

**GREENFIELD-CENTRAL HIGH SCHOOL**  
**COURSE OF STUDY PLANNING GUIDE**  
**2025-2026**



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

Greenfield-Central High School  
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The content of this guide is subject to change as a result of new information.

# GREENFIELD-CENTRAL HIGH SCHOOL PERSONNEL

Principal	Mr. Dan Walbaum	Ext. 34102	<a href="mailto:dwalbaum@gcsc.k12.in.us">dwalbaum@gcsc.k12.in.us</a>
Assistant Principal	Ms. Nick Ragan	Ext. 34104	<a href="mailto:nick.ragan@gcsc.k12.in.us">nick.ragan@gcsc.k12.in.us</a>
Assistant Principal	Mr. Nathan Bruck	Ext. 34108	<a href="mailto:nbruck@gcsc.k12.in.us">nbruck@gcsc.k12.in.us</a>
Assistant Principal	Mr. Steve Wherry	Ext. 34101	<a href="mailto:swherry@gcsc.k12.in.us">swherry@gcsc.k12.in.us</a>
Athletic Director	Mr. Jared Manning	Ext. 34102	<a href="mailto:jmanning@gcsc.k12.in.us">jmanning@gcsc.k12.in.us</a>
Assistant Athletic Director	Ms. Elizabeth Mercer	Ext. 34302	<a href="mailto:emercer@gcsc.k12.in.us">emercer@gcsc.k12.in.us</a>
School Counseling Director	Mrs. Sarah Graham	Ext. 34201	<a href="mailto:sagraham@gcsc.k12.in.us">sagraham@gcsc.k12.in.us</a>
School Counselors:			
Grade 9-12-A-E	Mrs. Sheleatha Aldridge	Ext.34200	<a href="mailto:saldridge@gcsc.k12.in.us">saldridge@gcsc.k12.in.us</a>
Grade 9-12-F-L	Mrs. Sherri Foster	Ext. 34202	<a href="mailto:sfoster@gcsc.k12.in.us">sfoster@gcsc.k12.in.us</a>
Grade 9-12-M-SL	Mrs. Sarah Knecht	Ext. 34204	<a href="mailto:sknecht@gcsc.k12.in.us">sknecht@gcsc.k12.in.us</a>
Grade 9-12 SM-Z	Mrs. Sarah Graham	Ext. 34201	<a href="mailto:sagraham@gcsc.k12.in.us">sagraham@gcsc.k12.in.us</a>
Counseling Secretary	Mrs. Sarah Hopper	Ext. 34351	<a href="mailto:shopper@gcsc.k12.in.us">shopper@gcsc.k12.in.us</a>
Registrar	Mrs. Stacie Sheffield	Ext. 34205	<a href="mailto:ssheffield@gcsc.k12.in.us">ssheffield@gcsc.k12.in.us</a>
School Social Worker	Ms. Alexa Crowe	Ext. 34206	<a href="mailto:acrowe@gcsc.k12.in.us">acrowe@gcsc.k12.in.us</a>
School Secretary	Mrs. Cary Sible	Ext. 34107	<a href="mailto:cary.sible@gcsc.k12.in.us">cary.sible@gcsc.k12.in.us</a>
Treasurer	Mrs. Christina Watkins	Ext. 34111	<a href="mailto:cwatkins@gcsc.k12.in.us">cwatkins@gcsc.k12.in.us</a>
Attendance Secretary	Mrs. Jennifer True	Ext. 34112	<a href="mailto:jtrue@gcsc.k12.in.us">jtrue@gcsc.k12.in.us</a>
Principal's Secretary	Mrs. Connie Entrekin	Ext. 34100	<a href="mailto:centrekin@gcsc.k12.in.us">centrekin@gcsc.k12.in.us</a>
Athletic Office Secretary	Mrs. Katie Brown	Ext. 34300	<a href="mailto:kbrown@gcsc.k12.in.us">kbrown@gcsc.k12.in.us</a>
Performing Arts Secretary	Mrs. Jennifer Steele	Ext. 34702	<a href="mailto:jsteele@gcsc.k12.in.us">jsteele@gcsc.k12.in.us</a>



**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 and Hancock Career Center. Students follow an eight block schedule.

**Grading Scale**

2024-2025 GCHS Grading Scale			GPA Points	Weighted
Letter	Minimum	Max		
A	3.44	4.00	4.000	4.500
A-	3.25	3.43	3.666	4.166
B+	3.06	3.24	3.333	3.833
B	2.69	3.05	3.000	3.500
B-	2.50	2.68	2.666	3.166
C+	2.31	2.49	2.333	2.833
C	1.94	2.30	2.000	2.500
C-	1.75	1.93	1.666	2.166
D+	1.56	1.74	1.333	
D	1.00	1.55	1.000	
F	0.00	0.99	0.000	

**Marking System – Class Rank and Latin Honors**

**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.

Starting with the class of 2025, G-CHS will implement the Latin Honors system of graduation distinction. The classes of 2025 and beyond will only use Latin Honors and will not be subject to class rank. GPAs will not be rounded for the purpose of Latin Honor awards. The GPA listed in Power School will be used for Latin Honor awards. The Latin Honors GPA cutoffs are as follows:

Summa Cum Laude	4.0 or above
Magna Cum Laude	3.8 -3.9
Cum Laude	3.6 - 3.7

**Course Retake Policy**

Students who receive a D+ or lower in a course may retake the course in order to receive a higher grade and/or remain eligible for a Core 40 diploma with either Academic Honors or Technical Honors and/or to increase their chances of pursuing post-secondary education. Both grades for the course will remain on the student's transcript and only the highest grade obtained will be averaged into the student's grade point average.

**Exception:** Courses failed always remain on the transcript and are always calculated in the GPA. Students who wish to retake a course should communicate this desire with his or her counselor. Students may attempt a retake once per course for grade improvement.

**Withdrawal/Failure Grades**

Anyone who loses credit due to poor attendance, excessive tardiness, 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 2024 Postgraduate Profile**

Four Year Colleges	50.2%
Two Year Colleges	9.4%
Vocational/Technical Schools	8.0%
Post-Secondary (Totals)	67.6%
Military	3.4%
Workforce/Undecided	28.8%

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.

# GENERAL INFORMATION

## 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. 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
<p><b>1</b> * High School Diploma</p>	<p>* Meet the statutorily defined diploma credit and curricular requirements</p> <p>General _____ Core 40 _____ Core 40 with AHD _____ Core 40 with THD _____</p>
<p><b>2</b> * Learn and Demonstrate Employability Skills</p> <p>Students must complete <b>at least one</b> of the Graduation Pathway Options</p>	<p>* <b>Project-Based Learning Experience:</b> 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. <i>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.</i></p> <p>Description/Verification: _____</p> <p>* <b>Service-Based Learning Experience:</b> Integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. <i>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.</i></p> <p>Description/Verification: _____</p> <p>* <b>Work-Based Learning Experience:</b> 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. <i>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.</i></p> <p>Description/Verification: _____</p>
<p><b>3</b> * Postsecondary-Ready Competencies</p> <p>Students must complete <b>at least one</b> of the Graduation Pathway Options</p>	<p>* <b>Honors Diploma</b> AHD _____ THD _____ GPA _____ Credits _____</p> <p>* <b>ACT College Ready Benchmarks</b> (18 in English <b>or</b> 22 in Reading <b>and</b> 22 in Math <b>or</b> 23 in Science) English _____ <b>or</b> Reading _____ <b>and</b> Math _____ <b>or</b> Science _____</p> <p>* <b>SAT College Ready Benchmarks</b> (480 in EBRW and 530 in Math) EBRW _____ Math _____</p> <p>* <b>ASVAB</b> (minimum score of 31) AFQT score _____</p> <p>* <b>State and Industry Recognized Credential or Certification</b> _____</p> <p>* <b>Federally Recognized Apprenticeship</b> _____</p> <p>* <b>CTE Concentrator</b> (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 _____</p> <p>* <b>AP/Dual Credit**</b> (earn C- average in at least 3 courses) _____ Total Average Grade _____ AP Exam scores _____</p> <p>* <b>CLEP Exams</b> (minimum score of 50 on at least 3 subject area exams with at least one being in core content)</p> <p>* <b>Locally Created Pathway</b> that earns approval of State Board of Education _____</p> <p>* <b>Waiver Eligible</b> (must meet criteria for Postsecondary Readiness Competency Waiver)</p>
<p>**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.</p>	

### Course and Credit Requirements

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

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

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 transcribed college credits in dual credit courses from the approved dual credit list.
  - C. Earn two of the following:
    1. A minimum of 3 verifiable transcribed college credits from the approved dual credit list,
    2. 2 credits in AP courses and corresponding AP exams,
    3. 2 credits in IB standard level courses and corresponding IB exams
  - D. Earn a 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.

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

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 transcribed 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.

# 2024-25 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*	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 (Walker)*
PLTW Principles of Engineering*	Interact **	Early Childhood Education NLPS*
Psychology*	National Honor Society**	Education Professions NLPS*
Robotics and Innovation*	Office Cadet**	Employment-(Must complete 75 hrs)**
Student Media Newspaper*	Orchestra*	Governor's Work Ethic Certificate*
Student Media Yearbook*	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)*
<b>*Transcribed Course: Documents teacher verification with a passing grade as well as a student product</b>	<b>*Transcribed Course: Documents teacher verification and student demonstration of employability skills through course completion</b>	<b>*Transcribed Course: Documents teacher verification with a passing grade as well as a student product</b>
	<b>**Non-Transcribed Experience: Requires supervisor verification and a student reflection form to be submitted</b>	<b>**Non-Transcribed Experience: Requires supervisor verification and a student reflection form to be submitted</b>



# NEXT LEVEL PROGRAMS OF STUDY (NLPS) PATHWAYS

## OFFERED AT GREENFIELD-CENTRAL (GC), WALKER CAREER CENTER (WCC), MOUNT VERNON (MV), HANCOCK CAREER CENTER (HCC) & EASTERN HANCOCK (EH)

For more information and to see how NLPS can help fulfill graduation pathway requirements, visit the  
<https://www.in.gov/che/cte/career-pathways-programs-of-study/>

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	Plant & Soil Science 5170	Advanced Life Science: Plants and Soil(L) 5070	Agricultural Research Capstone 7262
Agriscience – Plants or Animals (GC)	Principles of Agriculture 7117	Animal Science 5008	Food Science 5102	Agricultural Research Capstone 7262
Agriscience – Plants or Animals (GC)	Principles of Agriculture 7117	Plant & Soil Science 5170	Food Science 5102	Agricultural Research Capstone 7262
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
Aviation Management (MV)	Principles of Aviation Management 7214	Private Pilot Theory 7217	Aviation Safety & Operations 7207	*Aviation Management Capstone 7218
Biomedical Sciences (GC)	Principles of Biomedical Sciences 5218	Human Body Systems 5216	Medical Interventions 5217	Biomedical Innovations 5219
Business Administration (GC)	Principles of Business Management 4562	Accounting Fundamentals 4524	Advanced Accounting 4522	*Accounting Capstone 7252
Business Administration (GC)	Principles of Business Management 4562	Marketing Fundamentals 5914	Accounting Fundamentals 4524	*Business Administration Capstone 7256
Building and Facilities Maintenance (GC)	Principles of Construction Trades 7130	Building and Facilities Maintenance Fundamentals 7285	Advanced Building and Facilities Maintenance 7286	Building and Facilities Maintenance Capstone 7287
Computer Science (EH)	Principles of Computing 7183	Topics in Computer Science 7351	Computer Science 7352	Computer Science Capstone 7353
Construction Trades: Carpentry (NP)	Principles of Construction Trades 7130	Construction Trades: General Carpentry 7123	Construction Trades: Framing & Finishing 7122	Construction Trades Capstone 7242
Cosmetology (WCC)	Principles of Cosmetology 7330	Cosmetology Fundamentals 7331	Advanced Cosmetology 7332	Cosmetology Capstone 7334

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
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
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
Early Childhood Education (GC + WCC)	Principles of Early Childhood Education 7160	Early Childhood Education Curriculum 7158	Early Childhood Education Guidance 7159	Early Childhood Education Capstone 7259
Education Professions (GC)	Principles of Teaching 7161	Child & Adolescent Development 7157	Teaching & Learning 7162	Education Professions Capstone 7267
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
Human Services (GC online)	Principles of Human Services 7176	Understanding Diversity 7174	Relationships and Emotions 7177	Human Services Capstone 7241
HVAC (GC)	Principles of HVAC 7131	HVAC Fundamentals 7125	HVAC Service 7126	HVAC Capstone 7244
Marketing & Sales (GC)	Principles of Business Management 4562	Marketing Fundamentals 5914	Digital Marketing 7145	*Small Business Operations Capstone 7201
Precision Machining (WCC)	Principles of Precision Machining 7109	Precision Machining Fundamentals 7105	Advanced Precision Machining 7107	Precision Machining Capstone 7219
Pre-Nursing (MV)	Principles of Healthcare 7168	Healthcare Fundamentals 5274	Healthcare Specialist: CNA 7166	Healthcare Specialist Capstone 7255
Pre-Nursing (MV)	Principles of Healthcare 7168	Healthcare Fundamentals 5274	Certified Clinical Medical Assistant (CCMA) 7164	Healthcare Specialist Capstone 7255
Emergency Medical Services (MV)	Principles of Healthcare 7168	Healthcare Fundamentals 5274	Emergency Medical Tech 7165	Healthcare Specialist Capstone 7255
Radio & Television (GC)	Principles of Broadcasting 7139	Audio & Video Production Essentials 7306	Mass Media Production 7307	Radio & TV Broadcasting Capstone 7308
Veterinary Science (EH)	Principles of Veterinary Science 7280	Veterinary Science 7281	Advanced Life Science: Animals 5070	Veterinary Science Capstone 7282
Welding Technology (WCC + MV)	Principles of Welding Technology 7110	Shielded Metal Arc Welding 7111	Gas Welding Processes 7101	Welding Technology Capstone 7226

# 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

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

## **BUSINESS, MARKETING, IT, & ENTREPRENEURSHIP**

4512 Business Math  
4801 Computer Science I  
4540 Personal Financial Responsibility

## **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

## **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

## **SOCIAL STUDIES**

1514 Economics

## **TRADE AND INDUSTRY**

7183 Principles of Computing  
7351 Topics in Computer Science

## 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

# 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/ Vincennes University	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 <b>and</b> Reading
ARH300 Visual Communication I 4086	VISC 115 Intro to Computer Graphics	Program Ready Writing <b>and</b> Reading
ARH301 Visual Communication II 4086	VISC 102 Fundamentals of Imaging	Program Ready Writing <b>and</b> Reading
ARH602/603 AP 2-D Art & Design 4050	ARTS 102 Color & Design Theory I	Program Ready Writing <b>and</b> Reading
BUH 222/223 Accounting Fundamentals	ACCT 100 Basic College Accounting (Vinu.edu)	None
BUH 230/231 Advanced Accounting	ACCT 143 Introduction to Payroll (Vinu.edu)	C or better in ACCT 100
BUH260/261 Principles Business Management 4562	MGMT 101 Introduction to Business (Vinu.edu)	None
ENH410 English 12, Dual Credit 1008	ENGL 111 English Composition	Program Ready Writing <b>and</b> Reading
FCH124/125 Principles of Culinary 7173	HOSP 101 Sanitation & Safety HOSP 102 Basic Food Theory & Skill	Program Ready Writing <b>and</b> Reading HOSP 101 Sanitation & Safety
FCH324/325 Nutrition 7171	HOSP 104 Nutrition	Program Ready Writing <b>and</b> Reading
FCH326/327 Culinary Arts 7169	HOSP 103 Soups, Stocks, and Sauces HOSP 105 Introduction to Baking	HOSP 101 <b>and</b> HOSP 102 HOSP 101 Sanitation & Safety
FCH114/115 Principles of Teaching 7161	EDUC 101 Introduction to Teaching	Program Ready Writing <b>and</b> Reading <b>OR</b> 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	<b>MATH</b> – 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 <b>and</b> HVAC 103 HVAC 103 and BCTI 130
VOH610/611 HVAC Capstone 7244	HVAC 208 Heating Service	HVAC 101 and BCTI 130

# 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	Biomedical Science (BioTech)	ENGT 10100: Biotechnical Studies
Automation and Systems Integration Engineering Technology	Aerospace Engineering (AE)	ENGT 10200: Aerospace Studies
Computer Engineering Technology	Civil Engineering & Architecture (CEA)	ENGT 10300: Exploring Civil Engineering & Architecture
Construction Management Technology	Introduction to Engineering Design (IED)	ENGT 10500: Introduction to Engineering Design
Electrical Engineering Technology	Digital Electronics (DE)	ENGT 10600: Digital Electronics
Energy Engineering Technology	Principles of Engineering (POE)	ENGT 10700: Principles of Engineering
Engineering Technology (at select Polytechnic locations*)	Computer-Integrated Manufacturing (CIM)	ENGT 10800: Computer Integrated Manufacturing
Engineering/Technology Teacher Education	Engineering Design and Development (EDD)	ENGT 10900: Engineering Design and Development
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.



# 2025-26 COURSE SUMMARY

INTERDEPARTMENTAL	
ADH100/101	0520 Peer Tutoring 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
AGH220/221	5008 Animal Science F/S
AGH330/331	5102 Food Science F/S
AGH250	5228 Supervised Agricultural Experience
AGH334/335	5170 Plant and Soil Science F/S
AGH340/341	5070 Advanced Life Science: Animals F/S
AGH350/351	5074 Adv Life Science: Plant & Soil Science 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
BUH230/231	4522 Advanced Accounting F/S
BUH250/251	5914 Marketing Fundamentals F/S
BUH260/261	4562 Principles Business Mgmt F/S
BUH262/263	4562 DC Principles Business Mgmt F/S
BUH270/271	7145 Digital Marketing F/S
BUH456/457	4801 Principles of Computing I F/S
BUH402	4540 Personal Finance

ENGINEERING & TECHNOLOGY	
TEH210/211	7130 Principles Construction Trades F/S
TEH230/231	7285 Building and Facilities Maintenance Fundamentals F/S
TEH240/241	7286 Advanced Building and Facilities Maintenance 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
TEH604/605	4796 Introduction to Adv Manufacturing 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
ENH460	1048 Themes in Lit: Epic Heroes
ENH461	1048 Themes in Lit: Sports Lit
ENH462	1036 Genres of Lit: Sci Fi & Fantasy
ENH464	1074 Critical Thinking
ENH540	1124 Literary Int L202
ENH660/661	1056 AP English Language & Comp F/S
ENH106/107	1012 English as a New Language F/S

FAMILY & CONSUMER SCIENCE	
FCH114/115	7161 Principles Teaching F/S
FCH124/125	7173 Principles Culinary & Hosp F/S
FCH126/127	7173 Dual Credit Principles Culinary & Hosp F/S
FCH130	5364 Interpersonal Relationships
FCH214/215	7157 Child & Adolescent Development F/S
FCH216/217	7162 Teaching & Learning F/S
FCH322/323	7171 Dual Credit Nutrition F/S
FCH324/325	7171 Nutrition F/S
FCH326/327	7169 Culinary Arts F/S
FCH328/329	7169 Dual Credit Culinary Arts F/S
FCH350/351	7301 Principles of Fashion & Textiles F/S
FCH310/311	5366 Human Development & Wellness F/S
FCH401/402	7267 Education Professions Capstone F/S
FCH104/105	7160 DC Principles of Early Childhood Education F/S
FCH576/577	7158 DC Early Childhood Education Curriculum F/S
FCH578/579	7159 DC Early Childhood Education Guidance F/S
FCH580/581	7259 DC Early Childhood Education Capstone F/S

FINE & VISUAL ARTS	
ARH100	4000 Introduction to 2D Art F
ARH101	4004 Advanced 2D Art S
ARH110	4002 Introduction to 3D Art S
ARH111	4006 Advanced 3D Art S
ARH200	4062 Photography
ARH202/206	4060 Drawing I/II
ARH314/316	4060 Drawing III /IV
ARH212/214	4040 Ceramics I/II
ARH312/313	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
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
ARH608/609	4025 ACP Introduction to 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
MAH410	2564 ACP Pre-Calculus: Algebra
MAH411	2566 ACP 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
MUH420	4244 Technical Theater
MUH421	4248 Theater Production

<b>PHYSICAL EDUCATION &amp; HEALTH</b>	
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

<b>SCIENCE</b>	
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
SCH350/351	3044 Earth & Space Science I F/S
SCH340	3092 Astronomy
SCH342	3092 Planetary Science
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

<b>SOCIAL STUDIES</b>	
SOH200/201	1548 World History & Civilization F/S
SOH220/221	1570 Geography & History of the World F/S
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
SOH630/631	0514 Humanities F/S
SOH500	1540 ACP Intro to American Politics

<b>WORLD LANGUAGE</b>	
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
FGH250/251	2042 ACP German II F/S
FGH350/351	2044 ACP German III F/S
FGH 450/451	2046 ACP 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

<b>CAREER &amp; TECHNICAL EDUCATION</b>	
GCH100/101	7139 Principles of Broadcasting F/S
GCH102/103	7306 Audio Video Prod Ess F/S
GCH104/105	7307 Mass Media F/S
GCH401/402	7308 Radio/TV Capstone F/S
GCH504/505	7131 Principles of HVAC F/S
GCH506/507	7125 HVAC Fundamentals F/S
GCH508/509	7126 HVAC Service F/S
GCH610/611	7244 HVAC Capstone F/S

<b>HANCOCK CAREER CENTER-NEW PAL</b>	
HCC214/215	7168 Principles of Health Care F/S
HCC356/357	5274 Medical Terminology F/S
HCC358/359	7165 Emergency Medical Tech F/S
HCC604/605	7255 Healthcare Specialist Capstone F/S
HCC550/551	7310 Principles of Construction Trades F/S
HCC526/527	7123 Construction: Gen Carpentry F/S
HCC528/529	7122 Construction: Framing & Finishing F/S
HCC530/531	7242 Construction Trades Capstone F/S

<b>HANCOCK CAREER CENTER-EASTERN HANCOCK</b>	
HCC518/519	7183 Principles of Computing F/S
HCC520/521	7351 Topics in Computer Science F/S
HCC522/523	7352 Computer Science F/S
HCC524/525	7353 Computer Science Capstone F/S
HCC260/261	7280 Principles of Veterinary Science F/S
HCC262/263	7281 Veterinary Science F/S
HCC346/347	5070 Advanced Life Science: Animals F/S
HCC660/661	7262 Veterinary Science Capstone F/S

<b>HANCOCK CAREER CENTER-MOUNT VERNON</b>	
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
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
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
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

<b>WARREN CAREER CENTER-WALKER</b>	
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
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
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
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
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

# 2023-24 COURSE DESCRIPTIONS

## 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 transcribed 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.

### **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 transcribed 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 transcribed 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.

## **Food Science 5102**

AGH230/231

Not offered 2024-25

- Grade Levels: 10-12
- Required Prerequisite: Principles of Agriculture
- Recommended Prerequisite: Plant and Soil Science or Animal Science
- Credits: 2 semesters required, 1 credit per semester, 2 credits max.
- Fulfills a science requirement for the General Diploma

Food Science is a two semester course that provides students with an overview of food science and the role it plays in the securing of a safe, nutritious, and adequate food supply. A project-based approach is utilized in this course, along with laboratory, team building, and problem solving activities to enhance student learning. Students are introduced to the following areas of food science: food processing, food chemistry and physics, nutrition, food microbiology, preservation, packaging and labeling, food commodities, food regulations, issues and careers in the food science industry.

## **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.

### **Advanced Life Science: Plant and Soil Science 5074**

AGH350/351

- Grade Levels: 11-12
- Required Prerequisite: Principles of Agriculture
- Recommended Prerequisite: Plant and Soil Science (preferred) or Animal Science
- Credits: 2 semesters required, 1 credit per semester, 2 credits max.
- Fulfills a science requirement for all diplomas; counts as a quantitative reasoning course

Advanced Life Science: Plants and Soils is a two semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students study concepts, principles, and theories associated with plants and soils. Knowledge gained enables them to better understand the workings of agricultural and horticultural practices. They recognize how plants are classified, grow, function, and reproduce. Students explore plant genetics and the use of plants by humans. They examine plant evolution and the role of plants in ecology. Students investigate, through laboratories and fieldwork, how plants function and how soil influences plant life.

### **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.

### **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 transcribed 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**

### **Advanced Accounting 4522**

BUH230/230

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Business Management; Accounting Fundamentals
- 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a quantitative reasoning course
- Counts as a directed elective or elective for all diplomas

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

### **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.

### **Principles of Computing 7183**

BUH456/457

- Grades 9-11
- Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
- 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

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.

## **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.

## **BUSINESS MANAGEMENT AND ADMINISTRATION**

### **Principles of Business Management 4562**

BUH260/261

### **DC Principles of Business Management 4562**

BUH262/263

- 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.

### **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.

## **ENGINEERING AND TECHNOLOGY DEPARTMENT**

### **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.

### **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 transcribed 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:

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

## **ENGINEERING**

### **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 transcribed 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 transcribed 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 transcribed 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 transcribed 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.

## **ARCHITECTURE AND CONSTRUCTION**

### **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

This course would be the first in the Building Facilities and Maintenance pathway which is in the Architecture and Construction Career Cluster.

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.

### **Building and Facilities Maintenance Fundamentals 7285**

TEH230/231

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Construction Trades
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

This course would be the second in the Building Facilities and Maintenance pathway which is in the Architecture and Construction Career Cluster.

Building and Facilities Maintenance Fundamentals prepares students to complete basic maintenance tasks like minor construction repairs and be able to repair and/or replace various building materials including flooring, wall covering, hardware, lighting, and plumbing fixtures.

### **Advanced Building and Facilities Maintenance 7286**

TEH240/241

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Construction Trades and Building Facilities and Maintenance
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

This course would be the third in the Building Facilities and Maintenance pathway which is in the Architecture and Construction Career Cluster allowing students to complete the entire pathway at GCHS.

Advanced Building and Facilities Maintenance prepares students to complete more advanced repairs involving a building’s mechanical system including electrical, HVAC, and plumbing.

## **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.

### **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.

## **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 transcribed 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.

**English as a New Language 1012**

ENH106/107

- Grades 9-12
- 2 semesters, 2 credits
- Prerequisite: English proficiency placement test results
- If ENL course work addresses Indiana’s Academic Standards for English/Language Arts and is based on general ELA curriculum and student’s Individualized Learning Plan, up to 8 credits accrued can be counted as the required English/ Language Arts credits for all diplomas.
- Fulfills an English Language Arts requirement for all diplomas

English as a New Language, an integrated English course based on the WIDA English Language Development (ELD) Standards, is the study of language, literature, composition and oral communication for English learners (ELs) so that they improve their proficiency in listening, speaking, reading, writing and comprehension of standard English. Students study English vocabulary used in fictional texts and content-area texts, speak and write English so that they can function within the regular school setting and an English-speaking society, and deliver oral presentations appropriate to their respective levels of English proficiency.

## **FAMILY AND CONSUMER SCIENCE DEPARTMENT**

### **CULINARY ARTS**

#### **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

#### **Dual Credit Principles of Culinary and Hospitality 7173**

FCH126/127

- 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**
  - Ivy Tech dual credit courses in the culinary pathway require students to take and pass the English Knowledge Assessment or current juniors/seniors must have a 2.6 GPA to earn the credit
  - This section is specifically for students who want to enroll in the Ivy Tech dual credit program and earn college credit
  - The grading scale for Ivy Tech can be found below
  - Ivy Tech Grading Scale:
    - A 92%-100% B 84%-91% C 75%-83% D 72%-74% F 71% or lower
  - Semester 1 of Principles of Culinary students will be required to take and pay for the ServSafe Food Handler exam or ServSafe Manager exam proctored during class. <https://www.servsafe.com/>

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

#### **Dual Credit Nutrition 7171**

FCH322/323

- 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, and will be required to take and pass an English knowledge assessment with Ivy Tech.**

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

## **Dual Credit Culinary Arts 7169**

FCH328/329

- 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.

## **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.

## **Principles of Early Childhood Education 7160**

FCH104/105

- Grades 11 -12
- 2 semesters, 2 credits: 2 credits maximum
- Qualifies as the first course in NLPS for Early Childhood Education. This course will allow students to begin the process towards completion of the pathway and the Early Childhood Apprenticeship program.

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 part of this course.

## **7158 Early Childhood Education Curriculum**

FCH576/577

- Grades 11-12
- 2 semesters, 2 credits: 2 credits maximum
- Qualifies as the second course in NLPS for Early Childhood Education. This course will allow students to continue the process towards completion of the pathway and the Early Childhood Apprenticeship program.

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 part of this course.

## **7159 Early Childhood Education Guidance**

FCH578/579

- Grades 11-12
- 2 semesters, 2 credits: 2 credits maximum
- Qualifies as the third course in NLPS for Early Childhood Education. This course will allow students to continue the process towards completion of the pathway and the Early Childhood Apprenticeship program.

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 part of this course.

### **7259 Early Childhood Education Capstone**

FCH580/581

- Grades 11-12
- 2 semesters, 2 credits: 2 credits maximum
- Qualifies as the Capstone course in NLPS for Early Childhood Education. This course will allow students to finalize completion of the pathway and the Early Childhood Apprenticeship program.

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 provided an introduction 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 part of this course.

### **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.

## **EDUCATION PROFESSIONS**

### **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 Capstone 7267**

FCH401/402

- Grade Levels: 11-12
- Required Prerequisite: Principles of Teaching; Child and Adolescent Development, Teaching and Learning
- Credits: 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

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

### **Principles of Fashion and Textiles 7301**

FCH150/151

Not Offered 2025-26

- 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 transcribed 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 transcribed 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 transcribed 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.

### **ACP Introduction to Art History and Visual Culture 4020/ 4024**

ARH608/609

- Recommended Grade(s): 11, 12
- Credits: 1 semester course, 1 credit per semester, 2 credits maximum
- Fulfills fine arts requirement for the Core 40 Academic Honors Diploma
- Weighted Grade
- Counts as a Directed Elective or Elective for all diplomas
- Students may be eligible to earn college credits for this course through IU Kokomo

This course is designed to introduce the non-specialist to the world of art and visual culture. Its emphasis will be on viewing and understanding works of art and visual culture within cultural, thematic, and historical contexts. We will discuss the purposes and themes of art, analyze objects and learn to talk and write about what we see. Learning a new visual vocabulary will enable us to analyze and to understand a variety of different styles, periods, cultures, and media, as well as to become familiar with the terminology used in speaking and writing about art.

### **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 8<sup>th</sup> 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.

### **ACP Pre-Calculus :Algebra**

MAH410

- Grade Levels: 11-12
- Recommended Prerequisite: Geometry and Algebra 2
- Credits: 2 semesters required, 1 credit per semester, 2 credits max.
- Fulfills a math requirement for all diplomas

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.

### **ACP Pre-Calculus:Trigonometry**

MAH411

- Grade Levels: 11-12
- Recommended Prerequisite: Geometry and Algebra 2
- Credits: 2 semesters required, 1 credit per semester, 2 credits max.
- Fulfills a math requirement for all diplomas

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 transcribed 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 transcribed 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 transcribed 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 transcribed 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: MUH132/133

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 transcribed 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

transcribed 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 transcribed 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 transcribed 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 transcribed 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 transcribed 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 transcribed 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 transcribed 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 transcribed 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 2025-26

- 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 transcribed 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**

MUH4204

- 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 transcribed 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 transcribed 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.

## **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 2024-25

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.

### **Advanced Science - Astronomy**

**SCH340**

- Grade Levels: 11-12
- Required Prerequisites: none
- Credits: 1 semester course; 1 credit per semester
- Fulfills a science requirement for all diplomas

Astronomy is the study of the physical nature of objects in the universe and methods used by scientists to understand them. Topics covered in this course include the celestial sphere, orbital mechanics, stars, nebulae, galaxies and cosmology. Current and future NASA projects and astronomical research are a key aspect of the course. This course will make use of the planetarium and culminate in a final project.

### **Advanced Science - Planetary Science**

**SCH342**

- Grade Levels: 11-12
- Required Prerequisites: none
- Credits: 1 semester course; 1 credit per semester
- Fulfills a science requirement for all diplomas

Planetary Science is the study of planets, moons and other celestial bodies. As the most convenient subject of study, this course will place a lot of emphasis on the structure, composition and dynamics of the Earth. We will also build on this to learn how these features and dynamics are alike and different on other planets and how the study of celestial bodies has helped us to better understand the Earth. Topics will include planetary composition, geophysics and plate tectonics, oceanography and atmospheric dynamics, planetary formation and exoplanets. This course will make use of the planetarium and culminate in a final project.

## **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

9 <sup>th</sup> Grade:	PBS – Principles of Biomedical Sciences
10 <sup>th</sup> Grade:	HBS – Human Body Systems
11 <sup>th</sup> Grade:	MI – Medical Interventions
12 <sup>th</sup> 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 transcribed 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.

## **Humanities**

### **SOH60/631**

- Grade Levels: 9-12
- Recommended Prerequisite: Credits: none
- Credits: 1 credit per semester up to 2 credits
- Counts as a directed elective or elective for all diplomas.
- Fills a World Perspectives Course Requirement

A course in humanities provides for the study of content drawn from history, philosophy, literature, languages, and the arts. This course also includes an in-depth study of specific disciplines in these and related subject areas that could include: (1) linguistics; (2) archeology; (3) jurisprudence; (4) the history, theory, and criticism of the arts; (5) the history and philosophy of science; (6) ethics; (7) comparative religions; and (8) other aspects of the social sciences which relate to understanding life and the world. The emphasis of the course work is on developing an understanding of the content of the course and how to apply it to the human environment. Particular attention is given to the relevance of these applications regarding the current conditions of life.

### **ACP Introduction to American Politics 1540 POLS-Y 103**

#### **SOH500**

- Grade Levels: 12
- Recommended Prerequisite: Credits: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills the government requirement for all diplomas

Introduction to the nature of government and the dynamics of American politics. Origin and nature of the American federal system and its political party base.

### **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 transcribed 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 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 transcribed 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 8<sup>th</sup> 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.

## **ACP German II, III, IV**

FGH 250/251, FGH350/350, FGH 450/451

- Grade Levels: 10-12
- Required Prerequisites: successful completion of the previous year of German
- Credits: 2 semester course; 1 credit per semester
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

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

## **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**

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 TV Broadcasting Capstone 7308**

GCH401/402

- Grade Levels: 11-12
- Required Prerequisites: Principles of Broadcasting; Audio and Video Production Essentials; Mass Media Production
- Credits: 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective for all diplomas

This course will cover a variety of domains further building on skills in video production, and broadcast industry practices specific to radio, television, and digital media. Attention will be given to cross-industry synergies, emerging technologies, and the global market for media. Students are highly encouraged to do a video newscast or radio practicum to gain real world experience. In most cases this practicum may be completed through a school-based enterprise.

### **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 transcribed 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

HCC456/457

- 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

HCC214/215

- 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/ Healthcare Fundamentals 5274**

VOH356/357

HCC356/357

- 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.

### **Emergency Medical Tech 7165**

HCC35/359

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Healthcare; Medical Terminology
- 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas.

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

### **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 certification 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

HCC604/605

- 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.

## **Veterinary Technology Pathway**

### **Principles of Veterinary Science 7280**

HCC260/261

- Recommended Grade(s): 9, 10, 11
- Required Prerequisites: None
- Recommended Prerequisites: Introduction to Agriculture, Food, and Natural Resources
- 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

Principles of Veterinary Science provides students with an overview of the small and large animal veterinary industry which includes companion, food, and exotic animals. Principles of Veterinary Science provides students with an overview of common veterinary careers, including: veterinary assistant, veterinary technician, and veterinarian. Students will learn the foundational knowledge necessary for a career working with either large or small animals. Students will also begin developing practical lab skills and an understanding of common veterinary office practices.

### **Veterinary Science 7281**

HCC262/263

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Veterinary Science
- 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

Veterinary Science provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts including: medical terminology, laboratory procedures, clinical examination procedures, and the principles of animal diseases. Students will be introduced to issues associated with working in a veterinary clinic, veterinary clinic management, and veterinary law and ethics.

### **Advanced Life Science: Animals (L) 5070**

HCC346/347

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.

### **Veterinary Science Capstone 7262**

HCC660/661

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Veterinary Science; Advanced Life Science: Animals; Veterinary Science
- 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

The Veterinary Science Capstone builds upon the knowledge and skills developed in the animal and veterinary courses by developing advanced skills that students can apply to the field. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience. Students should explore concepts related to pharmacy and pharmacology, medical math, animal nursing, radiology and ultrasound imaging, and surgical preparation and assisting.

### **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.