



# 2023-2024

## **Course Description Guide**

**North Montgomery  
High School**

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## General Information

North Montgomery High School is a comprehensive high school with a curriculum designed to allow students to complete requirements for graduation as prescribed by the State Board of Education and the North Montgomery Board of Education, as well as to prepare for entry into post-secondary institutions, vocational education, and entry-level employment.

North Montgomery Community School Corporation does not discriminate on the basis of race, color, religion, gender, national origin, including limited English proficiency, military service, age, or disability, in its educational programs, activities, or employment policies as required by the Indiana Civil Rights Law (I.C. 22-9-1), Title VI and VII (Civil Rights Act of 1964), the Equal Pay Act of 1973, Title IX (Educational Amendments), Section 504 (Rehabilitation Act of 1973), and the Americans with Disabilities Act (42 USCS §12101, et. seq.).

Inquiries regarding compliance by the North Montgomery Community School Corporation with Title IX and other civil rights laws may be directed to the Superintendent/Designee at 480 W. 580 N. Crawfordsville, IN, or by telephone at 765-359-2112.

### **A minimum of 40 credits are required to graduate from North Montgomery High School**

Credit: a credit is the value recorded for a semester of high school work successfully completed.

#### **\*Commencement Exercises**

Only those students who have completed all requirements for graduation may participate in Commencement exercises. Students who have not earned a passing grade for the semester in all courses required for graduation will not receive a diploma and will not participate in graduation exercises. There are no exceptions.

If desired, it may be possible for a student to complete their coursework by mid-term (December) of senior year. Availability of this option will depend upon credits earned, graduation requirements, and class sizes. Should a student wish to complete coursework sooner than midterm of senior year, they need to make a request to the school counselor sophomore year when scheduling junior year classes. While we will work with each student to help them reach individual goals, North Montgomery designs their curriculum and class offerings based on a 4-year plan of study, therefore early graduation is not always an option. Please direct specific questions to the Counseling Department.

## Scheduling Process and Timeline

Educational planning starts with the selection of courses in the spring of the 8<sup>th</sup> grade year. North Montgomery High School counselors will distribute information for course selection. All students and their parents should review the information in this booklet so that the courses selected reflect a plan that will give the student a solid foundation for post-secondary career options. **Courses listed in this guide may not be offered every year depending on student interest, teacher availability, graduation requirements, and administrative decisions.**

### Course Scheduling

North Montgomery High School is committed to helping all students schedule courses so that they have every opportunity to take advantage of academic options. Students and parents are encouraged to review all information concerning course selection in a timely fashion so that the best decisions may be made. Counselors and teachers are the best sources of information concerning various classes and academic options. Students and parents should take advantage of this resource when making decisions. Students will receive initial information about course selection between January and March of each year.

### Course Schedule Changes

Due to the tremendously complicated process of scheduling the number of students in our school, changes cannot be made for specific teachers, lunch periods, or changes of mind. Counselors may need to change schedules in the following instances: to balance class counts, correct data processing errors, to allow a student to retake a failed class, to meet credit requirements, to meet requirements of a particular college program (seniors), to add a class in place of an 'out' if the addition does not overload the class count (seniors), and conflict in a schedule. **Classes dropped after 3 days into the semester will result in a WF.**

### Tentative Scheduling Timeline\*

**January-February 2023:** Counselors will conduct scheduling presentations and will meet with students to discuss class options. Information will be given to students and should be brought home to share with parents. A parent signature is highly recommended and may be required for students to take certain classes.

**February 23, 2023:** Last day for students to request a change to their course scheduling sheets. Course offering decisions are made based on student choices for classes. Requests for changes between February 23 and May 12 will be honored only if seats are available in a class.

**May (date TBD) 2023:** Student schedules will be distributed. Students can request changes to their schedules, but will only be accommodated if seats are available in the class(es) requested.

**May 12, 2023:** Last day for students to request schedule changes of any kind, and can only be honored if class size permits.

Counselors will adjust schedules in **June** for academic purposes, such as the failure of a class required for graduation. Support class placements will also be finalized and placed into schedules, as appropriate.

\*This tentative timeline may be altered or delayed based upon unforeseen factors that arise.

## Dual Credit Opportunities

In order to receive college credit, students must meet the criteria set forth by the individual college/university, apply by the deadline, and pay any applicable fees. If students do not meet the testing criteria for college credit or do not want to pay the fee for college credit, they may remain in the class for high school credit only. This chart reflects classes that have been offered in the past. We cannot guarantee that they will be offered every year and are subject to changes by the postsecondary institution.

<b>NMHS Course</b>	<b>College Course</b>	<b>Qualification Scores Required</b>	<b>Cost *</b>	<b>Counts toward AHD</b>	<b>Counts Toward THD</b>
Precalculus, Hon	Ivy Tech MA 136	Yes	Free	X	
Trigonometry, Hon	Ivy Tech MA 137	Yes	Free	X	
Chemistry II	Indiana University CHEM 101 CHEM 121	2.7 GPA	\$125^ (5 cr hr class)	X	
AP Calculus	Indiana University MATH- M 211	2.7 GPA	\$100^ (4 cr hr class)	X	
Animal Science	Ivy Tech AGRI 103	No	Free	X	X
Agribusiness Management	Ivy Tech AGRI 102	No	Free	X	X
Horticultural Science	Ivy Tech AGRI 116	No	Free	X	X
Landscape Management	Ivy Tech AGRI 164	No	Free	X	X
Advanced Life Science, Animals	Ivy Tech AGRI 107	No	Free	X	X
Principles of Agriculture	Ivy Tech AGRI 100	No	Free	X	X
Education Professions Year 1	Ivy Tech EDUC 101 EDUC 121	Yes	Free	X	X
Education Professions Year 2	EDUC 233	Yes	Free	X	X
Introduction to Engineering (IED)	Ivy Tech DESN 101	No	Free	X	X
Principles of Industry 4.0	Ivy Tech SMDI 110	No	Free	X	X

Smart Manufacturing					
Robotics Design and Innovation	Ivy Tech SMDI 111	Prereq: SMDI 100	Free	X	X
Automotive Services Year 1	Ivy Tech AUTI 100, 111,145, 121, 122	No	Free	X	X
Automotive Services Year 2	Ivy Tech AUTI 131 AUTI 141	Prereq: Year 1	Free	X	X
Cyber Security & IT Support Year 1	Ivy Tech SDEV 120 INFM 109 IVYT 111 ENGL 111 ITSP 132,134,136 PSYCH 101	Yes	Free	X	X
Cyber Security & IT Support Year 2 (tentative)	Ivy Tech NETI 104 CSIA 105 ECON 101 ITSP 175 SVAD 111,121	Prereq: Year 1	Free	X	X
Cosmetology Year 1 Freestyle Academy	Vincennes University COSMO 100, 150	No	Free	X	X
Cosmetology Year 2 Freestyle Academy	Vincennes University COSMO 200, 250	Prereq: Year 1	Free	X	X
Criminal Justice Year 1	Ivy Tech CRIM 101, 103, 105, 110, 113, 130	Yes	Free	X	X
Criminal Justice Year 2	Ivy Tech CRIM 120, 134	Prereq: Year 1	Free	X	X
Fire and Rescue Year 1	Ivy Tech Indianapolis HSPS 102, 106,122,165,167	Yes	Free	X	X
EMT	Ivy Tech Indianapolis PARM 102, HLHS100,101,102	Yes	Free	X	X
Pre-Nursing (CNA) Year 1	Ivy Tech HLHS 100, 101, 102, 107, 113	Yes	Free	X	X
Pre-Nursing Year 2	Ivy Tech HLHS 105, 122, 125	Prereq: Year 1	Free	X	X
Ivy Tech Business	Ivy Tech BUSN 101, 105, 201	Yes	Free	X	X

Administration Year 1	ENGL 111 PSYC 101 BOAT 207 IVYT 111				
Ivy Tech Business Administration Year 2	Ivy Tech BUSN 202, 207 ACCT 101 ECON 101	Prereq: Year 1	Free	X	X
Precision Machining Year 1	Vincennes University PMTD 105,110, 110L,116,115,120	Yes	Free	X	X
Radio and Television Year 1	Vincennes University BCST 102 BCST 120 BCST 140	Yes	Free	X	X
Radio and Television Year 2	Vincennes Univ. BCST 206	Prereq: Year 1	Free	X	X
Welding Technology Year 1	Vincennes University WELD 102 WELD 103 WELD 107	Yes	Free	X	X
Welding Technology Year 2	Vincennes University WELD 104 WELD 105 WELD 106	+WELD 105 has a prerequisite of C or higher in WELD 102	Free	X	X
HVAC Year 1	Ivy Tech HVAC 100, 101, 103, 202, 211 INDT 113	Yes	Free	X	X

\* = Students in their junior or senior year with a GPA of 2.6 or higher are exempt from test score requirements in areas designated with a \*.

^= Students on free/reduced lunch do not pay Indiana University fees.

## Core 40 Designation

<b>English/Language Arts</b>	<b>8 Credits</b>
	Includes a balance of literature, composition, and speech English 9 – 12 fulfills this requirement
<b>Mathematics</b>	<b>6 Credits</b>
	2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II Students must take a math or quantitative reasoning course each year in high school. 6 math credits must be earned in grades 9-12.
<b>Science</b>	<b>6 Credits</b>
	2 credits: Biology I 2 credits: Chemistry I, 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>Physical Education</b>	<b>2 Credits</b>
<b>Health &amp; Wellness</b>	<b>1 Credit</b>
<b>Directed Electives</b>	<b>5 Credits</b>
	World Languages Fine Arts: Music, Theatre, Visual Arts Career/Technical: Agriculture, Health, Manufacturing, etc.
<b>Electives</b>	<b>6 Credits</b>
	College and Career Pathway courses recommended
<b>TOTAL</b>	<b>40 credits</b>



## Core 40 with Academic Honors Designation

<b>English/Language Arts</b>	<b>8 credits</b>
	Includes a balance of literature, composition, and speech English 9 – 12 fulfills this requirement
<b>Mathematics</b>	<b>8 credits</b>
	2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II 2 credits: Any core 40 math course Students must take a math or quantitative reasoning course each year in high school. Students must earn at least 6 math credits while in grades 9-12.
<b>Science</b>	<b>6 credits</b>
	2 credits: Biology I 2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 credits</b>
	2 credits: Geography/History of the World 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics
<b>World Languages</b>	<b>6 – 8 credits</b>
	Six (6) credits in a single world language or four (4) credits in each of two (2) different world languages
<b>Fine Arts</b>	<b>2 credits</b>
	Visual Arts or Performing Arts
<b>Physical Education</b>	<b>2 credits</b>
<b>Health &amp; Wellness</b>	<b>1 credit</b>
<b>Electives</b>	<b>6-8 credits</b>
	Core 40 courses/credits which will enhance or support the academic career sequence of the student's graduation plan
<b>Grade Requirements</b>	- Earn a grade of a "C-" or better in courses that will count toward the diploma - Have a grade point average of a "B" (3.00) or better
	Complete <b>one</b> of the following: A. Earn 4 credits in 2 or more AP courses and take the corresponding AP exams B. Earn 6 verifiable transcribed college credits in dual credit courses from approved dual credit list C. Complete the following two requirements: 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, D. Earn a total score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on EBRW. E. Earn an ACT composite score of 26 or higher and complete written section
<b>TOTAL</b>	<b>47 credits</b>

## Core 40 with Technical Honors Designation

<b>English/Language Arts</b>	<b>8 credits</b>
	Includes a balance of literature, composition, and speech English 9 – 12 fulfills this requirement
<b>Mathematics</b>	<b>6 credits</b>
	2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II Students must take a math or quantitative reasoning course each year in high school. 6 math credits must be earned in grades 9-12.
<b>Science</b>	<b>6 credits</b>
	2 credits: Biology I 2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 credits</b>
	2 credits: Geography/History of the World 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics
<b>College &amp; Career Pathways</b>	<b>6 or more credits</b>
	Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and <b>one</b> of the following: 1. State approved, industry recognized certification or credential, or 2. Pathway dual credits from the approved dual credit list resulting in six (6) transcribed college credits
<b>Physical Education</b>	<b>2 credits</b>
<b>Health &amp; Wellness</b>	<b>1 credit</b>
<b>Electives</b>	<b>6 or more credits</b>
	Core 40 courses/credits which will enhance or support the College & Career Pathway of the student's graduation plan which may include World Languages, Fine Arts, or other academic courses
<b>Grade Requirements</b>	- Earn a grade of a "C-" or better in courses that will count toward the diploma - Have a grade point average of a "B" (3.00) or better
<b>Other Requirements</b>	Complete <b>one</b> of the following: 1. Earn 4 credits in 2 or more AP courses and take the corresponding AP exams 2. Earn 6 verifiable transcribed college credits in dual credit courses from approved dual credit list 3. A minimum of 3 verifiable transcribed college credits from the approved dual credit list <u>and</u> 2 credits in AP courses and corresponding AP exams, 4. Earn a total score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on EBRW. 5. Earn an ACT composite score of 26 or higher and complete written section. 6. Earn the following scores or higher on WorkKeys: Workplace Documents Level 6, Applied Math Level 6, <u>and</u> Graphic Literacy Level 5. 7. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, and Math 75 .
<b>TOTAL</b>	<b>47 credits</b>

## Quantitative Reasoning Courses

A quantitative reasoning course is a high school course that advances a student's ability to apply mathematics in real world situations and contexts and that deepens a student's understanding of high school mathematics standards. The Indiana Department of Education will provide an annual review to determine the high school courses that meet these criteria.

- For the Core 40, Academic Honors, and Technical Honors diplomas, students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.
- For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.

The following courses satisfy the Mathematics or Quantitative Reasoning requirement and have been offered at NMHS in the past.

### Agriculture

Agribusiness Management  
Advanced Life Science, Animals

### Social Studies

Economics

### Business

Personal Financial Responsibility  
Advanced Accounting

### Science

Chemistry I  
Chemistry II  
Integrated Chemistry/Physics (ICP)  
AP Physics I

### Engineering and Technology

Principles of Engineering

## Fine Arts Credits

Students are required to earn 2 Fine Arts credits for an Academic Honors Diploma. The following courses fulfill the Fine Arts credit requirement.

- All courses listed under the categories of *Fine Arts: Music* and *Fine Arts: Visual Arts*
- Student Media (Yearbook), listed under the *English* category

## Graduation Pathways

Graduation Requirement	Pathway Options
<b>① High School Diploma</b>	Meet the statutorily defined diploma credit and curricular requirements
<b>② Learn and Demonstrate Employability Skills</b>	<p>Students must complete at least <b><u>one</u></b> of the following:</p> <ul style="list-style-type: none"> <li>• Project-Based Learning Experience, OR</li> <li>• Service-Based Learning Experience, OR</li> <li>• Work Based Learning Experience</li> </ul>
<b>③ Postsecondary-Ready Competencies</b>	<p>Students must complete at least <b><u>one</u></b> of the following:</p> <ul style="list-style-type: none"> <li>• Academic or Technical Honors Diploma Designation</li> <li>• ACT- College Ready Benchmarks</li> <li>• SAT- College Ready Benchmarks</li> <li>• ASVAB – Earn at least minimum AFQT score</li> <li>• State/Industry Recognized Credential or Certification</li> <li>• Federally Recognized Apprenticeship</li> <li>• Career-Technical Education Concentrator</li> <li>• AP/Dual Credit courses or CLEP Exams (at least 3)</li> <li>• Locally Created Pathway</li> </ul>

## Weighted Grades Tier Classification\*

<b>Tier 1 Courses:</b> No Additional Weight	<b>Tier 2 Courses*:</b> Additional Weight: <b>+0.5</b>	<b>Tier 3 Courses*:</b> All AP Offerings Additional Weight: <b>+1</b>
All courses not listed as Tier 2 or Tier 3.	Honors English 9 Honors English 10 Honors Algebra I (NMMS) Honors Algebra 2 Honors Geometry PreCalculus: Algebra Hon PreCalculus: Trig Hon Honors Biology I Honors Chemistry I PLTW MI PLTW BI Chem II (ACP) Advanced Accounting Honors English 12/Ivy Tech ENGL 111 Spanish IV	AP Calculus AB AP Calculus BC AP Human Geography AP US History AP Physics AP Art History

- \*Only grades of a C- or higher will receive additional weight. If a student transfers from another school, only those courses offered at North Montgomery High School will be weighted.
- This chart represents current courses and is subject to change.

## Latin Recognition

North Montgomery High School does not rank students and will instead recognize outstanding academic performance through a Latin system of honor based on the criteria listed below. Latin recognition will be determined after the final semester of the senior year. This system gives students the incentive to take rigorous coursework while giving them flexibility to explore their unique areas of interest without concern for the impact of class rank. North Montgomery Community School Corporation believes this is the best way to prepare students for life beyond high school. Many schools observe this policy, so the impact on college admissions or scholarship consideration is immaterial. However, in the rare event that a class rank is **required** for admission into an institution or consideration for a specific scholarship, the Student Services department can provide an unofficial class ranking. The student must provide evidence that providing a rank is a requirement.

### **Summa Cum Laude- “with highest distinction”**

- 4.2+ weighted GPA
- Academic or Technical Honors Diploma
- Complete 8 Tier 2 or 3 courses

### **Magna Cum Laude- “with great distinction”**

- 4.1+ weighted GPA
- Academic or Technical Honors Diploma
- Complete 6 Tier 2 or 3 courses

### **Cum Laude- “with distinction”**

- 4.0+ weighted GPA
- Academic or Technical Honors Diploma
- Complete 4 Tier 2 or 3 courses

## Academic Letter Criteria

The Parent Advisory Council (PAC) sponsors our Academic Letter recognition program. Details are currently under review and will be provided as soon as they are determined.

## NMHS Course Offerings

This guide is intended to provide information on anticipated course offerings for the 2023-2024 school year. Circumstances arise that may require adjustment; therefore we cannot guarantee the availability of each specific course. Students may also have the opportunity to enroll in online courses with counselor approval.

### Alternative PE I & II Credit

The Indiana State Board of Education has granted local school districts the flexibility to award students Physical Education (PE) credit by demonstrating proficiency through alternative means. Students who demonstrate mastery of the Indiana Academic Standards for PE, as documented by a coach, sponsor, or director, may be eligible for PE credit. North Montgomery will begin to utilize this option with the main purpose of creating scheduling flexibility and providing further opportunities for athletic conditioning. By granting PE through alternative means, freshman athletes will have room in their schedules to participate in Strength and Conditioning class (Weight Training) during the regularly scheduled school day. This will help our student-athletes develop good fitness habits for improved performance and injury prevention. To be eligible to earn PE credit through athletic participation, freshman must sign up for a full year of Strength and Conditioning.

School Counselors will provide additional information, including an alternative PE credit application, during scheduling of freshman classes.

### Postsecondary Planning

Students are encouraged to take a strong course of study to prepare for the various options after high school. Students who wish to attend a postsecondary institution are especially encouraged to begin looking at admissions requirements so they can make informed decisions about class selections. Indiana colleges and universities typically require applicants to have met, at a minimum, all Indiana Core 40 Diploma requirements. Many colleges and universities prefer that applicants exceed those requirements.

### Outside Credit Approval

While North Montgomery offers a wide variety of credit opportunities, we recognize that there are circumstances where a student wishes to earn credit in a class outside of our regular course offerings. It is essential that students communicate their plans with their School Counselor so that an appropriate course of study can be achieved.

Students must seek approval for such a course by completing an *Outside Credit Approval Form*, obtained from the School Counseling department. The form must be completed and approved prior to registering for the class. Unless otherwise specified, NMHS is not responsible for any fees associated with any course taken outside of our normal offerings.

## West Central CTE

West Central Indiana Career and Technical Education (CTE) is a co-op of North Montgomery, Crawfordsville, Western Boone, and Southmont School Corporations. Through this partnership, NMHS students have access to a wide range of CTE programs that can lead to workplace readiness or college preparation in a high-demand field.

Additional class details can be found in this guide within the corresponding Career Cluster sections. West Central Education programs currently include:

- Automotive Services
- Construction Trades
- Cosmetology
- Cybersecurity
- Fire & Rescue
- Pre-Nursing (CNA)
- Welding Technology
- Business Administration
- Criminal Justice
- EMT
- HVAC
- Precision Machining
- Radio/TV

## Career Cluster: CTE

### PERSONAL FINANCIAL RESPONSIBILITY

GRADE 11, 1 CREDIT

4540

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

- Recommended Prerequisites: None
- Counts as a Directed Elective or Elective for all diplomas.
- Qualifies as a quantitative reasoning course.

### PREPARING FOR COLLEGE AND CAREERS

GRADE 9, 1 CREDIT

5394

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

reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

- Counts as a Directed Elective or Elective for all diplomas

## Career Cluster: Advanced Manufacturing

### WEST CENTRAL CTE

#### WELDING TECHNOLOGY YEAR 1      GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM,

Dual College Credit, Vincennes University

##### Principles of Welding Technology: 7110

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.

- Counts as a Directed Elective or Elective for all diplomas.

##### Shielded Metal Arc Welding: 7111

This course 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.

- Counts as a Directed Elective or Elective for all diplomas.

##### Gas Welding Processes: 7101

A course 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 will have the option to introduce students to both MIG and TIG welding rather than focusing solely on MIG welding.

- Counts as a Directed Elective or Elective for all diplomas.

### WEST CENTRAL CTE

#### WELDING TECHNOLOGY YEAR 2      GRADE 12, 6 CREDITS, FULL YEAR PROGRAM

Dual College Credit, Vincennes University

##### Welding Technology Capstone: 7226

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

- Counts as a Directed Elective or Elective for all diplomas.

## **WEST CENTRAL CTE**

### **PRECISION MACHINING YEAR 1      GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Vincennes University

#### **Principles of Precision Machining: 7109**

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### **Precision Machining Fundamentals: 7105**

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### **Advanced Precision Machining: 7101**

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.

- Counts as a Directed Elective or Elective for all diplomas

## **PRINCIPLES OF INDUSTRY 4.0 & DIGITAL MANUFACTURING   GRADES 9-12, 2 CREDITS**

### **7220**

Principles of Industry 4.0 introduces students to the Industrial Internet of Things (IIoT). Students will explore industry 4.0 technologies such as artificial intelligence (AI), human to robot collaboration, big data, safety, electrical, sensors, digital integration, fluid power, robot operation, measurement, CAD, CNC, additive manufacturing, print reading, and technical mathematics. Students will complete hands-on labs, virtual simulations, projects, and critical thinking assignments to help prepare for SACA C-101 Certified Industry 4.0 Associate I - Basic Operations certification exam.

- Counts as a Directed Elective or Elective for all diplomas

**ROBOTICS DESIGN AND INNOVATION****GRADES 10-12, 2 CREDITS****4728**

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. The course will prepare students for the SACA, C-102 Certified Industry 4.0 Associate

- Required Prerequisite: Principles of Industry 4.0 and Digital Manufacturing
- Counts as a Directed Elective or Elective for all diplomas
- 

**SMART MANUFACTURING SYSTEMS****GRADES 11-12, 2 CREDITS****7100**

Smart Manufacturing Systems will deepen students' technical skills by studying the electrical system required to support an Industry 4.0 manufacturing system and building on skills learned in Principles of Industry 4.0 and Robotics Design and Innovation. Topics include Industry 4.0 technologies such as data analytics, cyber security, and smart sensors. Students will work on a 4-6 student team to build a working prototype of an Industry 4.0 system. Highlights include: Variable Frequency Drives, PLC troubleshooting, Cyber Security, Smart Sensors, and Smart network communications

- Required Prerequisite: Principles of Industry 4.0 and Digital Manufacturing, Robotics Design and Innovation
- Counts as a Directed Elective or Elective for all diplomas

**Career Cluster: Agriculture****PRINCIPLES OF AGRICULTURE****GRADES 9-12, 2 CREDITS****DUAL COLLEGE CREDIT: IVY TECH****7117**

Principles of Agriculture is a two-semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding and the role of agriculture in the United States and globally. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, as well as careers.

- Counts as a Directed Elective or Elective for all diplomas

**ADVANCED LIFE SCIENCE, ANIMALS****GRADES 11-12, 2 CREDITS****DUAL COLLEGE CREDIT: IVY TECH****5070**

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

practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture.

- Required Prerequisites: Animal Science
- Fulfills a science requirement for all diplomas
- Counts as a quantitative reasoning course

### **AGRIBUSINESS MANAGEMENT**

**GRADES 11-12, 2 CREDITS**

#### **DUAL COLLEGE CREDIT: IVY TECH**

5002

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

- Counts as a Directed Elective or Elective for all diplomas.
- Counts as a quantitative reasoning course
- Instructor Approval Required

### **ANIMAL SCIENCE**

**GRADES 10-12, 2 CREDITS**

#### **DUAL COLLEGE CREDIT: IVY TECH**

5008

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

- Required Prerequisite: Principles of Agriculture
- Fulfills a Directed Elective or Elective for all diplomas
- Fulfills a science course requirement for all diplomas

### **HORTICULTURAL SCIENCE**

**GRADES 10-12, 2 CREDITS**

#### **DUAL COLLEGE CREDIT: IVY TECH**

5132

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

- Required Prerequisite: Principles of Agriculture
- Counts as a Directed Elective or Elective for all diplomas.
- Fulfills a life science or physical science requirement for the General Diploma only

**LANDSCAPE AND TURF MANAGEMENT**  
**DUAL COLLEGE CREDIT: IVY TECH**

**GRADES 10-12, 2 CREDITS**

7115

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

- *Required Prerequisite: Principles of Agriculture*
- Counts as a Directed Elective or Elective for all diplomas.

**SUPERVISED AGRICULTURAL EXPERIENCE**

**GRADES 9-12, 1 CREDIT, SUMMER**

5228

*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 should experience and apply what is learned in the classroom, laboratory, and training site to real-life situations. Students work closely with their agricultural science and business teacher(s), parents, and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session.

- Counts as a Directed Elective or Elective for all diplomas.

**Career Cluster: Architecture and Construction**

**WEST CENTRAL CTE:**

**HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) YEAR 1 GRADE 11-12,**  
**6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Ivy Tech

**Principles of HVAC: #7131**

Principles of Heating, Ventilation and Air Conditioning (HVAC) This 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.

- Fulfills a Directed Elective or Elective for all diplomas

**HVAC Fundamentals: # 7125**

HVAC Fundamentals introduces fundamentals applicable to the heating and refrigeration phases of air conditioning. Includes types of units, parts, basic controls, functions, and applications. Emphasizes practices, tool and meter use, temperature measurement, heat flow, the combustion process and piping installation practices. Covers the basic sequence of operation for gas, oil and electric furnaces. Introduction to compression systems used in mechanical refrigeration including the refrigeration cycle and system components. Introduces 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.

- Fulfills a Directed Elective or Elective for all diplomas

#### HVAC Service: # 7126

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.

- Fulfills a Directed Elective or Elective for all diplomas

#### **WEST CENTRAL CTE:**

#### **CONSTRUCTION TRADES YEAR 1      GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

#### Principles of Construction Trades: #7130

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Construction Trades: General Carpentry: #7123

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Construction Trades: Framing and Finishing: # 7122

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.

- Counts as a Directed Elective or Elective for all diplomas.

## **INTRODUCTION TO CONSTRUCTION**

**GRADES 10-12, 1 CREDIT**

4792

*Introduction to Construction* is a course that will offer hands-on activities and real world experiences related to the skills essential in residential, commercial and civil building construction. During the course students will be introduced to the history and traditions of construction trades. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students are introduced to blueprint reading, applied math, basic tools and equipment, and safety. Students will demonstrate building construction techniques, including concrete and masonry, framing, electrical, plumbing, dry walling, HVAC, and painting as developed locally in accordance with available space and technologies. Students learn how architectural ideas are converted into projects and how projects are managed during a construction project in this course. Students study construction technology topics such as preparing a site, doing earthwork, setting footings and foundations, building the superstructure, enclosing the structure, installing systems, finishing the structure, and completing the site. Students also investigate topics related to the purchasing and maintenance of structures, special purpose facilities, green construction and construction careers.

- Counts as a Directed Elective or Elective for all diplomas.

## **INTRODUCTION TO HOUSING & INTERIOR DESIGN**

**GRADES 10-12, 1 CREDIT**

5350

An introductory course essential for those students interested in academic enrichment or a career within the housing, interior design, or furnishings industry. This course addresses the selection and planning of designed spaces to meet the needs, wants, values and lifestyles of individuals, families, clients, and communities. Housing decisions, resources and options will be explored including factors affecting housing choices and the types of housing available. Developmental influences on housing and interior environments will also be considered. Basic historical architectural styling and basic furniture styles will be explored as well as basic identification of the elements and principles of design. Design and space planning involves evaluating floor plans and reading construction documents while learning to create safe, functional, and aesthetic spaces. Presentation techniques will be practiced to thoroughly communicate design ideas. Visual arts concepts will be addressed. A project based approach will be utilized requiring higher-order thinking, communication, leadership and management processes as housing and interior design content is integrated into the design of interior spaces while meeting specific project criteria. This course provides the foundation for further study and careers in the architecture, construction, housing, interior design, and furnishings industries.

- Counts as a Directed Elective or Elective for all diplomas.

### **Career Cluster: Arts, AV Tech, and Communications**

## **WEST CENTRAL CTE**

### **RADIO AND TELEVISION YEAR 1**

**GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Vincennes University

Principles of Broadcasting: 7139



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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Audio and Video Production Essentials: 7306

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Mass Media Production: 7307

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.

- Counts as a Directed Elective or Elective for all diplomas.

### **WEST CENTRAL CTE**

#### **RADIO AND TELEVISION YEAR 2**

#### **GRADE 12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Vincennes University

#### Radio & TV Broadcasting Capstone: 7308

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

### **INTRODUCTION TO FASHION AND TEXTILES**

### **GRADES 9-12, 1 CREDIT**

**5380**

*Introduction to Fashion and Textiles* is an introductory course for those students interested in academic enrichment or a career in the fashion, textile, and apparel industry. This course addresses knowledge and skills related to design, production, acquisition, and distribution in the fashion, textile, and apparel arena. The course includes the study of personal, academic, and career success; careers in the fashion, textile, and apparel industry; factors influencing the merchandising and selection of fashion, textile, and apparel goods and their properties, design, and production; and consumer skills. A project-based approach integrates instruction and laboratory experiences including application of the elements and principles of design; selection, production, alteration, repair, and maintenance of apparel and textile products; product research, development, and testing; and application of technical tools and equipment utilized in the industry. Visual arts concepts will be addressed. Direct, concrete mathematics proficiencies will be applied. Service learning and other authentic applications are strongly recommended.

This course provides the foundation for continuing and post-secondary education in fashion, textile, and apparel-related careers.

- Counts as a Directed Elective or Elective for all diplomas.

## Career Cluster: Business, Marketing, and Entrepreneurship

### **PRINCIPLES OF BUSINESS MANAGEMENT**

**GRADES 9-11, 2 CREDITS**

4562

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

- Counts as a Directed Elective or Elective for all diplomas.

### **ACCOUNTING FUNDAMENTALS**

**GRADES 10-12, 2 CREDITS**

4524

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.

- Required Prerequisite: Principles of Business Management
- Counts as a Directed Elective or Elective for all diplomas.

### **ADVANCED ACCOUNTING**

**GRADES 11-12, 2 CREDITS**

4522

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in Introduction to 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.

- Required Prerequisite: Accounting Fundamentals
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

### **BUSINESS LAW AND ETHICS**

**GRADES 11-12, 2 CREDITS**

4560

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



- Counts as a Directed Elective or Elective for all diplomas

## **MARKETING FUNDAMENTALS**

**GRADES 10-12, 2 CREDITS**

5914

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.

- Required Prerequisite: Principles of Business Management
- Counts as a Directed Elective or Elective for all diplomas

## **WEST CENTRAL CTE: BUSINESS ADMINISTRATION**

**GRADE 11-12, 6 CREDITS, FULL YEAR**

Dual College Credit, Ivy Tech

Eligible Juniors and Seniors will have the opportunity to take courses on the Ivy Tech Crawfordsville campus and work towards the requirements for a technical certificate in business administration.

- Students must have eligible Knowledge Assessment, PSAT, SAT, or ACT scores to participate.
- Students must have their own transportation to Ivy Tech Crawfordsville.
- Counselor approval required.
- Ivy Tech will provide the schedule of classes and counselors will communicate it as soon as they are made aware.

## **Career Cluster: Education and Training**

### **EDUCATION PROFESSIONS YEAR 1**

**GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM DUAL COLLEGE CREDIT IVY TECH**

*Students are responsible for their daily transportation to Pleasant Hill Elementary*

#### **Principles of Teaching: 7161**

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 volunteer experience of a minimum of 20 hours is required for successful 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.

- Counts as a Directed Elective or Elective for all diplomas.

#### **Child and Adolescent Development: 7157**

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Teaching and Learning: 7162

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### EDUCATION PROFESSIONS YEAR 2 GRADE 12, 6 CREDITS, FULL YEAR PROGRAM

*Students are responsible for their daily transportation to Pleasant Hill Elementary*

#### Education Professions Capstone: 7267

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

- Counts as a Directed Elective or Elective for all diplomas.

### Career Cluster: Family and Consumer Sciences/CTE

#### CHILD DEVELOPMENT

GRADES 10-12, 1 CREDIT

5362

*Child Development* is an introductory course that is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It

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

- Counts as a Directed Elective or Elective for all diplomas

## **INTERPERSONAL RELATIONSHIPS**

**GRADES 10-12, 1 CREDIT**

**5364**

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

- Counts as a Directed Elective or Elective for all diplomas.

## **Career Cluster: Health Science**

### **WEST CENTRAL CTE EMS**

**GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

Principles of Health Care: 7168

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.

- Counts as a Directed Elective or Elective for all diplomas.

Medical Terminology: 5274

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Emergency Medical Tech: 7165

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

- Counts as a Directed Elective or Elective for all diplomas.

### **WEST CENTRAL CTE**

#### **PRE-NURSING CNA Year 1**

#### **GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Ivy Tech

#### Principles of Health Care: 7168

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Medical Terminology: 5274

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Healthcare Specialist CNA: 7166

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

- Counts as a Directed Elective or Elective for all diplomas.

## **WEST CENTRAL CTE**

### **PRE-NURSING CNA and EMS Year 2**

### **GRADE 12, 6 CREDITS, FULL YEAR PROGRAM**

#### **Healthcare Specialist Capstone: 7255**

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

- Counts as a Directed Elective or Elective for all diplomas.

## **ANATOMY & PHYSIOLOGY**

### **GRADES 11-12, 2 CREDITS**

5276

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

- Required Prerequisite: Biology I with A or B
- Fulfills a Science course requirement for all diplomas

## **BIOMEDICAL INNOVATIONS**

### **GRADES 11-12, 2 CREDITS**

5219

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

- Required Prerequisites: Principles of the Biomedical Sciences, Human Body Systems, and Medical Interventions
- Counts as a Directed Elective or Elective for all diplomas
- Tier 2 course

## **HUMAN BODY SYSTEMS**

### **GRADES 10-12, 2 CREDITS**

5216

*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.

- Required Prerequisites: Principles of Biomedical Sciences
- Fulfills a science requirement for all diplomas

## **MEDICAL INTERVENTIONS**

**GRADE 11-12, 2 CREDITS**

5217

*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 quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions including vascular stents, cochlear implants, and prosthetic limbs. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. Using 3-D imaging software, students will design and build a model of a therapeutic protein.

- Required Prerequisites: Principles of Biomedical Science & Human Body Systems or Anatomy/Physiology
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a science requirement for all diplomas
- Tier 2 course

## **PRINCIPLES OF BIOMEDICAL SCIENCES**

**GRADES 9-12, 2 CREDITS**

5218

*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.

- Prerequisite: Biology I or concurrent enrollment in Biology I
- Fulfills a science requirement for all diplomas

## **Career Cluster: Hospitality and Tourism**

## **PRINCIPLES OF CULINARY AND HOSPITALITY**

**GRADES 9-12, 2 CREDITS**

7173

*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, this course will help students learn basic principles of sanitation and safety in order to maintain a safe and healthy food service environment. It

presents laws and regulations related to safety, fire, and sanitation and how to adhere to them in the food service operation.

- Counts as a Directed Elective or Elective for all diplomas .

## **NUTRITION**

**GRADES 10-12, 2 CREDITS**

**7171**

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

- Required Prerequisite: Principles of Culinary and Hospitality
- Counts as a Directed Elective or Elective for all diplomas

## **CULINARY ARTS**

**GRADES 11-12, 2 CREDITS**

**7169**

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.

- Required Prerequisite: Principles of Culinary and Hospitality and Nutrition
- Counts as a Directed Elective or Elective for all diplomas

## **Career Cluster: Human Services**

## **WEST CENTRAL CTE**

### **COSMETOLOGY YEAR 1**

**GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

*Dual College Credit, Vincennes University*

#### **Principles of Barbering and Cosmetology: 7330**

Principles of Barbering and 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.

- Counts as a Directed Elective or Elective for all diplomas

#### **Barbering and Cosmetology Fundamentals: 7331**

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

- Counts as a Directed Elective or Elective for all diplomas



### Advanced Cosmetology: 7332

Advanced Cosmetology will emphasize the development of advanced skills in styling, hair coloring, permanent waving, facials, manicuring, chemical texturizing, and hair cutting techniques. Students will also further study anatomy and physiology as it applies to hair care professions. Successful completion of the course requires at least 375 studio hours.

- Counts as a Directed Elective or Elective for all diplomas

### **WEST CENTRAL CTE**

### **COSMETOLOGY Year 2**

### **GRADE 12, 6 CREDITS, FULL YEAR PROGRAM**

*Dual College Credit, Vincennes University*

### Barbering and Cosmetology Capstone: 7334

Barbering and Cosmetology Capstone builds and improves previously developed skills with emphasis on developing individual techniques. Professionalism, shop management, psychology in relation to barbering and cosmetology, and preparation for state board examination are stressed. Successful completion of the course requires at least 375 studio hours.

- Counts as a Directed Elective or Elective for all diplomas

## **Career Cluster: Information Technology**

### **DIGITAL APPLICATIONS AND RESPONSIBILITY**

### **GRADES 9-10, 1 CREDIT**

4528

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

- Counts as a Directed Elective or Elective for all diplomas

### **WEST CENTRAL CTE**

### **CYBER SECURITY AND IT SUPPORT:**

### **GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM, IVY TECH DUAL COLLEGE CREDIT**

Eligible Juniors and Seniors will have the opportunity to take courses on the Ivy Tech Crawfordsville campus in the area of IT Support with a focus on Cybersecurity.

- Students must have eligible Knowledge Assessment, PSAT, SAT, or ACT scores to participate.
- Students must have their own transportation to Ivy Tech Crawfordsville.
- Counselor approval required.



- Ivy Tech will provide the schedule of classes and counselors will communicate it as soon as they are made aware.

## Career Cluster: Law and Public Safety

### WEST CENTRAL CTE

#### CRIMINAL JUSTICE YEAR 1:

#### GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM

Dual College Credit, Ivy Tech

##### Principles of Criminal Justice: 7193

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. It will critically examine the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis.

- Counts as a Directed Elective or Elective for all diplomas.

##### Law Enforcement and Cultural Awareness: 7191

Law Enforcement and Cultural Awareness introduces fundamental law enforcement operations and organization. Includes the evolution of law enforcement at federal, state, and local levels. 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.

- Counts as a Directed Elective or Elective for all diplomas.

##### Courts and Corrections: 7188

Courts and Corrections introduces topics related to the adjudication process in criminal cases, including arraignments and preliminary hearings, suppression hearings, trials, sentencing, juvenile court, and probation and parole. Reviews the role of criminal justice personnel in court processes. This course also examines the American correctional system; the study of administration of local, state, and federal correctional agencies. The examination 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.

- Counts as a Directed Elective or Elective for all diplomas.

### WEST CENTRAL CTE

#### CRIMINAL JUSTICE YEAR 2:

#### GRADE 12, 6 CREDITS, FULL YEAR PROGRAM

##### Criminal Justice Capstone: 7231

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. It will critically examine the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis.

- Counts as a Directed Elective or Elective for all diplomas.

## **WEST CENTRAL CTE**

### **FIRE AND RESCUE YEAR 1: GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Ivy Tech

#### **Principles of Fire Fighting: 7195**

Fire and Rescue introduces students to the various roles that firefighters and emergency services workers play to protect the public from the loss of life and property. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. This course will introduce students to the history, terminology, and basic firefighting skills needed for a beginning firefighter. Additionally students will develop a career plan for a career in public safety; including areas of Fire Science, Homeland Security, and Emergency Medical Services.

- Counts as a Directed Elective or Elective for all diplomas.

#### **Fire Fighting Fundamentals: 7189**

Fire Fighting Fundamentals is for those students who are seeking certification as a firefighter. This course will prepare students for the Hazardous Materials Awareness and Operations certifications and will introduce students to NFPA 1001 which serves as the standard of measurement for all fire fighters in North America. Students will learn the knowledge and hands-on practical skills for managing and controlling a hazardous materials incident required for the certifications. Furthermore, students will study how a fire behaves and will learn the basic firefighting skills needed to extinguish a fire while protecting themselves and other firefighters

- Counts as a Directed Elective or Elective for all diplomas.

#### **Advanced Fire Fighting: 7186**

Advanced Fire Fighting expands upon the principles and techniques of firefighting learned in Fire Fighting Fundamentals. Students will study fire protection systems, firefighter safety and survival. Students will also learn what fire is, the chemical hazards of combustion, and related by-products of fire. Additionally, students will gain a better understanding of fire department organization, administration, operations, and basic strategies and tactics.

- Counts as a Directed Elective or Elective for all diplomas.

## **WEST CENTRAL CTE**

### **FIRE AND RESCUE YEAR 2: GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Ivy Tech

#### **Fire and Rescue Capstone/EMT: 7229**

Fire and Rescue Capstone will prepare students to earn the EMT certification.

- Counts as a Directed Elective or Elective for all diplomas.

## Career Cluster: STEM

### INTRODUCTION TO ENGINEERING DESIGN DUAL COLLEGE CREDIT: IVY TECH

GRADES 9-12, 2 CREDITS

4802

*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 advance from completing structured activities 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.

- Counts as a Directed Elective or Elective for all diplomas.

## Career Cluster: Transportation

### WEST CENTRAL CTE

### AUTOMOTIVE SERVICES YEAR 1: GRADE 11-12, 6 CREDITS, FULL YEAR PROGRAM

Dual College Credit, Ivy Tech

#### Principles of Automotive Services: 7213

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

- Counts as a Directed Elective or Elective for all diplomas.

#### Brake Systems: 7205

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.

- Counts as a Directed Elective or Elective for all diplomas.

#### Steering and Suspensions: 7212

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

- Counts as a Directed Elective or Elective for all diplomas.

## **WEST CENTRAL CTE**

### **AUTOMOTIVE SERVICES YEAR 2: GRADE 12, 6 CREDITS, FULL YEAR PROGRAM**

Dual College Credit, Ivy Tech

#### **Automotive Service Capstone: 7209**

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.

- Counts as a Directed Elective or Elective for all Diplomas

## **INTRODUCTION TO TRANSPORTATION**

**GRADES 9-12 ,1 CREDIT**

4798

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

- Counts as a Directed Elective or Elective for all diplomas.

## **English/Language Arts**

### **CONTEMPORARY LITERATURE**

**GRADES 10-12, 1 CREDIT**

1054

*Contemporary Literature*, a course based on the Indiana Academic Standards for English/Language Arts, is a study of how post-1950s literature from around the world, such as North and South America, Europe and Great Britain, the Middle East, and post-colonial Africa and Asia, addresses contemporary issues. Students examine multiple genres to develop a

sense of how particular genres are used today to represent ideas and events. Students analyze different theories and methods of textual criticism especially theories currently popular. Students analyze how the interpretations and themes of contemporary literature read in this course relate to the time period and to historical issues.

- Recommended Prerequisites: C or higher in English classes taken
- Counts as a Directed Elective or Elective for all diplomas.
- This course will be offered on a rotating basis

## **CREATIVE WRITING**

**GRADES 10-12, 1 CREDIT**

1092

*Creative Writing*, a course based on Indiana's Academic Standards for English/Language Arts and the *Common Core State Standards for English/Language Arts*, is a study and application of the rhetorical (effective) 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.

- *Recommended Prerequisites: C or better in English classes taken, or teacher recommendation*
- Counts as a Directed Elective or Elective for all diplomas.

## **ENGLISH 9**

**GRADE 9, 2 CREDITS**

1002

*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.

- **English 9 Honors (tier 2 course) is available for students seeking a more advanced English opportunity.**
- Fulfills an English/Language Arts requirement for all diplomas

## **ENGLISH 10**

**GRADE 10, 2 CREDITS**

1004

*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.

- **English 10 Honors (tier 2 course) is available for students seeking a more advanced English opportunity.**
- Fulfills an English/Language Arts requirement for all diplomas

**ENGLISH 11****GRADE 11, 2 CREDITS**

1006

*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

- Fulfills an English/Language Arts requirement for all diplomas

**ENGLISH 12****GRADE 12, 2 CREDITS**

1008

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

- Fulfills an English/Language Arts requirement for all diplomas

**ENGLISH 12, Honors/Ivy Tech ENGL 111****GRADE 11-12, 2 CREDITS**

1008

This class is aligned with Ivy Tech ENGL 111. It will count toward 2 required English credits for NMHS students. To be eligible for this section, students must be juniors or seniors with a GPA of 2.6 or higher.

- Due to a transition of class offerings, both juniors and seniors will be eligible for this class in 2023-24.

**GENRES OF LITERATURE****GRADE 9-10, 1 CREDIT**

1036

*Genres of Literature*, a course based on *Indiana's Academic Standards for English/Language Arts* and the *Common Core State Standards for English/Language Arts*, is a study of 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 stronger impact on the culture than others in different historical time periods, and what the most influential genres are in contemporary times.

- Counts as a Directed Elective or Elective for all diplomas
- This course will be offered on a rotating basis

**FILM LITERATURE****GRADES 10-12, 1 CREDIT**

1034



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.

- Counts as an elective for all diplomas

## **STUDENT MEDIA (YEARBOOK)**

**GRADES 10-12, 1-2 CREDITS**

1086

*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.

- *Prerequisite:* A or B in English classes
- Counts as a Directed Elective or Elective for all diplomas
- **Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma.**

## **Fine Arts**

### **Music Course Titles**

## **ADVANCED CHORUS**

**GRADES 10-12, 2 CREDITS**

4188

*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.

- Prerequisite: Permission of Instructor, **Audition Required**
- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all Diplomas

## **CONCERT BAND**

**GRADES 9-12, 2 CREDITS**

4160

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 will 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 **including, but not limited to, concerts, festivals, and athletic events.**

- Students may have the option of participating in Marching Band, Jazz Band, Color Guard, Winter Guard, Winter Drumline and Pit Band in addition to this class.
- Prerequisite: Prior band experience or permission of instructor
- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

### INTERMEDIATE CHORUS

GRADES 9-12, 2 CREDITS

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.

- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

### MUSIC HISTORY AND APPRECIATION

GRADES 9-12, 1 CREDIT

4206

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

- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

### MUSIC THEORY AND COMPOSITION

GRADES 10-12, 1 CREDIT

4208

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.

- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- Students may earn multiple credits of this class with instructor approval.

## **MUSICAL THEATRE**

**GRADES 9-12, 1 CREDIT**

0518

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

- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- Students may earn multiple credits of this class with instructor approval.

## **Visual Arts Course Titles**

### **AP ART HISTORY**

**GRADES 10-12, 2 CREDITS**

4025

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.

- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

### **CERAMICS**

**GRADES 10-12, 1 CREDIT**

4040

*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.

- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- Ceramics II may be offered to those that successfully complete Ceramics I.

## **DRAWING**

**GRADES 10-12, 1 CREDIT**

**4060**

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

- Recommended Prerequisite: Intro to Two Dimensional Art
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

## **FIBER ARTS**

**GRADES 10-12, 1 CREDIT**

**4046**

*Fiber Arts* is a course based on the Indiana Academic Standards for Visual Art. Students in fiber arts 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 fiber art works utilizing processes such as loom and off-loom construction, dyeing, coiling, and stitchery. 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.

- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- Fiber Arts II may be offered to those that successfully complete Fiber Arts I.

## **INTRODUCTION TO 3D ART**

**GRADES 10-12, 1 CREDIT**

**4002**

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

literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

- *Recommended Prerequisites: Introduction to Two-Dimensional Art*
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

## **INTRODUCTION TO 2D ART**

**GRADES 9-12, 1 CREDIT**

**4000**

*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.

- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

## **PAINTING**

**GRADES 10-12, 1 CREDIT**

**4064**

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

- *Recommended Prerequisites: Introduction to Two-Dimensional Art*
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

## **PHOTOGRAPHY**

**GRADES 10-12, 1 CREDIT**

**4062**

*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 dark room 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.

- Required Prerequisites: Visual Communication or Instructor Approval
- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas

## VISUAL COMMUNICATION

GRADES 9-12, 1 CREDIT

4086

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

- Fulfills a Fine Arts requirement for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for all diplomas
- Visual Communication II may be offered to those that successfully complete Visual Communication I.

## Health and Physical Education

### Health Education

## HEALTH & WELLNESS EDUCATION

GRADE 10, 1 CREDIT

3506

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

- ***Required course; fulfills the Health & Wellness requirement for all diplomas***

### Physical Education

## PHYSICAL EDUCATION I

GRADE 9, 1 CREDIT

3542

*Physical Education I* focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to

actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

- **Required course; fulfills part of the Physical Education requirement for all diplomas**

## **PHYSICAL EDUCATION II**

**GRADE 9, 1 CREDIT**

3544

*Physical Education II* focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in four of the following that were not in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

- **Required course; fulfills part of the Physical Education requirement for all diplomas**

## **ELECTIVE PHYSICAL EDUCATION AEROBICS**

**GRADE 10-12, 1 CREDIT**

3560

The content of the class will center on exercise with the total body fitness in mind. Areas of instruction will be exercising for fitness through a variety of aerobic activities including plyometrics, yoga, Pilates, kenpo, core, cardio, circuit, tae bo, and dance.

- *Prerequisites: Physical Education I and II*
- *Counts as an Elective for all diploma types*

## **ELECTIVE PHYSICAL EDUCATION ADVANCED PE-SPORTS**

**GRADE 10-12, 1 CREDIT**

3560

The content of the class will cover a variety of different team sports and will allow students to learn the rules, practice, compete, and have fun.

- *Prerequisites: Physical Education I and II*
- *Counts as an Elective for all diploma types*

## **ELECTIVE PHYSICAL EDUCATION LIFETIME ACTIVITIES**

**GRADE 10-12, 1 CREDIT**

3560

The content of the class will focus on physical activities that can be enjoyed throughout life. Students will learn activities such as pickle ball, corn hole, table tennis, shuffle board, bowling, and spike ball.

- *Prerequisites: Physical Education I and II*
- *Counts as an Elective for all diploma types*

## **ELECTIVE PHYSICAL EDUCATION LIFEGUARDING TODAY**

**GRADE 10-12, 1 CREDIT**

3560

According to American Red Cross standards, a student must be 15 years of age by the last day of class. The student must be a strong swimmer who is capable of performing the front crawl

and breast stroke. **On the first day of class the student must be able to swim 300 yards non-stop and they must be able to surface dive, retrieve a 10-pound brick from 10 feet underwater, re-surface, and swim 20 yards with the brick in a timed drill.** The course will include videos, textbook learning, written testing, land-based skill testing, and in-water skill testing. Two sets of standards will be used. The school grading scale will be used to determine if the student receives a credit for the class. The American Red Cross standards will be used in order to determine certification in CPR for the Professional Rescuer, AED, First Aid, and Life Guarding.

- *Prerequisites: Physical Education I and II*
- *Counts as an Elective for all diploma types*

## **ELECTIVE PHYSICAL EDUCATION STRENGTH AND CONDITIONING**

**GRADE 10-12, 1 CREDIT**

3560

Students will learn the fundamentals of weight training practices and continue to refine their skills as they progress through the course. Geared toward North Montgomery athletes, students will gain strength that will prepare them for competition and reduce the likelihood of injury.

- *Prerequisites: Physical Education I and II*
- *Counts as an Elective for all diplomas*
- **In order to take Strength and Conditioning successive semesters, you must have earned a B- or better the previous Semester. If you fail to earn the necessary grade, you may not enroll in the following semester.**

## **Mathematics**

### **ALGEBRA I**

**GRADE 9, 2 CREDITS**

2520

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

- Fulfills the Algebra I requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.
- Honors Algebra I (tier 2 course) is offered to Grade 8 students that meet selection criteria.

### **ALGEBRA II**

**GRADE 10-12, 2 CREDITS**

2522

*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. The Mathematical Practice Standards apply throughout each course and, together with the content 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.

- *Prerequisite: Algebra I and Geometry*
- Fulfills the Algebra II/Integrated Mathematics III requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas and counts as a Mathematics Course for the General Diploma.
- ***Honor's Algebra II (tier 2 course) is available for students on pace to reach PreCalculus/Trigonometry/Calculus***

## **ANALYTICAL ALGEBRA II**

**GRADE 11-12, 2 CREDITS**

2524

Analytical Algebra II builds on previous work with linear, quadratic and exponential functions and extends to include polynomial, rational, radical, logarithmic, and other functions. Data analysis, 119 Indiana Department of Education High School Course Titles and Descriptions: 2023-2024 statistics, and probability content should be included throughout the course, as students collect and use univariate and bivariate data to create and interpret mathematical models. Additionally, Analytical Algebra II should focus on the application of mathematics in various disciplines including business, finance, science, career and technical education, and social sciences using technology to model real-world problems with various functions, using and translating between multiple representations. 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. This course is not recommended for students interested in pursuing a STEM degree at a four-year institution; this course does not prepare students for Precalculus: Algebra / Precalculus Trigonometry.

- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas.
- If Students use this course to fulfill this credit, the parent and student must sign a [Consent Form](#) notifying the parent and the student that enrollment in Analytical Algebra II may affect the student's ability to attend a particular post-secondary educational institution or enroll in a particular course at a particular post-secondary educational institution because Analytical Algebra II may not align with academic requirements established by the post-secondary educational institution.

## **AP CALCULUS AB**

**GRADE 12, 2 CREDITS**

**ACP DUAL COLLEGE CREDIT: INDIANA UNIVERSITY**

2562

*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.

- Required Prerequisite: Pre-Calculus and Trigonometry
- Counts as a Mathematics Course for all diplomas
- Tier 3 course

## **AP CALCULUS BC**

**GRADE 12, 2 CREDITS**

2572

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 A.

- Required Prerequisite: Calculus AB or Instructor Approval
- Counts as a Mathematics Course for all diplomas
- Tier 3 course

## **BUSINESS MATH**

**GRADE 11-12, 2 CREDITS**

4512

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

- Prerequisite: Algebra I
- Fulfills a Mathematics requirement for the General Diploma only or counts as an Elective or Directed Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- **This class is reserved for those students pursuing a general diploma.**

## **FINITE MATHEMATICS**

**GRADE 11-12, 2 CREDITS**

2530

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

- Prerequisite: Algebra II and Geometry



- Counts as a Mathematics Course for all diplomas

## GEOMETRY

GRADE 9-12, 2 CREDITS

2532

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

- Prerequisite: Algebra I
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas and counts as a Mathematics Course for the General Diploma
- ***Honor's Geometry (tier 2 course) is available for strong math students. Teacher permission required.***

## PRE-CALCULUS: ALGEBRA

GRADE 11-12, 1 CREDIT

DUAL COLLEGE CREDIT: IVY TECH

2564

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

- *Prerequisite: Geometry and Algebra II*
- PreCalculus: Algebra should be paired with Pre-Calculus:Trigonometry
- Counts as a Mathematics Course for all diplomas
- Tier 2 course

## PRE-CALCULUS: TRIGONOMETRY

GRADE 11-12, 1 CREDIT

DUAL COLLEGE CREDIT: IVY TECH

2566

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Trigonometry consists of seven strands: Conics, Unit Circle, Geometry, Periodic Functions, Identities, Polar Coordinates, and Vectors. Students will also advance their understanding of imaginary numbers through an

investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- *Prerequisite: Geometry and Algebra II*
- Pre-Calculus:Trigonometry should be paired with PreCalculus: Algebra
- Counts as a Mathematics Course for all diplomas
- Tier 2 course

## Multidisciplinary

### BASIC SKILLS DEVELOPMENT

GRADES 9-12, 1-2 CREDITS

0500

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

- Credits: One credit per semester up to 8 credits
- Counts as an Elective for all diplomas

### DIGITAL MEDIA (CHARGER TV

GRADES 10-12, 1-2 CREDITS

1084

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

- Credits: One credit per semester
- Counts as an Elective for all diplomas
- Advanced Digital Media is available for students that have successfully completed Digital Media.

### PEER TUTORING

GRADES 11-12, 1 CREDIT

0520

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

- Credits: One credit per semester, up to 2 credits
- Counts as an Elective for all diplomas
- Application required for this course.

## Science

### **AP PHYSICS I: ALGEBRA BASED**

**GRADES 11-12, 2 CREDITS**

3080

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

- Required Prerequisite: Approved application
- Fulfills a Science requirement for all diplomas.
- Qualifies as a quantitative reasoning course

### **ADVANCED SCIENCE, OCEANS I**

**GRADES 10-12, 2 CREDITS**

3092

Advanced Science, Special Topics is any science course which is grounded in extended laboratory, field, and literature investigations into one or more specialized science disciplines, such as anatomy/physiology, astronomy, biochemistry, botany, ecology, electromagnetism, genetics, geology, nuclear physics, organic chemistry, etc. Students enrolled in this course engage in an in-depth study of the application of science concepts, principles, and unifying themes that are unique to that particular science discipline and that address specific technological, environmental or health-related issues. Under the direction of a science advisor, students enrolled in this course will complete an end-of-course project and presentation, such as a scientific research paper or science fair project, integrating knowledge, skills, and concepts from the student's course of study. Individual projects are preferred, but group projects may be appropriate if each student in the group has specific and unique responsibilities.

- Recommended Prerequisites: Biology I
- Counts as a science course for all diplomas
- An second level course is available for students that successfully complete this course

### **ANATOMY & PHYSIOLOGY**

**GRADES 11-12, 2 CREDITS**

5276

*Anatomy & Physiology* is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the

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

- Required Prerequisite: Biology I with A or B or instructor approval
- Fulfills a Science requirement for all diplomas.

## **BIOLOGY I**

**GRADE 9, 2 CREDITS**

3024

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

- Fulfills the Biology requirement for all diplomas
- **Honors Biology** (tier 2 course) is available for those students interested in a more advanced and in-depth approach to entry level biology.

## **CHEMISTRY I**

**GRADE 10, 2 CREDITS**

3064

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

- Fulfills the 2 credit requirement for Chemistry I for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas. *Qualifies as a Quantitative Reasoning course for all diploma types.*
- **Honors Chemistry** (tier 2 course) is available for those students interested in a more advanced and in-depth approach to entry level chemistry.

## **CHEMISTRY II**

**GRADE 11-12, 2 CREDITS**

**DUAL COLLEGE CREDIT: INDIANA UNIVERSITY**

3066

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

- *Required Prerequisite: Chemistry I, 2.7 GPA*
- Counts as a Science Course for all diplomas

- *Qualifies as a Quantitative Reasoning course for all diploma types*
- *Tier 2 course*

## **EARTH AND SPACE SCIENCE I**

**GRADE 11-12, 2 CREDITS**

3044

Earth and Space Science I is a course focused on the following core topics: universe; solar system; Earth cycles and systems; atmosphere and hydrosphere; solid Earth; Earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by the Science and Engineering Practices (SEPS) and cross-cutting concepts.

- Fulfills a science requirement for all diplomas

## **INTEGRATED CHEMISTRY-PHYSICS**

**GRADE 10, 2 CREDITS**

3108

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

- *Recommended Prerequisite: Algebra I (may be taken concurrently with this course)*
- Fulfills the 2 credit requirement for Chemistry I, Physics I, or Integrated Chemistry and Physics towards all diplomas
- **Students pursuing an Academic Honor's Diploma are encouraged to take Chemistry instead of this course.**

## **BIOMEDICAL INNOVATIONS**

**GRADES 11-12, 2 CREDITS**

5219

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

- Required Prerequisites: Principles of the Biomedical Sciences, Human Body Systems, and Medical Interventions
- Counts as a Directed Elective or Elective for all diplomas
- Tier 2 course

## **HUMAN BODY SYSTEMS**

**GRADES 10-12, 2 CREDITS**

5216

*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.

- Required Prerequisites: Principles of Biomedical Sciences
- Fulfills a science requirement for all diplomas

## **MEDICAL INTERVENTIONS**

**GRADE 11-12, 2 CREDITS**

5217

*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 quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions including vascular stents, cochlear implants, and prosthetic limbs. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. Using 3-D imaging software, students will design and build a model of a therapeutic protein.

- Required Prerequisites: Principles of Biomedical Science and Human Body Systems or Anatomy/Physiology
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a science requirement for all diplomas
- Tier 2 course

## **PRINCIPLES OF BIOMEDICAL SCIENCES**

**GRADES 9-12, 2 CREDITS**

5218

*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.

- Prerequisite: Biology I or concurrent enrollment in Biology I
- Fulfills a science requirement for all diplomas



## Social Studies

### AP HUMAN GEOGRAPHY

GRADE 10-12, 2 CREDITS

1572

*Human Geography, Advanced Placement* is a course based on the content established by the College Board. The purpose of the AP Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Topics include: (1) Geography: its nature and perspectives, (2) population, (3) cultural patterns and processes, (4) political organization of space, (5) agriculture and rural land use, (6) industrialization and economic development, and (7) cities and urban land use. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at:

<http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>

- *Required Prerequisites: 2 of the following: 3.00 GPA, A in World History and Civilization, A or B in Honors English 9, A or B in Honors Biology, and completion of application*
- *Counts as an Elective for all diplomas*

### AP UNITED STATES HISTORY

GRADE 11, 2 CREDITS

1562

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

<http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>

- *Prerequisites: 3.00 GPA, A or B in World History/Civilization, A or B in Honors English 10 or A or B in AP Human Geography, completion of application.*
- ***Fulfills the US History requirement for all diplomas***

### ECONOMICS

GRADE 12, 1 CREDIT

1514

*Economics* examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning used by consumers, producers, savers, investors, workers, voters, and government in making decisions. Key elements of the course include study of scarcity and economic reasoning, supply and demand, market structures, role of government, national income determination, the role of financial institutions, economic stabilization, and trade. 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. The functions of government in a market economy and market structures will be examined. Students will understand economic performance, money, stabilization policies, and trade of the United States. The behavior of people, societies and institutions and economic thinking is integral to this course.

- ***Fulfills the Economics requirement for all diplomas***

## **ETHNIC STUDIES**

**GRADE 10-12, 1 CREDIT**

1516

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.

- Counts as an Elective for all diplomas.
- May be offered online.

## **INDIANA STUDIES**

**GRADE 10-12, 1 CREDIT**

1518

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

- Counts as an Elective for all diplomas.
- May be offered online.

## **PSYCHOLOGY**

**GRADE 11-12, 1 CREDIT**

1532

*Psychology* is the scientific study of mental processes and behavior. The course is divided into six content areas and uses the scientific methods to explore research methods and ethical consideration. Developmental psychology takes a life span approach to physical, cognitive, language, emotional, social, and moral development. Cognitive aspects of the course focus on learning, memory, information processing, and language. Personality, Assessment, and Mental Health topics include psychological disorders, treatment, personality, and assessment. Socio-cultural dimensions of behavior deal with topics such as conformity, obedience, perceptions, attitudes, and influence of the group on the individual. The Biological Basis focuses on the way the brain and nervous system function, including sensation, perception, motivation, and emotion.

- Prerequisite: Students need to have earned a C+ or higher in previous Social Studies courses, or instructor approval.
- *Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*

## **SOCIOLOGY**

**GRADE 11-12, 1 CREDIT**

1534

*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.

- Prerequisite: Students need to have earned a C+ or higher in previous Social Studies courses, or instructor approval.
- *Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*

## **UNITED STATES GOVERNMENT**

**GRADE 12, 1 CREDIT**

1540

*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 will 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 will examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. How the United States interacts with other nations and the government's role in world affairs will be examined. 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, political, and civic activities and the need for civic and political engagement of citizens in the United States.

- ***Fulfills the Government requirement for all diplomas***
- Students are required to take the naturalization test for citizenship per SEA 132

## **UNITED STATES HISTORY**

**GRADE 11, 2 CREDITS**

1542

*United States History* builds upon concepts developed in previous studies of U.S. History. Students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. They will develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

- ***Fulfills the US History requirement for all diplomas***

## **WORLD HISTORY AND CIVILIZATION**

**GRADE 9-10, 2 CREDITS**

1548

World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions

of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

- Fulfills the Geography History of the Wrld/World History and Civilization graduation requirement for all diplomas

## World Languages

### SPANISH I

GRADE 9-12, 2 CREDITS

2120

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

- *Recommended Prerequisites:* Must have earned As and Bs in 8<sup>th</sup> grade English to take a World Language as a Freshman.
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

### SPANISH II

GRADE 10-12, 2 CREDITS

2122

*Spanish II*, a course based on *Indiana's Academic Standards for World Languages*, builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate

pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

- *Recommended Prerequisites:* Spanish I
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

### **SPANISH III**

**GRADES 11-12, 2 CREDITS**

2124

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

- *Recommended Prerequisites:* Spanish I and II with a C
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma

### **SPANISH IV**

**GRADE 12, 2 CREDITS**

2126

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

- *Required Prerequisites: Spanish I, II and III with C*
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma