is for the student to take this course for dual credit and officially register for the course with Indiana University.

Advanced English/Language Arts, College Credit, is an advanced course based on the Indiana Academic Standards for English/Language Arts in grades 11 and 12. This course title covers any English language and composition advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school. L202 is a dual credit literature course where students will learn how to read, think, and write critically and clearly about literature. Students will learn to perform sophisticated analysis of literary texts and to argue rigorously about issues of interpretation. The course is divided into three units of advanced literary study: formal analysis, generic analysis, and contextual analysis. There are 3 essays and 4 microthemes assigned.

Journalism *1080*
ENH130
• Grades 9-12
• 1 semester, 1 credit
• Counts as an Elective for all diplomas
• Fulfills an English/Language Arts requirement for all diplomas

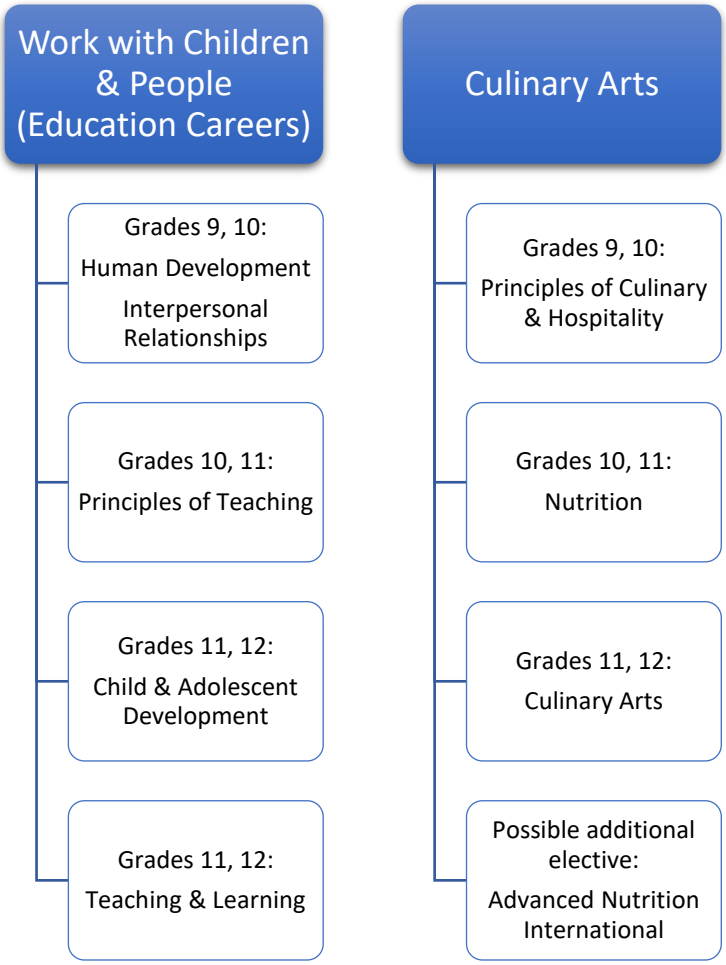
Journalism, a course based on the Indiana Academic Standards for English/Language Arts and the Indiana High School Journalism Standards, is a study of news elements, journalism history, First Amendment law, ethics, fact and opinion, copy editing, news, and features as they apply to print and digital media products. It includes a comparison study of journalistic writing to other types of English writing with practical application of news, features, editorials, reviews, columns, and digital media writing forms.

Student Media: Newspaper *1086*
ENH330/331
Student Media: Yearbook *1086*
ENH340/341
• Grades 9-12
• 2 semesters, 2 credits. The nature of this course allows for successive semesters of instruction.
• Recommended Prerequisite: Journalism
• Counts as a Directed Elective or Elective for all diplomas
• Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma
• Qualifies as PBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Student Media, a course based on the High School Journalism Standards and the Student Media Standards, is the continuation of the

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

FAMILY AND CONSUMER SCIENCE DEPARTMENT



Principles of Culinary and Hospitality *7173*
FCH124/125
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits from Ivy Tech Community College

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

Nutrition *7171*
FCH324/325
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Culinary and Hospitality
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits from Ivy Tech Community College

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

Culinary Arts *7169*
FCH326/327
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Culinary and Hospitality
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits from Ivy Tech Community College

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

Advanced Nutrition International *5340*
FCH301
CIP Code 19.0504
• Grades 10-12
• 1 semester, 1 credit; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

Advanced Nutrition International is a course which provides an extensive study of foods and etiquette from around the world. This course is recommended for all students wanting to improve their knowledge of different cultures and try a variety of unique foods. This is a project-based course, utilizing higher-order thinking, communication, leadership, and management processes. Topics include extensive study of the following countries: United States Regional Foods, Latin America, The British Isles, France, Germany, Scandinavia, Spain, Italy, Greece, Japan, China, India, and Russia. Laboratory experiences will be utilized to develop food handling and preparation skills, and attention will be given to nutrition, food safety, and sanitation as well as preparation of cultural foods. This course is the third in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

Advanced Life Science: Foods *5072*
Not offered 2023-24
FCH302/303
CIP Code 01.1001
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Agriculture
• Recommended Prerequisites: Advanced Nutrition and Wellness, Biology, Chemistry
• Fulfills a Science requirement for all diplomas
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

Advanced Life Science: Foods is a course that provides students with opportunities to participate in a variety of activities including laboratory work. This is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in the

context of foods and the global food industry. Students enrolled in this course formulate, design, and carry out food-base laboratory and field investigations as an essential course component. Students understand how biology, chemistry, and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging, and food storage. Students completing this course will be able to apply the principles of scientific inquiry to solve problems related to biology, physics, and chemistry in the context of highly advanced industry applications of foods.

Human Development and Wellness *5366*

FCH310/311

CIP Code 19.0799

- Grades 9-12
- 2 semesters, 2 credits; 2 credits maximum
- Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6).
- Counts as a Directed Elective or Elective for all diplomas

Human Development and Wellness is valuable for all students as a life foundation and academic enrichment. It is especially relevant for students interested in careers impacted by individuals' physical, social, emotional, and moral development and wellness across the lifespan. Major topics include: principles of human development and wellness; impact of family on human development and wellness; factors that affect human development and wellness; practices that promote human development and wellness; managing resources and services related to human development and wellness; and career exploration in human development and wellness. Life events and contemporary issues addressed in this course include, but are not limited to: change, stress, abuse, personal safety, and the relationships among lifestyle choices, health and wellness conditions, and diseases. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of these topics. Authentic applications through service learning are encouraged. Learning experiences in this course include caring for a RealCare Baby and wearing an Empathy Belly.

Interpersonal Relationships *5364*

FCH130

CIP Code 19.0704

- Grades 9-12
- 1 semester, 1 credit; 2 credits maximum
- Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6).
- Counts as a Directed Elective or Elective for all diplomas

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

Principles of Teaching *7161*

FCH114/115

- Grades 10-12
- 2 semesters required, 2 credits; 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits from Ivy Tech Community College

This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined.

A minimum 20-hour classroom observation experience is required for successful completion of this course. **Students must provide own transportation for this experience**.

Child and Adolescent Development *7157*

FCH214/215
- Grades 10-12
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisite: Principles of Teaching
- Counts as a Directed Elective or Elective for all diplomas

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.

Teaching and Learning *7162*

FCH216/217
- Grades 10-12
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisite: Principles of Teaching
- Counts as a Directed Elective or Elective for all diplomas

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

Education Professions II *5404*

FCH352/353
CIP Code 13.1210
- Grade 12
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisite: Education Professions I
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through Ivy Tech Community College. **Students must take both semesters of Education Professions II within the same school year to earn the college credit**.
- Qualifies as WBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Principles of Fashion and Textiles *7301*
FCH150/151
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

Principles of Fashion and Textiles prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the fashion industry. This course builds a foundation that prepares students for all aspects of the fashion creation process. Major topics include: Basic clothing construction techniques, pattern alterations, and use of commercial patterns.

FINE/VISUAL ARTS DEPARTMENT

Introduction to Two-Dimensional Art (L) *4000*
ARH100
• Grades 9-12
• 1 semester, 1 credit
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas

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.

Advanced Two-Dimensional Art (L) *4004*
ARH101
• Grades 9-12
• 1 semester, 1 credit
• Recommended Prerequisite: Introduction to Two-Dimensional Art
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas

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.

Drawing I/II (L) *4060*
ARH202/206
• Grades 10-12
• 1 semester, 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
• Recommended Prerequisites: Introduction to Two-Dimensional Art, Advanced Two-Dimensional Art
• Students may be eligible to earn college credits for these courses through Ivy Tech Community College. **Students must take both Drawing I and Drawing II within the same school year to earn the college credit**.
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas

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.

Drawing III/IV (L) *4060*

ARH314/316

- Grades 11-12
- 1 semester, 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
- Recommended Prerequisites: Introduction to Two-Dimensional Art, Advanced Two-Dimensional Art, Drawing I, and Drawing II
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Counts as a Directed Elective or Elective for all diplomas

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. Taking Drawing III and IV is considered preparation for AP Art classes.

Painting I/II (L) *4064*

ARH315/317

- Grades 10-12
- 1 semester, 1 credit

Painting III/IV (L) *4064*

ARH319/321

- Grades 11-12
- 1 semester, 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
- Recommended Prerequisite: Introduction to Two-Dimensional Art and Advanced Two-Dimensional Art
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Counts as a Directed Elective or Elective for all diplomas

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. Taking Painting III and IV is considered preparation for AP Art classes.

AP 2-D Art and Design *4050*

ARH602/603

- Grade 12
- 2 semesters, 2 credits
- Weighted Grade

• Prerequisites: Advanced laboratory 2-D visual arts courses
• Interview and portfolio review by instructor required
• Fulfills the Fine Arts requirement for the Core 40 with Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College
• Qualifies as PBL course for Graduation Pathways Box 2 (portfolio must be submitted)
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

AP 2-D Art and Design is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. **This course is designed for students who are seriously interested in the practical experience of art.** The AP Art Program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The portfolios correspond to most college foundation courses. Students submit portfolios for evaluation at the end of the school year. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected Works.

AP Drawing *4048*

ARH600/601
• Grade 12
• 2 semesters, 2 credits
• Weighted Grade
• Recommended Prerequisites: Advanced laboratory visual arts courses
• Interview and portfolio review by instructor required
• Fulfills the Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as PBL course for Graduation Pathways Box 2 (portfolio must be submitted)
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

AP Drawing is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. **This course is designed for students who are seriously interested in the practical experience of art**. The AP Art Program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The Drawing portfolio addresses issues such as line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth, and mark-making. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected Works.

Introduction to Three-Dimensional Art (L) *4002*

ARH110
• Grades 9-12
• 1 semester, 1 credit
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas

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.

Advanced Three-Dimensional Art (L) *4006*
ARH111
• Grades 9-12
• 1 semester, 1 credit
• Recommended Prerequisite: Introduction to Three-Dimensional Art
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas

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.

Ceramics I/II (L) *4040*
ARH212/214
• Grades 10-12
• 1 semester, 1 credit

Ceramics III/IV (L) *4040*
ARH312/313
• Grades 11-12
• 1 semester, 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
• Recommended Prerequisites: Introduction to Three-Dimensional Art, Advanced Three-Dimensional Art
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas

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

Sculpture I/II (L) *4044*
ARH213/215
• Grades 10-12
• 1 semester, 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
• Recommended Prerequisites: Introduction to Three-Dimensional Art, Advanced Three-Dimensional Art
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective all diplomas

Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students in sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials such as plaster, clay, metal, paper, wax, and plastic, students create portfolio quality works. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. 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.

AP 3-D Art and Design *4052*
ARH604/605
• Grade 12
• 2 semesters, 2 credits
• Weighted Grade
• Prerequisites: Advanced laboratory 3-D visual arts courses
• Interview and portfolio review by instructor required
• Fulfills the Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as PBL course for Graduation Pathways Box 2 (portfolio must be submitted)
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

AP 3-D Art and Design is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. **This course is designed for students who are seriously interested in the practical experience of art.** The AP Art Program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The 3-D Design portfolio involves decision making about how to use the elements and principles of art as they relate to the integration of depth, space, volume, and surface, either actual or virtual. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected Works.

Photography (L) *4062*
ARH200
• Grades 10-12
• 1 semester, 1 credit
• Recommended Prerequisites: Introduction to Two-Dimensional Art, Advanced Two-Dimensional Art
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas
• ***This course will require additional supplies that students must provide.***

Photography is a course based on the Indiana Academic Standards for Visual Art. Students in photography engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works, creating photographs, films, and videos utilizing a variety of digital tools and darkroom processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

Visual Communication I (L) *4086*
ARH300
• Grades 10-12
• 1 semester, 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
• Recommended Prerequisites: Introduction to Two-Dimensional Art, Advanced Two-Dimensional Art
• Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

Visual Communication II (L) *4086*

ARH301

- Grades 10-12
- 1 semester, 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
- Recommended Prerequisites: Introduction to Two-Dimensional Art, Advanced Two-Dimensional Art, Visual Communication I
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Jewelry (L) *4042*

ARH220

- Grades 10-12
- 1 semester, 1 credit
- Recommended Prerequisites: Introduction to Three-Dimensional Art, Advanced Three-Dimensional Art
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Counts as a Directed Elective or Elective for all diplomas

Jewelry is a course based on the Indiana Academic Standards for Visual Art. Students in Jewelry engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of jewelry design and fabrication techniques including sawing, piercing, filing, and soldering. 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.

AP Art History *4025*

ARH606/607

- Grades 10-12
- 2 semesters, 2 credits
- Weighted Grade
- Fulfills the Fine Arts requirement for the Core 40 Academic Honors Diploma
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through Ivy Tech Community College

AP Art 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. The AP Art History course is equivalent to a two-semester introductory college course that explores topics such as the nature of art, art making, and responses to art. By investigating a specific image set of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content, as they experience, research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art.

MATHEMATICS DEPARTMENT

Mathematics Lab *2560*
MAH100/101
• Grades 10-12
• 1 semester, 1 credit per semester; 8 credits maximum
• Counts as an Elective for all diplomas

Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana's Academic Standards for Mathematics. It is recommended that Mathematics Lab is 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. Instead, schools should offer Algebra I Lab to provide students with rigorous support for this course. Clarifying information can be appended to the end of the course title to denote the content covered in each course. Example: Mathematics Lab used to support students in Geometry can be recorded on the transcript as Mathematics Lab – Geometry.

Algebra I *2520*
MAH200/201
• Grades 9-12
• 2 semesters, 2 credits
• Counts as a Mathematics course for all diplomas
• Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas
• Students pursuing a Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of 6 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. Students will also engage in methods for analyzing, solving, and using quadratic functions. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Algebra I Lab *2516*
MAH152/153
• Grades 9-12
• 2 semesters, 2 credits
• Algebra I Lab is designed as a support course for Algebra I. As such, a student taking Algebra I Lab must also be enrolled in Algebra I during the same academic year.
• 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 diplomas

Algebra I Lab is a mathematics support course for Algebra I. The 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.

Geometry *2532*
MAH210/211
• Grades 9-12
• 2 semesters, 2 credits
• Prerequisite: Algebra I

Honors Geometry *2532*

MAH220/221

- Grades 9-12
- 2 semesters, 2 credits
- Honors Geometry is recommended for students currently in 8th grade Algebra I earning an A or B, or current G-CHS students in Algebra I with teacher recommendation
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas
- Counts as a Mathematics course for all diplomas
- The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

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

Algebra II *2522*

MAH300/301

- Grades 9-12
- 2 semesters, 2 credits

Honors Algebra II *2522*

MAH320/321

- Grades 9-12
- 2 semesters, 2 credits
- Prerequisites: Algebra I and Geometry. This class may be taken during the same year as Geometry for students in grades 10-12 and with proper approval.
- Honors Algebra II is recommended for students who have earned a minimum grade of A- in Algebra I and Algebra I teacher recommendation.
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas
- Counts as a Mathematics course for all diplomas
- The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

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

Pre-Calculus: Algebra *2564*

MAH406

- Grades 10-12
- 1 semester, 1 credit

Honors Pre-Calculus: Algebra *2564*

MAH408

- Grades 10-12
- 1 semester, 1 credit

- Recommended Prerequisites: Geometry and Algebra II
- Counts as a Mathematics course for all diplomas
- The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

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.

Pre-Calculus: Trigonometry *2566*

MAH407

- Grades 10-12
- 1 semester, 1 credit

Honors Pre-Calculus: Trigonometry *2566*

- Grades 10-12
- 1 semester, 1 credit
- Recommended Prerequisites: Geometry and Algebra II
- Counts as a Mathematics course for all diplomas
- The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

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.

CCR Bridge: Math Ready *2514*

MAH440/441

- Grade 12
- 2 semesters, 2 credits
- Recommended Prerequisite: Algebra II
- Counts as a Mathematics course for all diplomas
- Cannot be used for NCAA initial-eligibility certification

The CCR Bridge: Math Ready course will include and reinforce the Algebra I, Geometry, Algebra II, and Statistics skills necessary to be ready for an entry-level college math course. This course emphasizes understanding of math concepts rather than just memorizing procedures. Math Ready students learn the context behind the procedure (e.g., why to use a certain formula or method to solve a problem). This equips them with higher-order thinking skills in order to apply math skills, functions, and concepts in different situations. The course is intended for students who currently have achieved the minimum math requirements for college entry. The content of this course is designed to enhance students 'math skills so that they are ready for college-level math assignments. It is not designed to prepare students for college-level math in STEM majors.

Finite Mathematics *2530*
MAH430
• Grades 11-12
• 1 semester, 1 credit
• Recommended Prerequisite: Algebra II
• Counts as a Mathematics course for all diplomas

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

Probability and Statistics *2546*
MAH310
• Grades 11-12
• 1 semester, 1 credit
• Recommended Prerequisite: Algebra II
• Counts as a Mathematics course for all diplomas

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Probability and Statistics is 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.

Calculus *2527*
MAH500/501
• Grades 11-12
• 2 semesters, 2 credits
• Recommended Prerequisites: Pre-Calculus: Algebra and Pre-Calculus: Trigonometry
• Counts as a Mathematics course for all diplomas

Calculus expands a student's knowledge of topics like functions, graphs, limits, derivatives, and integrals. Additionally, students will review algebra and functions, modeling, trigonometry, etc. Calculus is made up of five strands: Limits and Continuity; Differentiation; Applications of Derivatives; Integrals; and Applications of Integrals. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

AP Calculus AB *2562*
MAH630/631
• Grades 11-12
• 2 semesters, 2 credits
• Weighted Grade
• Required Prerequisite: Pre-Calculus: Algebra
• Counts as a Mathematics course for all diplomas
• Qualifies as a Quantitative Reasoning course

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

AP Calculus BC *2572*
MAH632/633
• Grade 12
• 2 semesters, 2 credits
• Weighted grade
• Required Prerequisite: Pre-Calculus: Algebra
• Counts as a Mathematics course for all diplomas
• Qualifies as a Quantitative Reasoning course

AP Calculus BC 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 BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AP Calculus AB to different types of equations and introduces the topic of sequences and series. This course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. 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. The content of AP Calculus BC is designed to qualify the student for placement and credit in a course that is one course beyond that granted for AP Calculus AB.

AP Statistics *2570*
MAH530/531
• Grades 11-12
• 2 semesters, 2 credits
• Weighted grade
• Recommended Prerequisite: Algebra II
• Counts as a Mathematics course for all diplomas
• Qualifies as a Quantitative Reasoning course

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

PERFORMING ARTS DEPARTMENT

Beginning Concert Band (L) *4160*
MUH050/051
• Grade 9
• 2 semesters, 2 credits
• Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas
• The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
• Qualifies as SBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

Intermediate Concert Band (L) *4168*

MUH100/101

- Grades 10-12
- 2 semesters, 2 credits
- Prerequisite: Audition
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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.

Advanced Concert Band (L) *4170*

MUH200/201

- Grades 10-12
- 2 semesters, 2 credits
- Prerequisite: Audition
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Jazz Ensemble I/II (L) *4164*

MUH110/111/112/113

- Grades 9-12
- 2 semesters, 2 credits
- Prerequisite: Member of Marching and Concert Bands or permission of band director by audition.

- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma if students are enrolled in another band or orchestra course
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Beginning Chorus (L) *4182*

Tenor-Bass: MUH132/33
Treble: MUH130/131

- Grade 9
- 2 semesters, 2 credits
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Intermediate Chorus (L) *4186*

Bella Voce: MUH220/221 (Women's Choir)
Concert Choir: MUH312/313 (Co-ed Choir)

- Grades 10-12
- 2 semesters, 2 credits
- Prerequisite: Audition
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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.

Advanced Chorus (L) Madrigal *4188*

MUH320/321

- Grades 11-12
- 2 semesters, 2 credits
- Prerequisite: Audition
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Vocal Jazz (L) Legacy Show Choir *4184*

MUH300/301

- Grades 11-12
- 2 semesters, 2 credits
- Prerequisite: Audition
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Vocal Jazz is based on the Indiana Academic Standards for High School Choral Music. Students in this course develop musicianship and specific performance skills through group and individual settings for the study and performance of varied styles of vocal jazz. Instruction includes the study of the history and formative and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. 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.

Intermediate Orchestra (L) *4172*

MUH140/141

- Grades 9-12
- 2 semesters, 2 credits

- Prerequisite: Director placement
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Advanced Orchestra (L) *4174*

MUH150/151

- Grades 9-12
- 2 semesters, 2 credits
- Prerequisite: Director placement
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Music Theory and Composition (L) *4208*

MUH210/211

- Grades 10-12
- 2 semesters, 2 credits
- Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

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

AP Music Theory (L) *4210*
MUH510/511
• Grades 11-12
• 2 semesters, 2 credits
• Weighted Grade
• Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas

AP Music Theory 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 AP Music Theory course corresponds to two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the learning process. Students understand basic concepts and terminology by listening to and performing a wide variety of music.

Dance Choreography (L) Color Guard *4142*
MUH230/231
• Grades 9-12
• 2 semesters, 2 credits
• Prerequisite: Audition
• Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas
• The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
• A non-licensed dance instructor may be contracted with a licensed Performing Arts teacher serving as the teacher of record.
• Qualifies as SBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

Dance Performance (L) Blue Fusion Dance Team *4146*
MUH402/403
• Grades 9-12
• 2 semesters, 2 credits
• Prerequisite: Audition
• Fulfills the Fine Arts requirement for Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas
• The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
• A non-licensed dance instructor may be contracted with a licensed Performing Arts teacher serving as the teacher of record.
• Qualifies as SBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Dance Performance is based on the Indiana Academic Standards for Dance. Sequential and systematic learning experiences are provided in the specific genre offered, whether it is Ballet, Modern, Jazz, or Ethnic-Folk. Activities utilize a wide variety of materials and experiences and are designed to develop techniques appropriate within the genre, including individual and group instruction in

performance repertoire and skills. Students develop the ability to express their thoughts, perceptions, feelings, and images through movement. The performance class provides opportunities for students to experience degrees of physical prowess, technique, flexibility, and the study of dance performance as an artistic discipline and as a form of artistic communication. Students describe, analyze, interpret, and judge live and recorded dance performances of professional dancers and companies in the genre. They also become aware of the career opportunities in dance.

Theater Arts (L) *4242*

MUH410

- Grades 9-12
- 1 semester, 1 credit
- This course is the prerequisite for all other theater classes
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Theater Arts is based on the Indiana Academic Standards for Theater. Students enrolled in Theater Arts read and analyze plays, create scripts and theater pieces, conceive scenic designs, and develop acting skills. These activities incorporate elements of theater history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theater, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theater patrons in their community.

Advanced Theater Arts (L) *4240*

MUH411

Not offered 2023-24

- Grades 9-12
- 1 semester, 1 credit
- Recommended Prerequisite: Theater Arts
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Advanced Theater Arts is based on the Indiana Academic Standards for Theater. Students enrolled in Advanced Theater Arts read and analyze plays and apply criteria to make informed judgments. They draw on events and experiences to create scripted monologues and scenes, create scenic designs for existing plays, and build characters through observation, improvisation and script analysis. These activities should incorporate elements of theater history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore careers in theater arts and begin to develop a portfolio of their work. They also attend and critique theater productions and identify ways to support the theater in their community.

Technical Theater (L) *4244*

MUH420

- Grades 9-12
- 1 semester, 1 credit
- Recommended Prerequisite: Theater Arts
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

- The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Technical Theater is based on the Indiana Academic Standards for Theater. Students enrolled in Technical Theater actively engage in the process of designing, building, managing, and implementing the technical aspects of a production. These activities should incorporate elements of theater history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theater, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theater patrons in their community.

Theater Production (L) ***4248***
MUH421
- Grades 9-12
- 1 semester, 1 credit
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
- Qualifies as SBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Theater Production is based on the Indiana Academic Standards for Theater. Students enrolled in Theater Production take on responsibilities associated with rehearsing and presenting a fully- mounted theater production. They read and analyze plays to prepare for production; conceive and realize a design for a production, including set, lighting, sound and costumes; rehearse and perform roles in a production; and direct or serve as assistant director for a production. These activities should incorporate elements of theater history, culture, analysis, response, creative process, and integrated studies. Additionally, students investigate a theater arts career then develop a plan for potential employment or further education through audition, interview, or presentation of a portfolio. Students also attend and critique theatrical productions and volunteer to support theater in their community.

PHYSICAL EDUCATION AND HEALTH DEPARTMENT

Physical Education I (L) ***3542***
PHH100
- Grades 9-12
- 1 semester, 1 credit
- Required Prerequisite: Grade 8 Physical Education
- Fulfills part of the Physical Education requirement for all diplomas

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

Physical Education II (L) ***3544***
PHH101
- Grades 9-12
- 1 semester, 1 credit

• Required Prerequisite: Physical Education I
• Fulfills part of the Physical Education requirement for all diplomas

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 included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.).

Health and Wellness Education *3506*

PHH110
• Grades 9-12
• 1 semester, 1 credit
• Fulfills the Health & Wellness requirement for all diplomas

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

Elective Physical Education – Strength & Fitness (L) *3560*

PHH600/601
• Grades 9-12
• 1 semester, 1 credit; 8 credits maximum
• Prerequisite: Complete PE I
• Counts as an Elective 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.

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

Elective Physical Education – Aquatics (L) *3560*

PHH102
• Grades 9-12

• 1 semester, 1 credit; 8 credits maximum
• Prerequisites: Complete PE I and PE II; Must be 15 years old, be able to swim 300 yards with 2 strokes, tread water for 5 minutes, and dive and retrieve a 10 lb. weight from the bottom of the deep end of the pool.
• Counts as an Elective for all diplomas

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

Current Health Issues *3508*
Not offered 2023-24
PHH300
• Grades 9-12
• 1 semester, 1 credit
• Prerequisite: Health & Wellness Education
• Counts as an Elective for all diplomas

Current Health Issues, an elective course that can be aligned to Indiana's Academic Standards for Health & Wellness, focuses on specific health issues and/or emerging trends in health and wellness, including, but not limited to: personal health and wellness, non-communicable and communicable diseases, nutrition, mental and emotional health, tobacco use prevention, alcohol and other drug use prevention, human development and family health, health care and/or medical treatments, and national and/or international health issues. 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.

SCIENCE DEPARTMENT

Biology I (L) *3024*
SCH100/101
• Grades 9-12
• 2 semesters, 2 credits
• Fulfills the Biology requirement for all diplomas

Biology I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Biology topics. Disciplinary Core Ideas for this course include From Molecules to Organisms, Ecosystems, Heredity, and Biological Evolution. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

Biology II (L) *3026*
SCH200/201
• Grades 9-12
• 2 semesters, 2 credits
• Prerequisite: Biology I
• Counts as a Science course for all diplomas
• Counts as an Elective for all diplomas

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.

Advanced Science, College Credit (L) *3090*
ACP Biology BIOL L100 – Humans & the Biological World
SCH630/631
• Grades 11-12
• 2 semesters, 2 credits
• Weighted Grade
• Prerequisites: Biology I and Chemistry I with at least a "B" average or approval of the science department chair
• Counts as a Science course for all diplomas
• Students may be eligible to earn college credits for this course through Indiana University-Bloomington. Students must have a minimum 2.7 GPA to earn the college credit. The expectation is for the student to take this course for dual credit and officially register for the course with Indiana University.

ACP Biology is a course offered in conjunction with Indiana University-Bloomington. It is a college course designed to examine the fundamental principles of Biology. ACP Biology expands the information presented in Biology I, and reinforces and builds on the principles of biological organization from molecules through cells and organisms. The emphasis is on processes common to all organisms, with special reference to humans. This course may be taken for college credit as well as high school credit. If taken for college credit, it counts as a 5-credit hour lab course for non-science majors, or as a 5-credit hour elective to prepare science majors for more advanced courses.

Anatomy and Physiology *5276*
SCH400/401
• Grades 11-12
• 2 semesters, 2 credits; 2 credits maximum
• Required Prerequisite: Biology I with at least a "B" average
• Counts as a Science course for all diplomas
• Counts as an Elective or Directed Elective for all diplomas

Anatomy and 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. This course introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, skeleton, muscular, and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy and 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.

AP Biology (L) *3020*
Not offered 2023-24
SCH640/641
• Grades 11-12
• 2 semesters, 2 credits
• Weighted Grade
• Recommended Prerequisites: Biology I and Chemistry I with at least a "B" average
• Counts as a Science course for all diplomas
• Qualifies as a Quantitative Reasoning course

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.

Chemistry I (L) *3064*
SCH300/301
Honors Chemistry I (L) *3064*
SCH304/305
• Grades 9-12
• 2 semesters, 2 credits
• Recommended Prerequisite: Algebra II (can be taken concurrently)
• Fulfills a Physical Science course requirement for all diplomas
• Qualifies as a Quantitative Reasoning course
• The course content for the Honors class is significantly more rigorous than the state approved course. Honors-level courses must be standards-based, have defined criteria for student admission to the course as well as clear expectations of student outcomes, and include a culminating honors project that reflects understanding of the Honors course content.

Chemistry I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Chemistry topics. Disciplinary Core Ideas for this course include Matter and its Interactions and Energy. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

Chemistry II (L) *3066*
ACP Chemistry C101/C121 (Elementary Chemistry/Elementary Chemistry I Lab)
SCH672/673
• Grades 10-12
• 2 semesters, 2 credits
• Weighted Grade
• Recommended Prerequisites: Chemistry I and Algebra II
• Fulfills a Physical Science course requirement for all diplomas
• Counts as an Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Indiana University-Bloomington. Students must have a minimum 2.7 GPA to earn the college credit. The expectation is for the student to take this course for dual credit and officially register for the course with Indiana University.

ACP Chemistry is a course offered in conjunction with Indiana University-Bloomington. This is an introduction to aspects of general chemistry, as well as the techniques and reasoning of experimental chemistry. Topics covered will include atomic structure, stoichiometry, matter, gases, kinetics, equilibrium, acid base chemistry, etc. All topics will also be covered in the laboratory. The course will have a strong emphasis on problem solving and laboratory work with reporting. See your counselor for more information and the discounted IU tuition cost for this course. Tuition will be determined by IU and will be communicated to students at the beginning of the semester.

AP Chemistry (L) *3060*
SCH650/651
• Grades 11-12
• 2 semesters, 2 credits; 2 credits maximum
• Weighted Grade
• Recommended Prerequisites: Chemistry I, Algebra II, and Pre-Calculus: Algebra/Pre-Calculus: Trigonometry
• Counts as a Science course for all diplomas
• Qualifies as a Quantitative Reasoning course

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.

Integrated Chemistry-Physics (L) *3108*
SCH230/231

• Grades 9-12
• 2 semesters, 2 credits
• Recommended Prerequisite: Algebra I (may be taken concurrently)
• Fulfills a Physical Science course requirement for all diplomas
• Counts as an Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

Integrated Chemistry and Physics incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry and Physics topics. Disciplinary Core Ideas for this course include Matter and its Interactions, Forces, Energy, and Waves and their Applications in Technologies for Information Transfer. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

Physics I (L) *3084*
SCH420/421
• Grades 10-12
• 2 semesters, 2 credits
• Recommended Prerequisites: Algebra I, Algebra II
• Fulfills a Physical Science course requirement for all diplomas
• Counts as an Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• This is a college prep class for students that do not intend to enroll in engineering or a physical science related career.

Physics I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Physics topics. Disciplinary Core Ideas for this course include Forces and Interactions, Energy, Wave Properties, and Electromagnetic Radiation. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

AP Physics 1: Algebra-Based *3080*
SCH662/663
• Grades 10-12
• 2 semesters, 2 credits
• Weighted Grade
• Recommended Prerequisite: Algebra I
• Counts as a Science course for all diplomas
• Qualifies as a Quantitative Reasoning course

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 covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits.

AP Physics 2: Algebra-Based (L) *3081*
SCH664/665
• Grades 11-12
• 2 semesters, 2 credits
• Weighted grade
• Recommended Prerequisite: AP Physics 1: Algebra-Based
• Counts as a Science course for all diplomas
• Qualifies as a Quantitative Reasoning course

AP Physics 2 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 2: Algebra-Based is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics.

AP Physics C (L) *3088*
SCH668/669
• Grade 12
• 2 semesters, 2 credits
• Weighted grade
• Recommended Prerequisites: Physics I, Calculus (can be taken concurrently)
• Counts as a Science course for all diplomas
• Counts as an Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

AP Physics C 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. There are two AP Physics C courses - Physics C: Mechanics and Physics C: Electricity and Magnetism. AP Physics C: Mechanics provides instruction in each of the following six content areas: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. AP Physics C: Electricity and Magnetism provides instruction in each of the following five content areas: electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism.

Earth and Space Science I (L) *3044*
SCH350/351
• Grades 10-12
• 2 semesters, 2 credits
• Fulfills a Science course requirement for all diplomas
• Counts as an Elective for all diplomas

Earth and Space Science incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Earth and Space Science topics. Disciplinary Core Ideas for this course include Earth's Place in the Universe, Earth's Systems, and Human Interaction with Earth's Systems. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

PROJECT LEAD THE WAY – BIOMEDICAL ACADEMY

Working with the same equipment and tools used by lab professionals, PLTW Biomedical Science students are empowered to explore and find solutions to some of today's most pressing medical challenges. Through scaffolded activities that connect learning to life, students step into the roles of biomedical science professionals and investigate topics including human medicine, physiology, genetics, microbiology, and public health. Students work together in teams to find unique solutions, and in the process, learn in-demand, transferable skills like critical thinking and communication.

Required courses

9th Grade:	PBS – Principles of Biomedical Sciences
10th Grade:	HBS – Human Body Systems
11th Grade:	MI – Medical Interventions
12th Grade:	BI – Biomedical Innovations

Principles of Biomedical Sciences *5218*
SCH250/251
CIP Code 14.0501
• Grade 9
• 2 semesters required, 2 credits; 2 credits maximum
• Weighted Grade
• Required Prerequisite: Biology I or concurrent enrollment in Biology I
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as an Elective or Directed Elective for all diplomas

Principles of Biomedical Sciences provides an introduction to this field through hands-on projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems

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

Human Body Systems *5216*
SCH310/311
CIP Code 26.0101
• Grade 10
• 2 semesters required, 2 credits; 2 credits maximum
• Weighted Grade
• Required Prerequisite: Principles of Biomedical Sciences
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as an Elective or Directed Elective for all diplomas

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

Medical Interventions *5217*
SCH430/431
CIP Code 14.0501
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Weighted Grade
• Required Prerequisites: Principles of Biomedical Sciences and Human Body Systems
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as an Elective or Directed Elective for all diplomas

Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve the quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. NOTE: This course aligns with the PLTW Medical Interventions curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

Biomedical Innovations *5219*
SCH450/451
CIP Code 14.0501
• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Weighted Grade
• Required Prerequisites: Principles of Biomedical Sciences, Human Body Systems, and Medical Interventions
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as PBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

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

SOCIAL STUDIES DEPARTMENT

Geography and History of the World *1570*
SOH220/221
- Grades 9-12
- 2 semesters, 2 credits
- Fulfills the Geography and History of the World/World History and Civilization requirement for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas
- Counts as a Social Studies course for the General Diploma
- Counts as an Elective for all diplomas

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

World History and Civilization *1548*
SOH200/201
- Grades 9-12
- 2 semesters, 2 credits
- Fulfills the Geography and History of the World/World History and Civilization requirement for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas
- Fulfills a Social Studies requirement for the General Diploma
- Counts as an Elective for all diplomas

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, content, skills and substance in the teaching and learning of history.

United States History *1542*
SOH300/301
- Grade 11
- 2 semesters, 2 credits
- Fulfills the U.S. History requirement for all diplomas

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.

ACP United States History *1542*
HIST-H105 American History I, HIST-106 American History II
SOH640/641
- Grade 11
- 2 semesters, 2 credits
- Weighted Grade
- Prerequisite: Strong academic background. Students should be able to read a college level textbook and write grammatically correct, complete sentences.
- Fulfills the U.S. History requirement for all diplomas
- Students may be eligible to earn college credits for this course through Indiana University-Bloomington. Students must have a minimum 2.7 GPA to earn the college credit. The expectation is for the student to take this course for dual credit and officially register for the course with Indiana University.

ACP United States History is a course that discusses the evolution of American society from English Colonization until present day. This course includes the following topics: political, economic, and social structure; racial and ethnic groups; sex roles; Indian, inter-American, and world diplomacy of the United States; and the evolution of ideology, war, territorial expansion, industrialization, urbanization, and international events and their impact on American history.

AP United States History *1562*
SOH660/661
- Grade 11
- 2 semesters, 2 credits
- Weighted Grade
- Recommended Prerequisite: Strong academic background. Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Fulfills the U.S. History requirement for all diplomas

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.

United States Government *1540*
SOH400
- Grade 12
- 1 semester, 1 credit
- Fulfills the Government requirement for all diplomas
- Students are required to take the naturalization test for citizenship per SEA 132. SEA 398 states that schools will be required to issue the naturalization test, report results, and post test data results starting in November 2022.

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of

local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. Analysis of how the United States interacts with other nations and the government's role in world affairs is included in this course. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

Economics *1514*

SOH420
- Grade 12
- 1 semester, 1 credit
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas
- Fulfills a Social Studies requirement for the General Diploma
- Counts as an Elective for all diplomas
- Qualifies as a Quantitative Reasoning course

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 will 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, and the role of financial institutions, economic stabilization, and trade.

Ethnic Studies *1516*

SOH450
- Grades 9-12
- 1 semester, 1 credit
- Counts as an Elective for all diplomas

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.

Indiana Studies *1518*

SOH440
- Grades 9-12
- 1 semester, 1 credit
- Counts as a Social Studies course for the General Diploma
- Counts as an Elective for all diplomas

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

Psychology *1532*

SOH430
- Grades 11-12
- 1 semester, 1 credit
- Counts as a Social Studies course for the General Diploma
- Counts as an Elective for all diplomas
- Qualifies as PBL course for Graduation Pathways Box 2

• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas: History and Scientific Method, Biological Basis for Behavior, Development, Cognition, Personality and Assessment, Abnormal Psychology, Socio-Cultural Dimensions of Behavior, and Psychological Thinking. History and Scientific Method explores the history of psychology, the research methods used, and the ethical considerations that must be utilized. Biological Basis for Behavior focuses on the way the brain and nervous system function, including sensation, perception, motivation and emotion. Development analyzes the changes through one's life including the physical, cognitive, emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment explains at the approaches used to explain one's personality and the assessment tools used. Abnormal Psychology explores psychological disorders and the 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.

Sociology *1534*

SOH410
• Grades 11-12
• 1 semester, 1 credit
• Counts as a Social Studies course for the General Diploma
• Counts as an Elective for all diplomas

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

AP European History *1556*

SOH650/651
• Grades 11-12
• 2 semesters, 2 credits; 2 credits maximum
• Weighted Grade
• Recommended Prerequisite: World History. Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
• Counts as an Elective for all diplomas

AP European 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. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing historical evidence; contextualization; comparison; causation; change and continuity over time; and argument development. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity.

AP Psychology *1558*

SOH670/671
• Grade 12
• 2 semesters, 2 credits
• Weighted Grade
• Recommended Prerequisite: Strong academic background. Students should be able to read and comprehend college-level texts and

apply the conventions of Standard Written English in their writing.
- Counts as an Elective for all diplomas
- Qualifies as PBL course for Graduation Pathways Box 2
- This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

AP Psychology 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 AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. Topics include: History and Approaches; Research Methods; Biological Bases of Behavior; Sensation and Perception; States of Consciousness; Learning; Cognition; Motivation and Emotion; Developmental Psychology; Personality; Testing and Individual Differences; Abnormal Behavior; Treatment of Abnormal Behavior; and Social Psychology.

WORLD LANGUAGE DEPARTMENT

French I, German I, Spanish I *2020, 2040, 2120*
FFH100/101
FGH100/101
FSH100/101
- Grades 9-12
- 2 semesters, 2 credits
- Prerequisite: It is recommended that 8th graders have a "C" or better in Language Arts before taking World Language in grade 9
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

Level I World Language is based on Indiana's Academic Standards for World Languages and introduces students to effective strategies for beginning language learning, and to various aspects of culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understanding and using appropriate greetings and forms of address, participating in brief guided conversations on familiar topics, and writing 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 the 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 the language and culture outside of the classroom.

French II, German II, Spanish II *2022, 2042, 2122*
FFH200/201
FGH200/201
FSH200/201
Honors Spanish II *2122*
FSH210/211
- Grades 9-12
- 2 semesters, 2 credits
- Prerequisite: World Language I in the language studied with a passing grade
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

Level II World Language is based on Indiana's Academic Standards for World Languages and builds upon effective strategies for language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and

questions in expanded contexts, participating independently in brief conversations on familiar topics, and writing 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 the 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 language and culture outside of the classroom.

French III, German III, Spanish III *2024, 2044, 2124*
FFH300/301
FGH300/301
FSH300/301
Honors Spanish III *2124*
FSH310/311
• Grades 10-12
• 2 semesters, 2 credits
• Prerequisites: World Language I and II in the language studied with a passing grade
• Fulfills a World Language requirement for the Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas

Level III World Language is based on Indiana's Academic Standards for World Languages and builds upon effective strategies for 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 the 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 the language and culture outside of the classroom.

French IV, German IV, Spanish IV *2026, 2046, 2126*
FFH400/401
FGH400/401
• Grades 11-12
• 2 semesters, 2 credits
• Prerequisites: World Language I, II, and III in the language studied with a passing grade
• Fulfills a World Language requirement for the Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas

Level IV World Language is based on Indiana's Academic Standards for World Languages and 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 the culture that speaks the targeted language 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 students' 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 world language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native language speakers.

Spanish V *2128*
FSH500/501
• Grades 11-12
• 2 semesters, 2 credits
• Required Prerequisite: Spanish IV
• Fulfills a World Language requirement for the Core 40 with Academic Honors diploma
• Counts as a Directed Elective or Elective for all diplomas

Spanish V, a course based on Indiana's Academic Standards for World Languages, provides opportunities for students to interact and exchange information in culturally and socially authentic and/or simulated situations to demonstrate integration of language skills with understanding of Spanish-speaking culture. This course emphasizes the use of appropriate formats, varied vocabulary and complex language structures within student communication, both oral and written, as well as the opportunity to produce and present creative material using the language. Additionally, students will continue to develop understanding of Spanish-speaking culture through investigating the origin and impact of significant events and contributions unique to the target culture, comparing and contrasting elements that shape cultural identity in the target culture and the student's own culture, and explaining how the target language and culture have impacted other communities. This course further emphasizes the integration of concepts and skills from other content areas with the target language and cultural understanding, as well as the exploration of community resources intended for native Spanish speakers.

CAREER AND TECHNICAL EDUCATION PROGRAMS

In cooperation with Warren Central High School, Mt. Vernon High School, and Eastern Hancock High School, Greenfield-Central juniors and seniors may attend classes at these locations. Greenfield-Central provides bus transportation for most programs. Students who are accepted into a program and choose to attend will be given information about this opportunity prior to the start of the school year. Adequate time is allowed for safe travel for students who must provide their own transportation.

Students applying for admission to any program at a career center will fill out an application which will be reviewed by the student's counselor and the location's staff. The student's attendance record, number of high school credits earned to that point, and high school discipline record will be reviewed. Additionally, teacher recommendations and the results of aptitude and interest testing may be used to help place the student in a program leading to a rewarding and satisfying career. Admission to any career and technical program will not be denied to anyone in the school corporation on the basis of race, sex, disability, or national origin including limited English proficiency.

CAREER & TECHNICAL EDUCATION COURSES AT GREENFIELD-CENTRAL HIGH SCHOOL

Heating, Ventilation, and Air Conditioning (HVAC) Pathway

Principles of Heating, Ventilation, and Air Conditioning (HVAC) *7131*
VOH504/505
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn 7 college credits for this course through Ivy Tech Community College

Principles of Heating, Ventilation and Air Conditioning (HVAC) covers many of the topics needed for students to be successful in the mechanical construction industry. Its modules include history of HVAC industry, OSHA 10-hour construction industry training, communication and customer service skills. This course will also cover basic electricity concepts.

HVAC Fundamentals *7125*
VOH506/507
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of HVAC

• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn 6 college credits for this course through Ivy Tech Community College

HVAC Fundamentals introduces fundamentals applicable to the heating and refrigeration phases of air conditioning, including units, parts, basic controls, functions, and applications. This course emphasizes practices, tool and meter use, temperature measurement, heat flow, the combustion process, and piping installation practices. It covers the basic sequence of operation for gas, oil, and electric furnaces. It introduces compression systems used in mechanical refrigeration including the refrigeration cycle and system components, safety procedures, proper use of tools used to install and service refrigeration equipment, refrigerant charging and recovery, system evacuation, calculating superheat and subcooling, and using a refrigerant temperature/pressure chart. This course will use lecture, lab and online simulation to prepare students for the nationally recognized certification exam as part of the outcome assessment learning objectives.

HVAC Service *7126*
VOH508/509
• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of HVAC and HVAC Fundamentals
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn 6 college credits for this course through Ivy Tech Community College

HVAC Service continues the study of air conditioning and refrigeration along with the procedures used to analyze mechanical and electrical problems encountered when servicing heating systems. Students will better understand compressors, metering devices, system recharging, refrigerant recovery, basics of motor types, equipment installation, and troubleshooting practices as they apply to air conditioning and refrigeration systems. Additionally, students will be able to understand electrical schematics and connection diagrams, combustion testing, venting and combustion air requirements, sequence of operation, heating controls, troubleshooting techniques, installation practices, basic codes applying to furnace codes, and service procedures. This course will use lecture, lab, and online simulation to prepare students for the nationally recognized certification exam as part of the outcome assessment learning objectives.

HVAC Capstone *7244*
VOH610/611
• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of HVAC, HVAC Fundamentals, and HVAC Service
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn 3 college credits for this course through Ivy Tech Community College

The HVAC Capstone course covers procedures used to analyze mechanical and electrical problems encountered when servicing heating systems. Topics include electrical schematics and connection diagrams, combustion testing, venting and combustion air requirements, sequence of operation, heating controls, troubleshooting techniques, installation practices, basic codes applying to furnace codes, and service procedures. Students may also have the opportunity to gain an understanding of Heat Pump Systems or to develop skills needed to fabricate and install ductwork. This course will use lecture, lab and online simulation to prepare students for the nationally recognized certification exam as part of the outcome assessment learning objectives.

Radio and Television Broadcasting Pathway

Principles of Broadcasting *7139*
GCH100/101
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

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

Audio and Video Production Essentials *7306*
GCH102/103
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Broadcasting
• Counts as a Directed Elective or Elective for all diplomas

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

Mass Media Production *7307*
Not offered 2023-24
GCH104/105
• Grades 10-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Broadcasting and Audio and Video Production Essentials
• Counts as a Directed Elective or Elective for all diplomas

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

Radio and Television II: Sports Broadcasting *5992*
GCH414/415
• Grades 11-12
• 2 semesters required, 2 credits; 6 credits maximum
• Prerequisites: Students should have taken at least one semester of Radio/TV. Students should be juniors & seniors with reliable transportation. Sophomores that can drive or have reliable transportation will be considered. Students must be serious about broadcasting and be approved for the class by the instructors. New students (only juniors & seniors) will be accepted into the class after an audition involving reading sports news and doing play by play commentary. Knowledge of football, soccer, volleyball, basketball, softball, and baseball is required.
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as WBL course for Graduation Pathways Box 2
• This course assists students in meeting the IDOE graduation requirement of "Learn and Demonstrate Employability Skills." Students are taught employability skills as part of the course curriculum and successful demonstration of skills is evidenced by a passing transcripted grade.

Radio/TV Sports Broadcasting is a class for aspiring sports broadcasters. Students enrolled in this course are expected to regularly broadcast sporting events of all kinds. During the class time, students will be researching statistics, creating video and radio packages, conducting interviews, and creating episodes of "Let's Talk Sports" and other various sports programs. Students get a chance to broadcast on radio and television for a sports enthused community and school system. This course will essentially be a designated section of Radio/TV that will meet at the end of the day to allow for work to continue after school.

CAREER & TECHNICAL EDUCATION COURSES AT MT. VERNON HIGH SCHOOL

Aviation Management Pathway

Principles of Aviation Management *7214*
VOH614/615
• Grades 11-12

• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

This course provides the student the opportunity to develop an understanding of various aspects of the aviation industry to include general regulations and laws associated with the field. Included is an overview of the aviation field and all employment opportunities. Areas of study include aerodynamics, aircraft systems, performance, weight and balance, physiology, regulations, cross country planning, weather, and decision-making skills. Students will also learn of the departments associated with an airport and their impact on the industry as a whole.

Private Pilot Theory *7217*
VOH616/617
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Aviation Management
• Counts as a Directed Elective or Elective for all diplomas

The student will receive ground school knowledge required for certification as a private pilot with an airplane single engine land rating. Areas of study include aerodynamics, aircraft systems, performance, weight and balance, physiology, regulations, cross country planning, weather, and decision-making skills.

Aviation Safety and Operations *7207*
VOH618/619
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Aviation Management
• Counts as a Directed Elective or Elective for all diplomas

This course is an overview of general aviation operations, including the operation and management of the Fixed Base Operation (FBO). It introduces the challenges and complexity of aviation security faced by aviation professionals across the industry and traces the evolution of current security approaches and explores technologies and processes targeting threat mitigation and improved operational efficiency. Emphasis will be placed on financial and operational considerations as well as on regulatory requirements and constraints.

CAREER & TECHNICAL EDUCATION COURSES AT WALKER CAREER CENTER

Automotive Collision Repair Pathway

Principles of Collision Repair *7215*
VOH216/217
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College or Vincennes University

Principles of Collision Repair provides students an overview of the operating, electrical, and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive collision industry. Students will study the basics of collision repair, along with learning to perform basic service and maintenance, including the car's starting and charging system.

Automotive Body Repair *7204*
VOH230/231
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Collision Repair

• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College or Vincennes University

Automotive Body Repair provides students with an understanding of the materials, measuring, welding, and information resources applicable to collision repair. Students will study steel and aluminum dent repair, including the welding practices commonly performed within an automotive repair environment. Students will gain basic skills and knowledge in oxy-fuel welding, cutting, brazing and plasma cutting, gas metal arc welding, squeeze type resistance welding, exterior panel welding, and I-CAR welding test preparation. Students will also learn the installation of moldings, ornaments, and fasteners with emphasis on sheet metal analysis and safety.

Plastic Body Repair and Paint Fundamentals *7206*

VOH510/511
• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Collision Repair and Automotive Body Repair
• Counts as a Directed Elective or Elective for all diplomas

Plastic Body Repair and Paint Fundamentals introduces the types of fiberglass and plastic materials used in auto body repair and considerations for automotive painting. Students will explore methods for repairing fiberglass and plastic damage, like welding, reinforcing, repairing holes, and retexturing plastic. Students will be asked to demonstrate the proper use of primers and sealers, spraying techniques, and an understanding of various paint finishes.

Collision Repair Capstone *7380*

VOH512/513
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Collision Repair, Automotive Body Repair, and Plastic Body Repair & Paint Fundamentals
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Vincennes University
• Students may earn ASE certification through this pathway

This course further explores important skills and competencies within the Automotive Body Technology Pathway. Topics such as Automotive Painting Technology, Collision Damage Appraising, and Fiberglass Plastic Repair. Additionally, Co-Op and Internship opportunities will be available for students.

Automotive Services Pathway

Principles of Automotive Services *7213*

VOH218/219
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.

Brake Systems *7205*

VOH232/233
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Automotive Services

• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

This course gives students an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in various automotive systems. Additionally, it teaches theory, service, and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today's automobiles. This course will emphasize professional diagnosis and repair methods for brake systems.

Steering and Suspensions *7212*
VOH514/515
• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Automotive Services and Brake Systems
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

This course presents engine theory and operation and studies the various engine designs utilized today. This course also takes an in-depth look at engine performance, including advanced concepts in the diagnosis and repair of ignition, fuel, emission, and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. Hybrid/Alternative fuel technology will also be introduced.

Automotive Service Capstone *7375*
VOH516/517
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Automotive Services, Brake Systems, and Steering and Suspensions
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College
• Students may earn ASE certification through this pathway

This course further explores important skills and competencies within the Automotive Service Technology Pathway. Topics such as Steering & Suspension, Engine Repair, Climate Control, and Driveline Service will be covered. Additionally, Co-Op and Internship opportunities will be available for students.

Computer Science Pathway

Principles of Computing *7183*
VOH518/519
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College or Vincennes University

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.

Topics in Computer Science *7351*
VOH520/521
• Grade 11

• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Computing
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course

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

Computer Science *7352*
VOH522/523
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Computing
• Fulfills a Science requirement for all diplomas (Core 40 Science Course)
• Counts as a Directed Elective or Elective for all diplomas
• The AP Computer Science A curriculum may be used to complete the competencies required for this course.
• Qualifies as a Quantitative Reasoning course

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

Computer Science Capstone *7353*
VOH524/525
• Grade 12
• 2 semesters required; 2 credits maximum
• Required Prerequisites: Principles of Computing, Topics in Computer Science, and Computer Science
• Counts as a Directed Elective or Elective for all diplomas

Computer Science Capstone provides a working understanding of the fundamentals of procedural and object-oriented program development using structured, modular concepts, and modern object-oriented programming languages. Reviews control structures, functions, data types, variables, arrays, and data file access methods. The course is a second level computer science course introducing object-oriented computer programming, using a language such as Java or C++. Object-oriented concepts studied include classes, objects, inheritance, polymorphism, operator overloading, exception handling, recursion, abstract data types, streams, and file I/O. Students will explore programming concepts such as software reuse, data abstraction, and event-driven programming.

Construction Trades: Carpentry Pathway

Principles of Construction Trades *7130*
VOH550/551
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Construction Trades: General Carpentry *7123*
VOH526/527
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Construction Trades
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College or Vincennes University
• Students may earn NCCER certification through this course

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.

Construction Trades: Framing and Finishing *7122*
VOH528/529
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Construction Trades and Construction Trades: General Carpentry
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College or Vincennes University

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.

Construction Trades Capstone *7242*
VOH530/531
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Construction Trades, Construction Trades: General Carpentry, and Construction trades: Framing and Finishing
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College or Vincennes University

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.

Cosmetology Pathway

Principles of Barbering and Cosmetology *7330*
VOH532/533
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams

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.

Barbering and Cosmetology Fundamentals *7331*
VOH534/535
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Barbering and Cosmetology
• Counts as a Directed Elective or Elective for all diplomas
• This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams
• Students may be eligible to earn college credits for this course through Vincennes University

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.

Advanced Cosmetology *7332*
VOH536/537
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Barbering and Cosmetology and Barbering and Cosmetology Fundamentals
• Counts as a Directed Elective or Elective for all diplomas
• This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams
• Students may be eligible to earn college credits for this course through Vincennes University

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 completion of the course requires at least 375 Cosmetology studio hours.

Technical Skills Development *7156*
VOH538/539
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum per program of study
• Required Prerequisite: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course
• Counts as a Directed Elective or Elective for all diplomas
• May be used by a student more than once as long as it is two separate programs of study

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real-world learning experiences such as lab activities, project-based learning, or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

Barbering and Cosmetology Capstone *7334*
VOH540/541
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Barbering & Cosmetology, Barbering & Cosmetology Fundamentals, and Advanced Cosmetology
• Counts as a Directed Elective or Elective for all diplomas
• This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams
• Students may be eligible to earn college credits for this course through Vincennes University
• Students may earn Indiana State Board of Cosmetology certification through this pathway

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.

Criminal Justice Pathway

Principles of Criminal Justice *7193*
VOH220/221
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Vincennes University

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.

Law Enforcement Fundamentals *7191*
VOH234/235
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Criminal Justice
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Vincennes University

Law Enforcement Fundamentals critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. This course 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. It demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organization. This includes the evolution of law enforcement at federal, state, and local levels.

Corrections and Cultural Awareness *7188*
VOH542/543
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Criminal Justice and Law Enforcement Fundamentals
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Vincennes University

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.

Criminal Justice Capstone *7231*
VOH544/545
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Criminal Justice, Law Enforcement Fundamentals, and Corrections & Cultural Awareness
• Counts as a Directed Elective or Elective for all diplomas

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.

Culinary Arts Pathway

Principles of Culinary and Hospitality *7173*
VOH212/213
• Grade 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Nutrition *7171*
VOH224/225
• Grade 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Culinary and Hospitality
• Counts as a Directed Elective or Elective for all diplomas

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

Culinary Arts *7169*
VOH226/227
• Grade 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Culinary and Hospitality
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Culinary Arts Capstone *7233*
VOH546/547
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Culinary and Hospitality, Nutrition, and Culinary Arts
• Counts as a Directed Elective or Elective for all diplomas

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.

Baking and Pastry Capstone *7235*
VOH548/549
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Culinary and Hospitality, Nutrition, and Culinary Arts
• Counts as a Directed Elective or Elective for all diplomas

The objective of this course is to help students understand the science of baking and the different reactions that take place based on the ingredients, temperatures, and equipment in relation to the final product. The course requires students to produce and finish a variety of cakes. The course emphasizes application techniques, color coordination, and the flavor and texture of fillings. Students will practice the techniques of basic cake decorating. This course will also address classical French and European desserts, including the preparation of goods such as Napoleons, Gateau St. Honoré, petit fours and petit fours sec, ganaches, pastry creams and fillings, sauces, flans and tarts, and European sponges. The course also includes instruction in tempering of chocolates, molding, and chocolate plastique, preparation of truffles, pastillage and marzipan, short doughs, and meringues. The student will be instructed in the latest preparation methods, innovative ideas for impressive plate presentations, and techniques that utilize specialized equipment and tools to make high-tech, novel creations.

Dental Careers Pathway

Principles of Dental Careers *7315*
VOH552/553
• Grade 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

Principles of Dental Careers will provide the foundational knowledge and skills necessary to pursue a career in the Dental Field. A focus will be placed on the role of the modern dental assistant and will cover key pre-clinical procedures and beginning dental terminology.

Dental Careers Fundamentals *7316*
VOH554/555
• Grade 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Dental Careers
• Counts as a Directed Elective or Elective for all diplomas

Dental Careers Fundamentals will build upon the knowledge and skills in the principles course. Students will understand and practice beginning chairside functions of the Dental Assistant along with a focus on the Anatomy and Physiology of the head, neck, and oral cavity. Students will also study tooth anatomy, physiology, and morphology. This part of the program will prepare students for the Anatomy, Morphology, and Physiology exam of the NELDA certification.

Advanced Dental Careers *7317*
VOH556/557
• Grade 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Dental Careers and Dental Careers Fundamentals
• Counts as a Directed Elective or Elective for all diplomas

Advanced Dental Careers Fundamentals will build upon the knowledge and skills developed in the first two courses. Students will study more advanced chairside assisting functions along with advanced infection control techniques. Additionally, students will explore preventive dentistry practices and dental emergencies. This course will prepare students for the ICE exam of the NELDA certification.

Dental Careers Capstone *7318*
VOH558/559
• Grade 12

• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Dental Careers, Dental Careers Fundamentals, and Advanced Dental Careers
• Counts as a Directed Elective or Elective for all diplomas

Dental Careers Capstone will provide the opportunity for increased skill development in clinical support through work-based learning experiences. Students will also prepare for the Radiation, Health, and Safety which is third and final part of the NELDA certification. The capstone course may also provide the opportunity to review and prepare for the entire NELDA certification.

Design Technology Pathway

PLTW Introduction to Engineering Design *4802*

TEH160/161
• Grades 9-12
• 2 semesters required, 2 credits; 2 credits maximum
• Students may be eligible to earn 3 college credits for this course through Ivy Tech Community College. Please see page 18 for details.
• Weighted Grade
• Counts as a Directed Elective or Elective for all diplomas

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

Mechanical and Architectural Design *7196*

VOH560/561
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Introduction to Engineering Design
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Mechanical and Architectural Design provides students with a basic understanding of creating working drawings related to manufacturing detailing and assembly as well as a survey of Architectural design focused on the creative design of buildings. Topics include fastening devices, thread symbols and nomenclature, surface texture symbols, classes of fits, and the use of parts lists, title blocks, and revision blocks. From an Architecture perspective, this course covers problems of site analysis, facilities programming, space planning, conceptual design, proper use of materials, and selection of structure and construction techniques.

BIM Architecture *7197*

VOH562/563
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Introduction to Engineering Design
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

BIM Architecture will introduce students to Building Information Modeling (BIM) which is an intelligent 3D model-based process that gives architecture, engineering, and construction professionals the insight and tools to better plan, design, and construct buildings. Students will deepen their skills in 3D CAD and learn to use BIM software to capture and analyze concepts and to prepare client presentations for Commercial Construction.

Architectural Design Capstone *7225*
VOH564/565
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Introduction to Engineering Design, Mechanical and Architectural Design Fundamentals, and BIM Architecture
• Counts as a Directed Elective or Elective for all diplomas

Architectural Design Capstone covers residential design and drafting. Topics include interior space planning, structural design and development of working drawings. The course provides opportunity for students to design a residence using accepted building standards and introduces various construction materials. Students will also learn advanced CAD design topics in architectural design. Completion of the entire course may also provide students the opportunity to understand basic surveying equipment and surveying techniques.

Digital Design Pathway

Principles of Digital Design *7140*
VOH566/567
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Digital Design Graphics *7141*
VOH568/569
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Digital Design
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Vincennes University

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.

Graphic Design and Layout *5550*
VOH372/373
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Digital Design and Digital Design Graphics
• Counts as a Directed Elective or Elective for all diplomas

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

Professional Photography and Videography *7136*
VOH570/571

• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Digital Design and Digital Design Graphics
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

Professional Photography & Videography further develops advanced camera skills and photographic vision. The course introduces special techniques and digital processes while refining printing and processing skills. It will also emphasize good composition and the use of photography as a communication tool. Students will also learn the basics of planning, shooting, editing and post-producing video and sound.

Digital Design Capstone *7246*
VOH572/573
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Digital Design Concentrator Sequence
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Early Childhood Education Pathway

Principles of Early Childhood Education *7160*
VOH574/575
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Early Childhood Education Curriculum *7158*
VOH576/577
• Grades 11-12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Early Childhood Education
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Early Childhood Education Guidance *7159*
VOH578/579
• Grades 11-12

• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Early Childhood Education
• Counts as a Directed Elective or Elective for all diplomas

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

Early Childhood Education Capstone *7259*
VOH580/581
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Early Childhood Education, Early Childhood Education Curriculum, and Early Childhood Education Guidance
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College
• Students may earn CDA certification through this pathway

This course will prepare students to complete the application, CDA exam, and verification process for the Child Development Associate (CDA) credential. Students may also study the physical, social, emotional, cognitive, and moral development of children from conception to age twelve. Theories of child development, biological and environmental foundations, prenatal development, the birth process, and the newborn baby will be discussed. Additionally, students will explore the aspects of early literacy skill development in young children from birth through third grade. Students will explore techniques, technological tools, and other learning opportunities that encourage positive attitudes in children regarding listening, speaking, reading, and writing activities. In the course, students will research, examine, and explore the use of observation in screening and assessment to promote healthy literacy development in early childhood education. Finally, students will be introduced to caring for each exceptional child. This includes theories and practices for producing optimal developmental growth. Students may be required to complete observations and field experiences with children as related to this course.

Fashion and Textiles Pathway

Principles of Fashion and Textiles *7301*
VOH582/583
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas

Principles of Fashion and Textiles prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the fashion industry. This course builds a foundation that prepares students for all aspects of the fashion creation process. Major topics include: Basic clothing construction techniques, pattern alterations, and use of commercial patterns.

Textiles, Apparel, and Merchandising *7302*
VOH584/585
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Fashion and Textiles
• Counts as a Directed Elective or Elective for all diplomas
Textiles, Apparel, and Merchandising provides a comprehensive overview of the textiles, apparel, and merchandising industry specific to fashion related goods including the nature of fashion, raw materials and production, designers, retailers, and supporting services.

Advanced Textiles *7303*
VOH586/587
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Fashion and Textiles and Textiles, Apparel, and Merchandising

• Counts as a Directed Elective or Elective for all diplomas

Advanced Textiles will focus on the study of textiles concerning fiber, yarn, fabric construction, and finishes which affect the selection, use, and care of textiles.

Fashion and Textiles Capstone *7304*
VOH588/589
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Fashion and Textiles, Textiles, Apparel, and Merchandising, and Advanced Textiles
• Counts as a Directed Elective or Elective for all diplomas

Fashion Textile Capstone studies the evolution of Western dress from ancient times to the twentieth century. Emphasis on representative style and change over time. Additionally, this course will focus on the Identification of physical features which affect apparel quality. Analysis of ready-to-wear apparel to identify features which produce desirable aesthetic and functional performance is also covered.

Precision Machining Pathway

Principles of Precision Machining *7109*
VOH590/591
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Recommended Prerequisite: Introduction to Advanced Manufacturing
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Precision Machining Fundamentals *7105*
VOH592/593
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Precision Machining
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Advanced Precision Machining *7107*
VOH594/595
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Precision Machining and Precision Machining Fundamentals
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Precision Machining Capstone *7219*
VOH596/597
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Precision Machining, Precision Machining Fundamentals, Advanced Precision Machining
• Counts as a Directed Elective or Elective for all diplomas
• Qualifies as a Quantitative Reasoning course
• Students may be eligible to earn college credits for this course through Ivy Tech Community College
• Students may earn NIMS certification through this pathway

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. This course develops the theory of programming in the classroom with applications of the program accomplished on industry-type machines. Students will study 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.

Pre-Nursing Pathway

Principles of Healthcare *7168*
VOH214/215
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Medical Terminology *5274*
VOH356/357
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Healthcare Specialist: CNA *7166*
VOH598/599

• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisite: Principles of Healthcare
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College
• Students may earn CNA certficiation through this course

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.

Certified Clinical Medical Assistant (CCMA) ***7164***
VOH612/613
• Grade 12
• 2 semesters required, 2 credits; 2 credits maximum
• Required Prerequisites: Principles of Healthcare, Medical Terminology
• Counts as a Directed Elective or Elective for all diplomas

The Certified Clinical Medical Assistant course will prepare students for the National Healthcare Association CCMA exam. Instruction includes taking and recording vital signs, preparing patients for examination, patient education, and assisting the physician during the exam. The collecting and preparation of laboratory specimens and basic laboratory tests will be covered. Prepares for the administration of medication, venipuncture, ECG, and wound care. Provides a basic understanding of the clinical and administrative duties and responsibilities pertinent to medical offices. Includes instruction in medical correspondence and records, case histories of patients, filing, telephone procedures, appointment scheduling, receptionist duties, and processing mail. Written, verbal and nonverbal communications according to patient needs are covered as well as documentation and associated legal and ethical boundaries.

Healthcare Specialist Capstone ***7255***
VOH604/605
• Grade 12
• 2 semesters required; 6 credits maximum
• Required Prerequisites: Principles of Healthcare, Medical Terminology, and Healthcare Specialist: CNA
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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

Welding Technology Pathway

Principles of Welding Technology ***7110***
VOH210/211
• Grade 11
• 2 semesters required, 2 credits; 2 credits maximum
• Recommended Prerequisite: Introduction to Advanced Manufacturing
• Counts as a Directed Elective or Elective for all diplomas
• Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Shielded Metal Arc Welding *7111*

VOH222/223
- Grade 11
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisite: Principles of Welding Technology
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through Ivy Tech Community College

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.

Gas Welding Processes *7101*

VOH606/607
- Grade 12
- 2 semesters required, 2 credits; 2 credits maximum
- Required Prerequisite: Principles of Welding Technology
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through Ivy Tech Community College

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, fluxcore, 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.

Welding Technology Capstone *7226*

VOH608/609
- Grade 12
- 2 semesters required; 6 credits maximum
- Required Prerequisites: Principles of Welding Technology, Shielded Metal Arc Welding, and Gas Welding Processes
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through Ivy Tech Community College
- Students may earn AWS certification through this pathway

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.