# Blackford High School Course Description Guide



2015-2016

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# Blackford High School Administration

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# **Grade Point Average (GPA) Calculations**

Grade point average for all students is determined by the adding the numerical value of each grade earned and dividing that sum by the number of classes attempted. Blackford High School operates on a 4 point scale.

A = 4 points

A = 3.667 points

B+=3.333 points

B = 3 points

B - = 2.667 points

C + = 2.333 points

C = 2 points

C - = 1.667 points

D + = 1.333 points

D = 1 point

D = 0.667 points

F = 0 points

Example: At the end of a student's 9<sup>th</sup> grade year they have attempted 14 classes, earning 3A's, 5 B's, 3 C's, 2 D's and 1 F.

 $A - 3 \times 4 = 12$ 

B - 5x 3 = 15

 $C - 3 \times 2 = 6$ 

D - 2x 1 = 2

 $F - 1 \times 0 = 0$ 

TOTAL = 35 35 divided by 14 = 2.5

Be aware that it becomes increasingly more difficult to affect the GPA later in high school because, as the number of credits increases, each semester's grade points have less of an effect. Therefore, it is very important to strive to do your very best and start out strong.

# **Weighted Grade Calculations**

For students who have completed courses that are weighted, their GPA is adjusted using a 5 point scale.

A = 5 points

A = 4.667 points

B + = 4.333 points

B = 4 points

B - = 3.667 points

C + = 3.333 points

C = 3 points

C = 2.667 points

D+=2.333 points

D = 2 point

D- = 1.667 points

F = 0 points

Special Note: Weighted grades will only be awarded for courses that have been offered and are available through Blackford High School. Therefore, if a student transfers into Blackford with weighted grades, only those courses listed as a Weighted Course for Blackford High School would transfer in as a weighted grade.

# **Weighted Courses**

ENGL 111 English Composition
ENGL 112 Exposition and Persuasion
COMM 101 Fundamentals of Public Speaking
MATH 211 Calculus I
MATH 136 College Algebra
MATH 137 Trig w/ Analytic Geom.
Physics 1 AP
BIOL 101 Introductory Biology
HIST 101 Survey of American History I
HIST 102 Survey of American History II
World History AP
US Government & Politics AP

SPAN 101 Spanish Level I SPAN 102 Spanish Level II SPAN 201 Spanish Level III SPAN 202 Spanish Level IV FREN 101 French Level I FREN 102 French Level II FREN 201 French Level III FREN 202 French Level IV AP Studio Art (Drawing)

# **Advanced Placement Courses**

# 2015-16 AP Course Offerings:

AP World History AP US Government & Politics AP Physics 1 AP Studio Art (Drawing)

# What are Advanced Placement (AP) Courses?

Through AP's college-level courses and exams, you can earn college credit and advanced placement. From the moment you enter an AP classroom, you'll notice the difference—in the teacher's approach to the subject, in the attitude of your classmates, in the way you start to think. In AP classrooms, the focus is not on memorizing facts and figures. Instead you'll engage in intense discussions, solve problems collaboratively, and learn to write clearly and persuasively. AP courses can help you acquire the skills and habits you'll need to be successful in college. You'll improve your writing skills, sharpen your problem-solving abilities, and develop time management skills, discipline, and study habits. Most four-year colleges in the United States and colleges in more than 60 other countries give students credit, advanced placement or both on the basis of AP Exam scores. By entering college with AP credits, you'll have the time to move into upper level courses, pursue a double-major or study abroad.

# **Is AP Considered Dual Credit?**

Advanced Placement (AP) refers to courses and corresponding exams offered in the high school administered by the College Board. While AP courses are rigorous, they do not fit into the Indiana Commission for Higher Education's definition of dual credit, since AP courses are not offered by a college and do not automatically result in college credit.

However, starting with the 2011 AP exams, students who earn a score of 3 or higher **shall** receive college credit toward their degree at any Indiana public institution of higher education; this includes all two-year and four-year schools and any accompanying satellites.

Indiana public institutions of higher education may require a score higher than 3 to award credit for a course that is part of a students' major, but the student will still receive elective credit that counts toward his/her overall degree requirements.

Indiana public institutions of higher education have detailed how each AP course and exam score will distribute within and outside of major fields. Information is available on the Transfer IN website: <a href="http://www.transferin.net/ap.aspx">http://www.transferin.net/ap.aspx</a>

Updated 5/22/2015

If the college or university that partners with a secondary school approves, it is permissible to allow both AP and Dual Credit to be taught by the same teacher in the same course section. However the student should earn either the AP course credit or the Dual Credit course credit (i.e. one course cannot count as two different courses for high school credit).

To earn the weighted grading scale at Blackford High School for an AP class, the AP Exam must be taken by the student.



# **Dual Credit Courses**

Ivy Tech Course	College Course Title	IDOE Course #	IDOE and BHS Course Title
MPRO 100 (3 credits) MPRO 102 (3 credits) MPRO 106 (3 credits) MPRO 122 (3 credits)	Introduction to Plant Floor and CNC Introduction to Print Reading Intro to the Workplace and Safety Mechatronics Electrical	5608 5608 5608 5606	HIRE Technology/Advance Manufacturing I HIRE Technology/Advanced Manufacturing I HIRE Technology/Advanced Manufacturing I Advanced Manufacturing II
MPRO 201 (3 credits)	Lean	5606	Advanced Manufacturing II
PLTW DESN 104 (3 credits)	Mechanical Graphics	5644	Principles of Engineering (POE) Non-PLTW
BUSN 101 (3 credits)	Introduction to Business	4562	Principles of Business Management
IVTY 105 (1 credit)	Personal Finance	4540	Personal Finance
HIST 101 (3 credits) HIST 102 (3 credits) ENGL 111 (3 credits) ENGL 112 (3 credits) MATH 136 (3 credits) MATH 137 (3 credits)	American History I American History II English Composition Exposition and Persuasion College Algebra Trigonometry with Analytic Geometry	1562 1562 1124 1124 2544 2544	US History US History Adv. English College Credit Adv. English College Credit Adv. Math College Credit Adv. Math College Credit
MATH 211 (4 credits)	Calculus I	2544	Calculus
BIOL 101 (3 credits) FREN 101 (4 credits) FREN 102 (4 credits) FREN 201 (3 credits) FREN 202 (3 credits) FREN 202 (3 credits) SPAN 101 (4 credits) SPAN 102 (4 credits)	Introductory Biology French Level I French Level II French Level III French Level IV Spanish Level I Spanish Level II	3026 2024 2024 2026 2026 2124 2124	Biology II (L) French III French IV French IV Spanish III Spanish III
SPAN 201 (3 credits) SPAN 202 (3 credits) HLHS 100 (3 credits) HLHS 101 (3 credits) HLHS 107 (5 credits)	Spanish Level III Spanish Level IV Introduction to Health Careers Medical Terminology CNA Preparation	2126 2126 5282 5274 5284	Spanish IV Spanish IV Health Science Education I Medical Terminology Health Science Education II
IU ACP Course			
COMM 101 (3 credits)	Fund. of Public Speaking	1078	Advanced Speech & Communication

# What is Dual Credit?

Dual credit is the term given to courses in which high school students have the opportunity to earn both high school and college credits. Dual credit courses are taught by high school faculty or college faculty either at the high school, at the college or university, or sometimes through online courses or distance education. Dual credit is offered by both state and independent (private, regionally accredited) colleges and universities.

# What is the Core Transfer Library?

To enable you to transfer college credits, Indiana has developed the Core Transfer Library (CTL) – a list of courses that will transfer among all Indiana public college and university campuses, assuming adequate grades.

All Core Transfer Library courses will meet the general education or free elective requirements

of undergraduate degree programs, and a significant majority of CTL courses will also count as one-on-one equivalents to courses taught at the college campus

# Should I Take a Dual Credit Course if I Plan to Attend a Private or Out-of-State College?

Courses listed on the Core Transfer Library are only guaranteed to transfer to a public college in the State of Indiana. Therefore, students who plan to attend a private or out-of-state college are encouraged to work with their high school counselor to determine whether dual credit will be accepted by their college of choice.

# May I Sign Up for a Dual Credit Course Even if I Do Not Wish to Receive College Credit?

Yes. If a student knows that the college credit will not transfer to their future college and the student does not wish to pay for the college credit, the student may still sign up for the course. However, students that make this decision will still be required to complete all of the same expectation as those that are enrolled in both the high school and college course.

# **Credit Earned Prior to Grade 9**

In order to recognize its responsibility to provide students the opportunity to receive a maximum amount of credits for completion of course work leading to high school credit, Blackford County Schools has established the following policy and criteria regarding the application of credits earned prior to students entering ninth grade.

Student may elect to transfer credit for any high school course earned prior to ninth grade that will count toward the required credits for graduation if the following conditions are met:

- A. The course content meets the competencies and proficiencies for the corresponding high school course which includes the Indiana Academic Standards
- B. Students must earn a semester grade of "C" or better\*
- C. Students must achieve a passing score on the End-of-Course Assessment if the course has a corresponding End-of-Course Assessment
- D. The grade received by the student will be recorded on the student's high school transcript and will be included in the student's grade point average (GPA)

NCAA eligibility rules provide that courses taken before Grade 9 may not be used to satisfy core curriculum requirements for college athletic eligibility.

\*In the event that a student receives a semester grade lower than a "C" but achieves a passing score on a corresponding End-of-Course Assessment, the student shall have the option of transferring the credit to the high school as a grade of "C."

# **Diploma Requirements**

(For Students Graduating in 2016 and Beyond)



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

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

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

# **C**•**RE40** with Academic Honors

(minimum 47 credits)

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

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

# **C**•**RE40** with Technical Honors

(minimum 47 credits)

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

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

# **Core 40 Quantitative Reasoning Courses**

All students that plan to graduate in 2016 and beyond must complete a Math or Quantitative Reasoning course each year they are enrolled in high school. The following courses satisfy the "Mathematics or quantitative reasoning course" in each year of high school for the **Core 40**, **AHD**, and **THD** diplomas.

Please note, this list comes from the Indiana Department of Education and therefore not all courses listed are available at Blackford High School

#### **Advanced Placement**

Biology, Advanced Placement (3020)

Calculus AB, Advanced Placement (2562)

Calculus BC, Advanced Placement (2572)

Chemistry, Advanced Placement (3060)

Computer Science A, Advanced Placement (4570)

Environmental Science, Advanced Placement (3012)

Macroeconomics, Advanced Placement (1564)

Microeconomics, Advanced Placement (1566)

Physics B, Advanced Placement (3080)

Physics C, Advanced Placement (3088)

Statistics, Advanced Placement (2570)

# Agriculture

Advanced Life Science: Foods (5072)

### **Business, Marketing, IT**

Computer Programming II (5236)

Computer Science A, Advanced Placement (4570)

Computer Science Higher Level, International Baccalaureate (4584)

Computer Science Standard Level, International Baccalaureate (4586)

#### **Economics**

Economics Higher Level, International Baccalaureate (1580)

Macroeconomics, Advanced Placement (1564)

Microeconomics, Advanced Placement (1566)

# **Engineering and Technology**

Aerospace Engineering (4816), Non-PLTW (5518)

Civil Engineering and Architecture (4820), Non-PLTW (5650)

Computer Integrated Manufacturing (4810), Non-PLTW (5534)

Digital Electronics (4826), Non-PLTW (5538)

Engineering Design and Development (4828), Non-PLTW (5698)

Principles of Engineering (4814), Non-PLTW (5644)

# **Family and Consumer Science**

Advanced Life Science: Foods (5072)

### **International Baccalaureate**

Chemistry Higher Level, International Baccalaureate (3070)

Chemistry Standard Level, International Baccalaureate (3072)

Computer Science Higher Level, International Baccalaureate (4584)

Computer Science Standard Level, International Baccalaureate (4586)

Economics Higher Level, International Baccalaureate (1580)

Further Mathematics Standard Level, International Baccalaureate (2580)

Mathematical Studies Standard Level, International Baccalaureate (2586)

Mathematics Higher Level, International Baccalaureate (2582)

Mathematics Standard Level, International Baccalaureate (2584)

Physics Higher Level, International Baccalaureate (3096)

Physics Standard Level, International Baccalaureate (3098)

#### **Mathematics**

Advanced Mathematics, College Credit (2544)

Algebra I (2520)

Algebra II (2520)

Calculus AB, Advanced Placement (2562)

Calculus BC, Advanced Placement (2572)

Discrete Mathematics (2530)

Further Mathematics Standard Level, International Baccalaureate (2580)

Geometry (2532)

Integrated Mathematics I (2554)

Integrated Mathematics II (2556)

Integrated Mathematics III (2558)

Mathematical Studies Standard Level, International Baccalaureate (2586)

Mathematics Higher Level, International Baccalaureate (2582)

Mathematics Standard Level, International Baccalaureate (2584)

Pre-Calculus/Trigonometry (2564)

Pre-Calculus (2568)

Probability and Statistics (2546)

Statistics, Advanced Placement (2570)

Trigonometry (2566)

# Science

Biology, Advanced Placement (3020)

Chemistry I (3064)

Chemistry II (3066)

Chemistry Higher Level, International Baccalaureate (3070)

Chemistry Standard Level, International Baccalaureate (3072)

Chemistry, Advanced Placement (3060)

Environmental Science, Advanced Placement (3012)

Physics I (3084)

Physics II (3086)

Physics B, Advanced Placement (3080)

Physics C, Advanced Placement (3088)

Physics Higher Level, International Baccalaureate (3096)

Physics Standard Level, International Baccalaureate (3098)

# **Trade and Industrial Education**

Advanced Manufacturing II (5606)

Architectural Drafting Design II (5652)

Mechanical Drafting Design II (4838)

Precision Machining II (5784)

# **BLACKFORD HIGH SCHOOL FOUR YEAR PLAN**

NAME	GRADUATION YEAR
CAREER INTEREST/GOAL	

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR
English	English	English	English
English 9/Honors	English 10/Expository	English 11	English 12
English 9	Writing	ENGL 111 DC	ENGL 112 DC
75.7	35.3	75.7	35.3
Math	Math	Math	Math
Algebra	Algebra	Geometry	Algebra II
Geometry	Geometry	Algebra II	Pre-Calculus
Algebra II	Algebra II	Pre-Calculus	College Alg DC
Pre-Calculus	Pre-Calculus	College Alg DC	College Trig DC
College Alg DC	College Alg DC	College Trig DC	Calculus DC
	College Trig DC	Calculus DC	Statistics
		Statistics	
Science	Science	Science	Science
Biology	Biology	Chemistry	Chemistry
Integrated Chem-Phys	Chemistry	Physics	Physics
	Integrated Chem-Phys	Physics AP	Physics AP
	Physics	Anat & Phys	Anat & Phys
		Adv Biology DC	Adv Biology DC
Social Studies	Social Studies	Social Studies	Social Studies
World History	World History	U.S. History	U.S. Government
·	World History AP	U.S. History DC	Economics
		·	US Govt & Politics AP
P.E./Health	P.E./Health		
P.E. 1	P.E. 1		
P.E. 2	P.E. 2		
Health	Health		
JROTC I	Life Guarding		
	JROTC II		
Elective(s)	Elective(s)	Elective(s)	Elective(s)
		, ,	, ,

# **Course Change Procedures**

Every attempt will be made to accommodate each student's request of courses for his/her schedule. However, there are times when every selection cannot be accommodated due to the number of available sections in a given course or periods offering those courses and other courses may be substituted to fulfill graduation requirements.

Valid reasons for changing a course:

- Schedule Conflicts
- Physical inability to take a class due to accident or illness
- A faculty member may initiate a change if, in the opinion of the faculty member, a student is inappropriately placed
- Extenuating circumstances

Requests that will not be honored include:

- Teacher Preference
- Period Preference
  - Lunch Preference

# **Course Change Procedure – Beginning 1st Day of School:**

Student must pick up the Course Change form from his/her guidance counselor and discuss the reason(s) for the request. If a student is requesting a change of classes at the end of semester 1, the course change form must be completed and must receive administrator approval before such change can be made.

### Drop/Add timetable:

- Week 1 No record or grade
- Week 2 THROUGH 1st midterm Grade of "W" with no effect on GPA and only with administrator approval to withdraw
- After 1st midterm WF-withdraw/fail, counts as an F on GPA and transcript

All requests initiated after week 1, student will only be allowed to take credit recovery in place of dropped class.

Students enrolling in yearlong courses are expected to remain in those courses for the entire year unless there is a clear indication that the student is failing the course at the end of the semester and the teacher/counselor recommends that the student not continue.

# **Book Rental Refund Policy**

Since textbooks and workbooks are purchased according to enrollment figures at the time of course selection, schedule changes become very costly to the book rental system. For this reason we have instituted a policy regarding book rental refunds as follows.

- 1. Book Rental refunds will NOT be given on schedule changes after 1st semester begins. In cases where the changes result in a greater fee, the student will be charged the difference.
- 2. No book rental refunds will be given when students drop a course, quit school, or are expelled during the school year. Refunds will be given in cases of transfer to another school.

If a change in your course is requested after course selection, the Guidance Office must be contacted prior to the end of school in the spring.

NO CHANGES WILL BE PERMITTED AFTER THE BEGINNING OF THE SCHOOL YEAR WITHOUT PETITIONING THE SCHOOL ADMINISTRATION.

APPLICATIONS FOR REDUCED BOOK FEES AND INSTALLMENT PAYMENTS ARE AVAILABLE IN THE FRONT OFFICE OR THE GUIDANCE OFFICE.

AVAILABILITY OF COURSES LISTED MAY CHANGE DUE TO STAFFING AND BUDGET ADJUSTMENTS.

# **Required Student Applications**

Students are required to fill out applications or gain teacher permission for the following courses:

- **Independent Study** (any subject area)
- Office Assistant
- PCI Cadet Teaching
- Any Career/Technical Course at an off-campus site
- Dual Credit Off-Campus College Course
- 7<sup>th</sup> Semester Completion

Students will not be scheduled into these courses without an approved application. <u>Applications must be</u> submitted before the end of the 2014-15 school year in order to be approved.

# Business, Marketing, and Information Technology Education

#### **BUSINESS LAW AND ETHICS**

#### 4560 One Semester 1 credit

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

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: None
- Credits: 1 credit per semester, maximum of 2 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with postsecondary courses for Dual Credit

#### PRINCIPLES OF BUSINESS MANAGEMENT

#### 4562 Two Semesters 2 credits

Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized.

- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Preparing for College and Careers
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech: **BUSN 101** Introduction to Business (3 credits)

#### PREPARING FOR COLLEGE AND CAREERS

### 5394 One semester 1 credit

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.

- Recommended Grade Level: 9
- Recommended Prerequisites: none
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Required Course for all Career Pathways

#### GRAPHIC DESIGN AND LAYOUT

#### 5550 Two Semesters 2 credits

Graphic Design and Layout includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy,

lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. The course will include actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging, and their allied industries. Students will learn Adobe Creative Suite, screen printing for t-shirts, and both film and digital photography.

- Recommended Grade Level: Grade 10-12
- Recommended Prerequisites: Computer Illustrations and Graphics, Preparing for College and Careers
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### COMPUTER TECH SUPPORT

One Semester 1 credit

Replaces IT: Information Support and Services

Computer Tech Support allows students to explore how computers work. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: IT Essentials
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### INTERACTIVE MEDIA

5232 Two Semesters 2 credits

Interactive Media prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace". Students will learn to create presentations in PowerPoint and Prezi and will have an opportunity to earn dual credit and a MOS Certificate in PowerPoint 2010.

- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: IT Essentials
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### PERSONAL FINANCIAL RESPONSIBILITY

### 4540 One Semester 1 credit

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 Grade Level: Grade 9 12
- Recommended Prerequisites: None
- Credits: 1 credit per semester, maximum 1 credit
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# **Engineering and Technology Education**

#### ADVANCED MANUFACTURING I

#### Two Semesters 4 credits

Advanced Manufacturing I, is a course that includes classroom and laboratory experiences in two broad areas: Industrial Technology/Software Controls and Manufacturing Trends. Industrial Technology and Software Controls covers wiring and schematic diagrams used to design, install, and repair electrical/electronic equipment such as wireless communication devices, programmable controllers. Course content will include basic theories of electricity, electronics, digital technology, and basic circuit analysis. Activities include experiences in: soldering; use of an oscilloscope, meters, signal generators and tracers; breadboarding; circuit simulation software; and troubleshooting. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Manufacturing Trends covers basic concepts in manufacturing operations and plant floor layout in the production environment. Applications of Computer Numerical Control (CNC), and lathe and turning operations are developed as a foundation for machining operations. Coordinate system concepts are introduced as relevant to machining processes, as well as fluid and mechanical power, welding, and lean manufacturing. Fluid power concepts will include hydraulic components and circuits, laws and principles, fluid power controllers, and the construction of systems. In the mechanical power portion of the course, students will learn about machine specifications, basic forces, friction, simple machines, motors, and motor controls. Students will also be introduced to lean manufacturing where they will study concepts including: lean goals, product quality, eliminating waste, cost effectiveness, lean concepts, resource planning, continuous improvement, and the various advantages of lean manufacturing. This course includes MSSC concepts required to earn MSSC certification.

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Introduction to Advanced Manufacturing
- Credits: 2 credits per semester, maximum of 4 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech: MPRO 100 Plant Floor (3 credits), MPRO 106 Safety (3 credits)
- Earned Certifications: APICS Certificate Logistics, APICS Certificate Operations, MSSC Certificate - Logistics Associate

### ADVANCED MANUFACTURING II

### 5606 Two Semesters 4 credits

Advanced Manufacturing II, Introduces basic blueprint reading, Computer Numerical Control (CNC) operation and the skills commonly used in the manufacturing industry. Areas of study will include: interpretation of drawing dimensions and notes to ANSI standards for machining including; Geometric Dimensioning and Tolerancing (GDT), welding, fabrication applications and inspection techniques. Students will be able to use Computer Aided Design software (CAD) to create 3D models and working drawings. Skills in the setup and operation of a CNC mill and lathe will also be acquired using multiple machine tool controllers. Other more general topics will include coordinate systems, dimensioning, line precedence, multiview drawings, safe dress, tool paths, speed and feed calculations, and tool selection. The course also introduces robotics, automation, and Computer Integrated Manufacturing Technology (CIMT). Common types of factory automation will be identified. The course will focus on three main types of manufacturing automation including; Programmable Logic Controllers (PLC), Computer Numerically Controlled Machines (CNC), and Robotics. Topics cover robotic principles including basic theory, robot safety, robotic classifications, applications, socioeconomic impact, work cell design, robot programming (Pendant and Software Language), and sensor and actuator interfacing. Students will be required to design, program and troubleshoot computer controlled machine logic and production processes in a project oriented learning environment.

- Recommended Grade Level: Grade 12
- Recommended Prerequisites: Advanced Manufacturing I
- Credits: 2 credits per semester, maximum of 4 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Qualifies as a Quantitative Reasoning course
- Potential Dual Credit Ivy Tech: MPRO 102 Print Reading (3 credits), MPRO 122 Mechatronics Electrical (3 credits), MPRO 201 Lean (3 credits)
- Potential Earned Certifications: MSSC Certificate Safety, MSSC Certificate Production

#### PRINCIPLES OF ENGINEERING, NON-PLTW

#### 5644 Two Semesters 2 credits

Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems.

- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: Introduction to Engineering Design
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### COMPUTERS IN DESIGN AND PRODUCTION

#### 4800 One Semester 1 credit

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

- Recommended Grade Level: Grade 9-10
- Recommended Prerequisites: None
- Credits: 1 credit per semester, maximum of 2 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- One of the courses specified in the sequence of courses for all Career Clusters and all of Indiana's College and Career Pathway Plans

# INTRODUCTION TO CONSTRUCTION

#### 4792 One Semester 1 credit

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.

- Recommended Grade Level: Grade 10
- Recommended Prerequisites: None
- Credits: 1 credit per semester, maximum of 2 credit
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### INTRODUCTION TO TRANSPORTATION

#### 4798 One Semester 1 credit

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.

- Recommended Grade Level: Grade 9-12
- Recommended Prerequisites: None
- Credits: 1 credit per semester, maximum of 2 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### INDUSTRIAL REPAIR AND MAINTENANCE

#### 5686 Two Semesters 2 credits

Industrial Repair and Maintenance includes classroom and practical experiences that prepare students to apply technical knowledge and skills to repair and maintain industrial machinery and equipment. Instructional activities develop diagnostic and problem-solving skills related to electric circuits, wiring, motors, robotics, hydraulics, and pneumatics. Additional areas of instruction should include plumbing, rigging, basic machining, welding and cutting.

- Recommended Grade Levels: 11-12
- Recommended Prerequisites: None
- The nature of this course allows for a second year of instruction provided that content and standards address higher levels of knowledge.
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# **English/Language Arts**

#### **ENGLISH 9**

#### 1002 Two Semesters 2 credits

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

- Recommended Grade Level: Grade 9
- Recommended Prerequisites: None
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **ENGLISH 9 HONORS**

#### 1002 Two Semesters 2 credits

In addition to the description above, Honors English 9 moves beyond the basic requirements and is more rigorous in its expectations. In contrast to English 9 which concentrates on identification and application, English 9 Honors stresses analytical skills and requires an understanding of both the content and structural form of texts. The selected literature is challenging or beyond grade level and students will focus on an explication of a variety of literature. In composition, students are required to write for various audiences and purposes while enhancing already developed skills in paragraph and multi-paragraph writing. These skills include (1) mastery of the essay as a formal structure with a thesis statement and supporting paragraphs; (2) an appropriate organizational structure for a complex body of information; and (3) an effective adaptation of language and tone to task and reader. Using technology, students receive instruction and practice in the writing process. The oral communication (speech) component of this course allows student to examine the complex connections between components of language arts. Students are expected to take original imaginative approaches to presentations and to be critical/analytical participants and listeners.

- Recommended Grade Level: Grade 9
- Recommended Prerequisites: None
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **ENGLISH 10**

#### 1004 Two Semesters 2 credits

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

- Recommended Grade Level: Grade 10
- Recommended Prerequisites: English 9
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **ENGLISH 11**

#### 1006 Two Semesters 2 credits

English 11 is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes and a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write fictional

narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

- Recommended Grade Level: Grade 11
- Recommended Prerequisites: English 10
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **ENGLISH 12**

#### 1008 Two Semesters 2 credits

English 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 for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

- Recommended Grade Level: Grade 12
- Recommended Prerequisites: English 11
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### ADVANCED ENGLISH/LANGUAGE ARTS, COLLEGE CREDIT

#### 1124 Two Semesters 2 credits

Advanced English/Language Arts, College Credit, is an advanced course based on Indiana's Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts in Grades 11 and 12. This course title covers any English language and composition advanced course offered for credit by an accredited postsecondary institution through an adjunct agreement with a secondary school.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: English 9 and English 10 or other literature, language, composition, and speech courses or teacher recommendation
- Credits: 1 credit per semester. May be offered for successive semesters
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Courses that use this title are most often those taught through the post---secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty
- Courses that use this title are those that do not meet specific high school standards for a
  corresponding high school course, as they are standards beyond what is taught in the high
  school.
- Ivy Tech: **ENGL 111** English Composition (3 credits)
- Ivy Tech: **ENGL 112** Exposition and Persuasion (3 credits)

#### **EXPOSITORY WRITING**

#### 1094 Two Semesters 2 credit

Expository Writing is a study and application of the various types of informational writing intended for a variety of different audiences. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. EXPOSITORY WRITING PROJECT: Students complete a project, such as an extended essay or report explaining the main idea or thesis by using the expository strategies of classification, illustration by example, definition, comparison and contrast, process analysis (descriptions or explanations that provide instructions for the reader), cause and effect, definitions, or some combination of these strategies, which demonstrates knowledge, application, and writing progress in the Expository Writing course content.

- Recommended Grade Level: Grade 10
- Recommended Prerequisites: English 9 Honors or teacher recommendation

- Credits: 2 credits
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- NOTE: Students are strongly encouraged to combine this course with Literary Movements (1040)

### LANGUAGE ARTS LAB

#### 1010 One Semester 1 credit

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing language arts course work aligned with Indiana's Academic Standards for English/Language Arts in Grades 9-12 and the Common Core State Standards for English/Language Arts, focusing on the Writing Standards (Standards 4, 5, and 6).

- Recommended Grade Level: Grades 9-12
- Recommended Prerequisites: None
- Credits: 1-8 credits. The nature of this course allows for successive semesters of instruction at advanced levels.
- Counts as an English/Language Arts Elective only for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is for students who need additional support in all the language arts (reading, writing, speaking and listening), especially in writing.
- NOTE: The course may also be used for students who need extra preparation to take Advanced Placement classes or college placement examinations.

# ADVANCED SPEECH AND COMMUNICATION (DUAL CREDIT)

### 1078 One Semester 1 credit

Advanced Speech and Communication, a course based on Indiana's Academic Standards for English Language Arts and emphasizing the High School Speech and Communication Standards, is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multi-media presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery. ADVANCED SPEECH AND COMMUNICATION PROJECT: Students complete a project, such as multi-media presentations that are reflective, reports or historical investigations, responses to literature, or persuasive arguments, which demonstrates knowledge, application, and speaking progress in the Advanced Speech and Communication course content.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit IU-ACP: COMM 101 Public Oral Communication/Public Speaking (3 credits)

# **Family and Consumer Sciences**

#### ADVANCED CHILD DEVELOPMENT

#### 5360 One Semester 1 credit

Advanced Child Development is for those students interested in life foundations, academic enrichment, and/or careers related to knowledge of children, child development, and nurturing of children. This course addresses issues of child development from age 4 through age 8 (grade 3). It builds on the Child Development course, which is a prerequisite. Advanced Child Development includes the study of professional and ethical issues in child development; child growth and development; child development theories, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children; and career exploration in child development and nurturing. A project-based approach that utilizes higher order thinking, communication, leadership, management, 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. Service learning, introductory laboratory/field experiences with children in preschool and early elementary school settings, and other authentic applications are strongly recommended. This course provides a foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: Child Development
- Credits: 1 Credit per Semester, 2 credits maximum
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# ADVANCED NUTRITION AND WELLNESS

#### 5340 One Semester 1 credit

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: Nutrition and Wellness
- Credits: 1 Credit per Semester, 2 credits maximum
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### CHILD DEVELOPMENT

#### 5362 One Semester 1 credit

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

- Recommended Grade Level: Grade 10, 11, 12
- Recommended Prerequisites: Preparing for College and Careers
- This course is one of the six FACS courses from which students may choose three to fulfill the required Health and Safety credit—See Rule 511 IAC 6-7-6 (6)

 Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **HUMAN DEVELOPMENT AND WELLNESS**

#### 5366 One Semester 1 credi

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: None
- Credits: 1 credit per semester, 2 credits maximum
- Qualifies as one of the F&CS courses a student can take to waive the Heath & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6)
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### INTERPERSONAL RELATIONSHIPS

#### 5364 One Semester 1 credit

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: None
- Credits: 1 credit per semester, 1 credit maximum
- Qualifies as one of the F&CS courses a student can take to waive the Heath & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6).
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### **NUTRITION AND WELLNESS**

#### One Semester 1 credit

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: None

- Credits: 1 credit per semester, 1 credit maximum
- Qualifies as one of the F&CS courses a student can take to waive the Heath & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6)
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### HUMAN AND SOCIAL SERVICES I

#### Two Semesters 2 Credits

Human and Social Services I is an introductory/exploratory course for students interested in careers in human and community services and other helping professions. Areas of exploration include family and social services, youth development, and adult and elder care, and other for---profit and non---profit services. This project---based course will help students integrate higher order thinking, communication, leadership, and management processes to conduct investigations in human and social services at the local, state, national, or global/world level. Research and development, interdisciplinary projects, and/or collaboration with postsecondary faculty, community agencies or organizations, or student organizations are appropriate approaches. Students will be introduced to human and social services professions through presentations from a variety of guest speakers, job shadowing, field trips and introductory and exploratory field experiences. Case studies, role play, and application of professional codes of ethics will be utilized reflecting the challenges of working in diverse communities. Service learning experiences are highly recommended. Achievement of applicable FACS, academic, and employability competencies will be documented through a student portfolio.

- Recommended Grade Level: 11
- Recommended Prerequisites: Nutrition and Wellness, Interpersonal Relationships, Child Development or Human Development and Wellness
- Credits: 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# **Fine Arts**

#### **CERAMICS**

#### 4040 One Semester 1 credit

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

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art, Introduction to Three-Dimensional Art
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### ADVANCED THREE-DIMENSIONAL ART: ADVANCED CERAMICS

#### 4006 One Semester

#### 1 credit

Ceramics II is a continuation of Ceramics I. Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and firing. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Ceramics
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### ADVANCED THREE-DIMENSIONAL ART: POTTERY WHEEL

#### 4006 One Semester

#### 1 credit

Wheel throwing will be advanced to the production of wheel thrown ceramics with emphasis on making functional and non-functional pottery. Students will also glaze and stain the wheel thrown work. *Advanced Three-Dimensional Art* is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Three-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Three-Dimensional Art
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### ADVANCED TWO-DIMENSIONAL ART: ADVANCED DRAWING

#### 4004 One Semester

#### 1 credit

Students in this course build on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and

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

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **DRAWING**

#### 4060 One Semester 1 credit

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

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### INTRODUCTION TO TWO-DIMENSIONAL ART

#### 4000 One Semester 1 credit

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

- Recommended Grade Level: 9, 10, 11, or 12
- Recommended Prerequisites: None
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **PAINTING**

### 4064 One Semester 1 credit

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

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **SCULPTURE**

#### 4044 One Semester 1 credit

Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students in sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials such as plaster, clay, metal, paper, wax, and plastic, students create portfolio quality works. Students at this level produce works for their portfolios that

demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art related careers.

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: a 1-semester course for 1 credit.
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### STUDIO ART (DRAWING PORTFOLIO), ADVANCED PLACEMENT

#### 4048 Two Semesters 2 credits

Studio Art, Advanced Placement – Drawing Portfolio is designed to address a very broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational, and inventive works may demonstrate drawing competence. Any work that makes use of (appropriate) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication. This is demonstrated through manipulation of the formal qualities, design, and/or concept of the source.

- Recommended Grade Level: 11 or 12
- Credits: A 2 credit course, 1 credit per semester
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma

# **VOCAL MUSIC COURSES**

### **BEGINNING CHORUS**

#### 182 Two Semesters 2 credits

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

- Recommended Grade Level: 10, 11, or 12
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### ADVANCED CHORUS

#### 4188 Two Semesters 2 credits

This class is an advanced choir of students, exhibiting exceptional vocal and musical skills in which much time is spent in working with tone production, vocal development, dance development, and overall performance showmanship. A wide variety of musical styles and choreography will be explored throughout the year. In addition to classroom activities, these students will be involved in extracurricular contests and festivals requiring a minimum amount of after school and/or evening rehearsals. Some cost is involved. Recommended Grade Level: 10, 11, or 12

- Recommended Prerequisites: Beginning Chorus. Must audition for director. Acceptance to the group will be by Audition Only
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **VOCAL JAZZ**

#### 4184 Two Semesters 2 credits

Vocal Jazz is based on the Indiana Academic Standards for High School Choral Music. Students in this course develop musicianship and specific performance skills through group and individual settings for the study and performance of varied styles of vocal jazz. Instruction includes the study of the history and formative and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Beginning Chorus. Must audition for director. Acceptance to the group will be by Audition Only
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# **INSTRUMENTAL MUSIC**

# **INTERMEDIATE CONCERT BAND (Marching)**

Two Semesters

2 credits

A band for students who desire training in the fundamental aspects of instrumental performance. Membership will be open to all students who have successfully completed the band programs at Hartford City Middle School or Montpelier Middle School and who have the recommendation of the Middle School band directors. Other students may be accepted with the approval of Blackford High School Band Director. This group will perform at school concerts and festivals. This band will also perform at all home basketball games. The emphasis will be on the development of good tone quality, proper balance and blend. This will include the marching band during the 1st semester. The marching band will perform drills at football games and participate in street parades and the Bluffton Street Fair. Students must enroll in this course in order to be eligible to go on the Florida trip. Intermediate Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. This course includes a balanced comprehensive study of music that develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Students study a varied repertoire of developmentally appropriate concert band literature and develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade Level: None
- Recommended Prerequisites: Successful Completion of 8<sup>th</sup> Grade Band and/or Permission of Director
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### JAZZ ENSEMBLE

4164 Two Semesters

2 credits

Students will perform various forms of jazz, blues, popular, and contemporary styles of music. The ensemble will perform at concerts with the symphonic band as well as various community events and competition. To be considered for this ensemble, students must be willing to also participate in band or another BHS musical ensemble OR must have 4 semester or 6 trimester high school music credits. *Jazz Ensemble* is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course develop musicianship and specific performance skills through group and individual settings for the study and performance of varied styles of instrumental jazz. Instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. A limited amount of time outside of the school day may be scheduled for rehearsals and performances. In addition, a limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students must participate in performance opportunities outside of the school day that support and extend the learning in the classroom. Student participants must also be receiving instruction in another band or orchestra class offering at the discretion of the director.

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisite: Completed Audition and Permission from the Director
- Fulfills requirement for 1 of 2 Fine Arts credits for the Core 40 with Academic Honors diploma if students are enrolled in another band or orchestra course
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### **BEGINNING CONCERT BAND**

#### 4160 Two Semesters 2 Credits

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

- Recommended Grade Level: 9, 10, 11, or 12
- Credits: a 1---semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# THEATRE ARTS

#### THEATRE ARTS

#### One Semester 1 credit

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

- Recommended Grade Level: 9, 10, 11, or 12
- Credits: a 1-semester course for 1 credit. The nature of this course allows for two successive semesters (Theatre Arts I and Theatre Arts II) of instruction at this level, provided that defined standards are utilized.
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

# **Health and Physical Education**

#### PHYSICAL EDUCATION I

#### 3542 One Semester

#### 1 credit

Physical Education *I* focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade Level: 9 12
- Recommended Prerequisites: Grade 8 Physical Education
- Fulfills part of the Physical Education requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Students may earn PE I credit through participation in alternative activities (meet with guidance counselor for details)
  - It is strongly recommended that students who earn credit through participation in alternative activities take an advanced Physical Education course

#### PHYSICAL EDUCATION II

#### 3544 One Semester

#### 1 credit

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.

- Recommended Grade Level: 9 12
- Recommended Prerequisites: Physical Education I
- Fulfills part of the Physical Education requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Students may earn PE II credit through participation in alternative activities (meet with guidance counselor for details)
  - o It is strongly recommended that students who earn credit through participation in alternative activities take an advanced Physical Education course

# **HEALTH & WELLNESS**

#### 3506 One Semester

### 1 credit

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

- Recommended Grade Level: 9 12
- Recommended Prerequisites: 8th grade health education
- Fulfills the Health & Wellness requirement for the General, Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors diplomas

### ELECTIVE PHYSICAL EDUCATION: INTRO TO WEIGHT TRAINING

3560 One Semester 1 credit

This course is designed for students who want to learn the proper technique of weight lifting and training for lifetime fitness. This course also instructs students in flexibility, cardiovascular endurance, and aerobic fitness. Basic lifts, safety procedures, and goal setting will be taught in this course. On-going assessment includes both written performance basked skill evaluation.

- Recommended Grade Level: 9 12
- Recommended Prerequisites: PE I and II
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

#### ELECTIVE PHYSICAL EDUCATION: LIFEGUARDING

3560

Two semesters

2 credits

This course is designed for the student who is an excellent swimmer and committed to earning the American Red Cross Certificate for Life Guarding and First Aid, CPR, and AED.

- Recommended Grade Level: 9 12
- Recommended Prerequisites: PE I, PE II
- Special Requirements: Students must have the ability to swim 300 yards continuously demonstrating breath control and rhythmic breathing. Students may use front crawl, breaststroke, or a combination of both. Students must be able to tread water for 2 minutes using only the legs. Students must be able to swim 20 yards, surface dive 7-10 feet to retrieve a 10 pound brick, return to starting point on his/her back with both hands holding the brick
- This course counts as one PE credit and one health credit for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- A fee is required for certification

### PE CREDIT THROUGH ATHLETICS

The Indiana State Board of Education has provided flexibility to adapt the high school physical education requirements for students who demonstrate proficiency through other means.

Blackford High School provides the opportunity for students to receive Physical Education Credit through participation as outlined below. If a student and his/her guardian wish to exercise this option the student will be required to adhere to the requirements outlined below.

### **Requirements:**

- 1. One PE credit will be given for a complete season of BHS Sponsored or IHSAA sanctioned sport (only one credit per season).
- 2. Retroactive credits will not be awarded.
- 3. A complete season is defined as: <u>first practice to final event</u> (including tournament play). The student must remain on the team the entire season.
- 4. Disciplinary suspensions from the team or academic failure may result in forfeiture of credit as determined by the coach, athletics director, and administration.
- 5. At the conclusion of the season, the coach or athletic director, will provide a roster of all athletes that completed the season to the guidance office. The guidance counselor will confirm successful participation and place credits on the student's transcript for the semester grade.
- 6. Athletes are required to complete the **Fitness Test** at the designated fitness levels prior to the end of year sports banquet of corresponding sport or the end of the school year (whichever occurs first). No credit will be awarded if a fitness test form is not returned to the guidance department.

### Updated 5/22/2015

- 7. Completion of **Standards Journal** is due at the end of the season. No credit will be awarded if athlete fails to return completed standards journal to the guidance department.
- 8. The assignment is pass/fail. A passing grade will transfer as an "A" to the student's transcript.

### Eligible Sports

Girls Cross Country	Boys Cross Country
Girls Soccer	Boys Soccer
Volleyball	Football
Girls Golf	Boys Tennis
Girls Basketball	Boys Basketball
Girls Swimming	Boys Swimming
Softball	Baseball
Girls Track	Boys Track
Girls Tennis	Boys Golf
Cheerleading (fall or winter)	Wrestling

### **Health Science Education**

### HEALTH SCIENCE EDUCATION I

### 5282 Two Semesters 4 credits

Health Science Education I content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, an introduction to health care systems, anatomy, physiology, and medical terminology. Lab experiences are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course.

- Recommended Grade Level: Grade 11
- Recommended Prerequisites: Biology I and Algebra I (C or better)
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech HLHS 100 Introduction to Health Careers (3 credits-semester 1); HLHS 101 Medical Terminology (3 credits-semester 2)

### HEALTH SCIENCE EDUCATION II: NURSING

### 5284 Two Semesters 4 credits

Health Science Education II is an extended laboratory experience at the student's choice of clinical site designed to provide students the opportunity to assume the role of a health care provider and practice technical skills previously learned in the classroom, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care teams and legal and ethical considerations. Students will be presented a curriculum designed to prepare them for a career as a nurse or doctor. Students will learn medical terminology essential to all health care professions and will investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. This course will introduce students to the cell 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. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in health science careers, including self-analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program.

- Recommended Grade Level: Grade 12
- Recommended Prerequisites: Health Science Education I, Chemistry, and teacher recommendation
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech: **HLHS 107** CNA Preparation (5 credits)

### **Mathematics**

#### ALGEBRA ENRICHMENT

### 2516 Two Semesters 2 credits

Algebra Enrichment is a mathematics support course for Algebra I. The course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra Enrichment align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra Enrichment combines standards from high school courses with foundational standards from the middle grades.

- Counts as a Mathematics Course for the General Diploma only or as an Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Algebra Enrichment is designed as a support course for Algebra I. As such, a student taking Algebra Enrichment must also be enrolled in Algebra I during the same academic year.

### **ALGEBRA I**

### 2520 Two Semester 2 credits

Algebra I formalizes and extends the mathematics that students learned in the middle grades. Five critical areas comprise Algebra I: Relations and Functions; Linear Equations and Inequalities; Quadratic and Nonlinear Equations; Systems of Equations and Inequalities; and Polynomial Expressions. The 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 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.

- Recommended Prerequisite: Pre-Algebra
- Fulfills the Algebra I/Integrated Mathematics I requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

#### ALGEBRA II

### 2522 Two Semesters 2 credits

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.

- Recommended Prerequisite: Pass both semesters of Algebra I
- 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

### PRE-CALCULUS

### 2564 Two Semesters 2 credits

This course is a two semester dual credit class that contains one semester of college algebra and one semester of trigonometry. Semester one presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, systems of equations, matrices, rational functions and exponential and logarithmic functions. Semester two presents an in-depth study of right triangle trigonometry, oblique triangles, vectors, graphs of trigonometric functions, trigonometric identities, equations, complex numbers in rectangular and polar/trigonometric forms, rectangular and polar coordinates, and conics.

- Recommended Prerequisite: Algebra II
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### ADVANCED MATH COLLEGE CREDIT

### 2544 Two Semesters

2 credits

These courses are to be taken in consecutive semesters and are taught at the same rigor as the first and second semester freshman college mathematics courses. During the first semester, students are presented an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, systems of equations, matrices, rational functions and exponential and logarithmic functions. During the second semester, student apply new knowledge in an in-depth study of right triangle trigonometry, oblique triangles, vectors, graphs of trigonometric functions, trigonometric identities and equations and complex numbers in rectangular and polar/trigonometric forms, rectangular and polar coordinates and conics.

- Recommended Prerequisite: Algebra II Honors and Geometry Honors or Teacher Recommendation
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech: MATH 136 College Algebra (3 credits)
   Ivy Tech: MATH 137 Trigonometry with Analytical Geometry (3 credits)
   Ivy Tech: MATH 211 Calculus I (4 credits)

### **GEOMETRY**

#### 2532 Two Semesters

2 credits

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. Six critical areas comprise the Geometry course: Congruency and Similarity; Measurement; Analytic Geometry; Circles; and Polyhedra. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school CCSS. 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.

- Recommended Prerequisite: Algebra I and Passing Score on Algebra I ECA
- Fulfills the Geometry 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

### **MATHEMATICS LAB**

#### 2560 One Semester

1 credit

Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana's Academic Standards for Mathematics. This course will be required for students who passed Algebra I but were unsuccessful in passing the End of Course Assessment (ECA). The content of Mathematics Lab is tightly aligned and designed to be taken in conjunction with Algebra II.

- Credits: A one to eight credit elective course
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### **STATISTICS**

### **Two Semesters**

2 credits

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Topics include: (1) descriptive statistics, (2) probability, and (3) statistical inference. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing calculators and computer programs is encouraged.

- Recommended Prerequisite: Algebra II or Integrated Mathematics III
- Credits: 2 credits
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### **Multi-Disciplinary**

### JUNIOR RESERVE OFFICER TRAINING CORPS

This course is designed to develop: (1) citizenship and patriotism, (2) self-discipline, (3) physical fitness, (4) reliance and leadership, and (5) the skills used in decision making, communications, and problem-solving. The course content and experiences enable the students to understand the role of the military in support of national objectives and to become familiar with basic military knowledge, gender equity issues, benefits, and requirements. Topics to be included in the course are: (1) military history, (2) ROTC in the military, (3) substance abuse, (4) map reading, (5) marksmanship and firearm safety, (6) military drill, (7) field activities, (8) reserve components, and (9) first aid and hygiene. Opportunities are provided to explore the qualities and traits of courage, self-sacrifice, and integrity. Junior Reserve Officer Training Corps programs must be approved by and meet the requirements of the appropriate military organization.

- Recommended Grade Level: None
- Recommended Prerequisites: None
- Counts as an Elective for all diplomas

### JROTC I - LET 1

### 0516 Two Semesters

2 credits

The first year curriculum focuses in four primary areas:

- Citizenship in action provides the foundations of Army JROTC and for getting involved
- Leadership Theory and Application Being a Leader, Leadership Skills, and Leadership Applications
- Foundations for Success Know yourself, Learning to Learn, Study Skills, Communication Skills, Conflict Resolution, and Financial Planning
- Wellness, Fitness, and First Aid Cadet Challenge (The President's Challenge; Physical Fitness Program)

### JROTC II – LET 2

### 0516 Two Semesters

2 credits

The second year curriculum focuses in five primary areas:

- Leadership Theory and Application Leadership Applications
- Foundations for Success Service Learning
- Wellness, Fitness, and First Aid Achieving a Healthy Lifestyle, First Aid for Emergency and Non-emergency Situations, Drug Awareness, and Cadet Challenge
- Geography, Map Skills, and Environmental Awareness Map Skills, Exploring the World, and Environmental Awareness
- Citizenship in History and Government You the People, Citizenship Skills, and We the People

### JROTC III - LET 3

### 0516 Two Semesters

2 credits

The third year curriculum focuses in five primary areas:

- Citizenship in Action Provides the foundations of Army JROTC and for getting involved
- Leadership Theory and Application Leadership Planning, Leadership Strategies, Leading Others, and Applications
- Foundations for Success Presenting Skills, Managing Conflicts, Career Planning, Planning Skills, Social Responsibility, Financial Planning, and Service Learning
- Wellness, Fitness, and First Aid Cadet Challenge
- Citizenship in History and Government You the People, Citizenship Skills, and We the People

### JROTC IV - LET 4

### 0516 Two Semesters 2 credits

The fourth year curriculum focuses in six primary areas:

- Citizenship in Action Service to the Nation, Assistant Teaching
- Leadership Theory and Application Leadership Principles, Leadership Applications, Assistant Teaching
- Foundations for Success Financial Planning, Winning Colors, Success Profiler, Teaching Skills, Assistant Teaching, and Service Learning
- Wellness, Fitness, and First Aid Cadet Challenge and Assistant Teaching
- Citizenship in History and Government YTP, Citizenship Projects, History Projects, and Assistant Teaching

### CADET TEACHING EXPERIENCE

### O502 One Semester 1 credit

This elective course provides students in grades eleven (11) or twelve (12) organized exploratory teaching experiences in grades kindergarten (K) through grade nine (9). All teaching experiences should be preplanned by the high school Cadet Teaching Experience teacher---trainer and the cooperating teacher(s) who are supervising prospective teachers and providing them with pre---training experiences in one or more classes. This course provides a balance of class work relating to: (1) classroom organization, (2) classroom management, (3) the curriculum and instructional process, (4) observations of teaching, and (5) instructional experiences. Study topics and background reading provide the cadets with information concerning the teaching profession and the nature of the cadet teachers' assignments. Evaluation is based upon the cadet teachers' cooperation, day---to---day practical performance, and class work including the cadets' potential ability to teach. The total workload of the Cadet Teaching course is comparable to those for other subjects in the high school curriculum.

- Recommended Grade Level: 11 or 12
- Recommended Prerequisites: None
- Credits: One credit per semester up to 4 credits
- Cadet teaching experience for high school students is limited to grades kindergarten through grade nine. Counts as an Elective for all diplomas

### **BASIC SKILLS**

### 0500 One Semester 1 credit

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. •

- Recommended Grade Level: 9-12
- Recommended Prerequisites: None
- Credits: One credit per semester up to 8 credits
- Counts as an Elective for all diplomas

### **COLLEGE ENTRANCE PREPARATION**

### One Semester 1 credit

College-Entrance Preparation utilizes individual student score reports from the PSAT and/or the PLAN to prepare students for the SAT, ACT, the Accuplacer and Compass assessments. Based on these score reports, students will receive targeted instruction to strengthen their foundations in critical reading, writing, mathematics, and science (all sections of college admission and placement exams). As appropriate, the course will also encompass test taking strategies to prepare students for success on a high-stakes assessment. Teachers are encouraged to use a curriculum with longitudinal, successful results. Course may also include college selection and application units, to best prepare students for overall college-readiness.

- Recommended Grade Level: semester 1 grade 11; semester 2 grade 10
- Recommended Prerequisite: Algebra II (or concurrent enrollment in Algebra II)
- Counts as an Elective credit for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

### **COMMUNITY SERVICE**

### 0524 Two Semesters 2 credits

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

- Grade level: 11 and 12 only
- Recommended Prerequisites: none
- This course is only available to students enrolled at the Alternative Education Center

### PEER TUTORING

### 0520 Two Semesters 2 credits

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

- Recommended Grade Level: 10, 11 or 12
- Recommended Prerequisites: None
- Counts as an Elective for all diplomas

### CAREER AND INFORMATION & EXPLORATION

### 0522 Two Semesters 2 credits

The Career Information and Exploration course provides students opportunities to learn about themselves and about various traditional and nontraditional occupations and careers. Students are also provided assistance with improving their reading, math, and writing skills as a part of the program. Students also gain an awareness of the type of occupational preparation or training needed for various occupations and careers. Students develop skills in (1) employability, (2) understanding the economic process, and (3) decision making and planning. Opportunities are provided for students to observe various job situations through field trips, internships, mock interviews, job shadowing, and guest speakers. Résumé development experience, career-related testing, and job placement assistance are provided to students. Credits from this course count as elective credits for all diplomas. These credits can also be used as part of a Career-Sequence or Flex credits for the General Diploma.

- Recommended Grade Level: 11 or 12
- Recommended Prerequisites: None
- Counts as an Elective for all Diplomas
- Enrollment in this course is only open to students participating in the Jobs for America's Graduates (JAG) program.

### **Science**

### ADVANCED SCIENCE, COLLEGE CREDIT – BIOLOGY

### 3090 Two Semesters

### 2 credits

BIOL 101 is a non-major's introductory biology 3-credit hour lecture/lab course. The course is a general survey course introducing general topics in biology. The course covers topics ranging from the chemical foundation of cells, genetics, natural selection/evolution, human physiology, ecology & environmental issues. Emphasis is placed on the interrelationships of organisms in the biological world.

- Recommended Grade Level: 11-12
- Credits: 1 credit per semester. May be offered for successive semesters
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty
- Courses that use this title are those that do not meet specific high school standards for a
  corresponding high school course, as they are standards beyond what is taught in the high
  school
- Dual Credit Ivy Tech: **BIOL 101** Introductory Biology (3 credits)

### **ANATOMY & PHYSIOLOGY**

### 5276 Two Semesters

### 2 credits

Anatomy & Physiology is a course in which students investigate and apply concepts associated with human anatomy and physiology. Concepts covered include the process of homeostasis and the essentials of human function at the level of genes, cells, tissues, and organ systems. Students will understand the structure, organization, and function of the various components of the healthy human body in order to apply this knowledge in all health-related fields. The course should include ample laboratory experiences that illustrate the application of the standards to the appropriate cells, tissues, organs, and organ systems. Dissection is both appropriate and necessary. Students should be able to use basic laboratory equipment such as microscopes, balances, and pipettes.

- Recommended Grade Level: 11-12
- Required Prerequisite: First-Year course of same discipline (Biology)
- Recommended Prerequisite: Chemistry
- Counts as a Life Science Course for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas

### **BIOLOGY I**

### **Two Semesters**

### 2 credits

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

- Recommended Grade Level: 9, 10
- Fulfills the Biology requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### **CHEMISTRY I**

### 3064 Two Semesters

### 2 credits

Chemistry I is a course based on the following core topics: properties and states of matter; atomic structure; bonding; chemical reactions; solution chemistry; behavior of gases, and organic chemistry. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. Instruction should focus on developing student understanding that scientific

knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grade Level: 10-12
- Recommended Prerequisite: Algebra II (can be taken concurrently)
- 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

#### INTEGRATED CHEMISTRY-PHYSICS

### 3108 Two Semesters 2 credits

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

- Recommended Grade Level: 9
- 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 the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas

### PHYSICS I

#### 3084 Two Semesters 2 credits

Physics I is a course focused on the following core topics: motion and forces; energy and momentum; temperature and thermal energy transfer; electricity and magnetism; vibrations and waves; light and optics. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grade Level: 9-12
- Recommended Prerequisite: Algebra II
- Fulfills the 2 credit requirement for Chemistry I, Physics I, or Integrated Chemistry and Physics towards the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas

### PHYSICS 1: ALGEBRA-BASED, ADVANCED PLACEMENT

### 3080 Two Semesters 2 credits

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

- Recommended Grade Level: 10-11
- Recommended Prerequisite: Algebra I or Integrated Mathematics I
- Credits: A two credit course, 1 credit per semester
- Counts as a Science Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Qualifies as a quantitative reasoning course

### **Social Studies**

### **ECONOMICS**

### 1514 One Semester 1 credit

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.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas, a Social Studies requirement for the General Diploma, or counts as an Elective for any diploma

### UNITED STATES GOVERNMENT

### 1540 One Semester 1 credit

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, politic, and civic activities and the need for civic and political engagement of citizens in the United States.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Fulfills the Government requirement for the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

### GOVERNMENT AND POLITICS: UNITED STATES, ADVANCED PLACEMENT

### 1560 Two Semesters 2 credits

Government and Politic: United States, Advanced Placement is a course based on content established by the College Board. Topics include: (1) constitutional underpinnings of United States government, (2) political beliefs and behaviors, (3) political parties, interest groups, and mass media, (4) institutions of national government, (5) public policy, and (6) civil rights and civil liberties. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: <a href="http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html">http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html</a>

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Credits: A 1 or 2 semester course, 1 credit per semester
- Fulfills the US Government requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

### **PSYCHOLOGY**

### 1532 One Semester 1 credit

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.

- Recommended Grade Level: 11 or 12
- Recommended Prerequisites: None
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### SOCIOLOGY

#### 1534 One Semester 1 credit

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.

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisites: None
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### UNITED STATES HISTORY

#### 1542 Two Semesters 2 credits

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.

- Recommended Grade Level: None
- Recommended Prerequisites: None
- Fulfills the US History requirement of the General, Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas

### ADVANCED SOCIAL SCIENCE, COLLEGE CREDIT

### 1574 Two Semesters 2 credits

HIST 101: This course provides a topical introduction to American history from the era of Columbus's exploration of the New World, up through the era of the American Civil War. As our guiding themes we will focus on cultural tensions between freedom and un-freedom, between equality and inequality, and between prosperity and poverty. For instance, has it ever been possible in American history to imagine equality without at the same time excluding some people? In examining such cultural tensions, we will look in particular at how notions of gender, race, and class have changed over time, first in a colonial context in the collision of European, Native American, and African cultures in the challenging environment of North America, and then in a postcolonial context when competing social groups struggled for advantage in the young American nation. Throughout the course, we will situate North America and then the United States not only in a multicultural but also in a global context. Special attention will be paid, as well, to how the lives of ordinary people intersected with broader sweeps of history. To test the continuing resonance of early modern American history, we will scrutinize not only struggles for social dominance or self-determination by people in the past, but also struggles over the meaning of historical memory by people in the present.

**HIST 102:** This course takes up the story as the nation rebuilds after the Civil War. In the years between 1865 and 2005, the United States evolves from a marginal and predominantly rural nation to become the world's preeminent military and economic power. This course will examine this story from a variety of perspectives including biography and autobiography, original documents, and the often conflicting interpretations of historians.

- Recommended Grade Level: Grades 11
- Recommended Prerequisites: World Civilizations
- Credits: 1 credit per semester. May be offered for successive semesters
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech: HIST 101 Survey of American History I (3 credits semester 1)
   Ivy Tech: HIST 102 Survey of American History II (3 credits semester2)

### WORLD HISTORY AND CIVILIZATION

### 1548 Two Semesters 2 credits

World History 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 skills and process of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

- Recommended Grade Level: None
- Recommended Prerequisites: None
- Fulfills a Social Studies requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma

### WORLD HISTORY, ADVANCED PLACEMENT

### 1576 Two Semesters 2 credits

World History, Advanced Placement is a course that provides students with the content established by the College Board. The course will have a chronological frame from the periods 8000 B.C.E. to the present. AP World History focuses on five overarching themes: Interaction Between Humans and the Environment, Development and Interaction of Cultures, State-Building, Expansion, and Conflict, Creation, Expansion, and Interaction of Economic Systems, Development and Transformation of Social Structures. A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: A comprehensive description of this course can be found on the College Board AP Central Course Description web page at: <a href="http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html">http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html</a>

- Recommended Grade Level: None
- Recommended Prerequisites: Geography and History of the World
- Fulfills a Social Studies requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma.

### World Language

### FRENCH I

### 2020 Two Semesters 2 credits

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

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

### **FRENCH II**

### 2022 Two Semesters 2 credits

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

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

### **FRENCH III**

### 2024 Two Semesters 2 credits

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

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

• Dual Credit – Ivy Tech: FREN 101 French Level I (4 credits - semester 1), FREN 102 French Level II (4 credits – semester 2)

### **FRENCH IV**

### 2026 Two Semesters 2 credits

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

- Recommended Grade Level: 10-12
- Recommended Prerequisites: French I, II and III
- Credits: A 2-credit course
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma
- Dual Credit Ivy Tech: FREN 201 French Level III (3 credits semester 1), FREN 202 French Level IV (3 credits – semester 2)

### **JAPANESE I**

### 2060 Two Semesters 2 credits

Japanese I, a course based on Indiana's Academic Standards for World Languages, introduces students to effective strategies for beginning Japanese language learning, and to various aspects of Japanese-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 simple sentences using characters. This course also emphasizes the development of reading and listening comprehension skills, such as recognizing letters and sounds of familiar words and comprehending brief oral directions. Additionally, students will examine the practices, products and perspectives of Japanese-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 Japanese language and culture outside of the classroom.

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

### JAPANESE II

### 2062 Two Semesters 2 credits

Japanese II, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Japanese 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 sentences and descriptions using characters. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and recognizing words and characters through stroke order and stroke count. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation. Additionally, students will describe the practices, products and perspectives of Japanese-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 Japanese language and culture outside of the classroom.

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

### **JAPANESE III**

#### 2064 Two Semesters 2 credits

Japanese III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Japanese 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 simple paragraphs using characters. This course also emphasizes the continued development of reading and listening comprehension skills, such as using radicals, stroke order, and stroke count to guess meaning. 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. Additionally, students will continue to develop understanding of Japanese-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 Japanese language and culture outside of the classroom.

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

### JAPANESE IV

#### 2066 Two Semesters 2 credits

Japanese 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 Japanese-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 Japanese language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Japanese speakers.

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

### **SPANISH I**

### 2120 Two Semesters 2 credits

Spanish I introduce students to effective strategies for beginning language learning, and to various aspects of Spanish-speaking culture. These courses encourage 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. These courses 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.

- Recommended Grade Level: 9-12
- Recommended Prerequisites: C or better in 8th grade English
- 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

### Two Semesters 2 credits

Spanish II build upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. These courses encourage 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. These courses 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.

- Recommended Grade Level: 9-12
- Recommended Prerequisites: C or better in 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**

### 2124 Two Semesters 2 credits

The first semester of Spanish III-DC will introduce additional grammatical structures and vocabulary to further develop speaking, reading, writing, and listening skills as well as an appreciation of the cultures of the Spanish speaking world. During the second semester, Spanish is the primary medium of instruction, as well as the subject. The goal of this course is to continue the development and reinforcement of the basic skills of the target language through listening, speaking, reading, and writing. The course continues the study of grammar, vocabulary, and introduces Spanish and Latin American civilizations through conversation coordinated with reading of cultural text.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Spanish I and II
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma
- Dual Credit Ivy Tech: SPAN 101 Spanish Level 1 (4 credits semester1); Ivy Tech: SPAN 102 Spanish Level 2 (4 credits semester 2)

### **SPANISH IV**

### 2126 Two Semesters 2 credits

In this course, Spanish is the primary medium of instruction. The goal of the course is to continue the development and reinforcement of the skills of the target language through listening, speaking, reading, and writing at an advanced level. The course continues the study of grammar, vocabulary, and introduces Spanish and Latin American civilizations through conversation coordinated with reading of cultural text.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Spanish I and II
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma
- Dual Credit Dual Credit Ivy Tech: SPAN 201 Spanish Level III (3 credits semester 1),
   SPAN 202 Spanish Level IV (3 credits semester 2)

### **Muncie Area Career Center**

### AUTOMOTIVE SERVICES TECHNOLOGY I

5510 Two Semesters 6 credits AUTOMOTIVE SERVICES TECHNOLOGY II 5546 Two Semesters 6 credits

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

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

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Introduction to Transportation
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with postsecondary courses for Dual Credit
- Dual Credits available: Ivy Tech AUTC 101, AUTC 107, AUTC 121, AUTC 127, AUTC 113, and AUTC 109
- Certifications available: NA3SA National Automotive Student Skills Standards Assessment Minimum of 4 Tests

## BIO TECHOLOGY - (PLTW BIOMEDICAL INNOVATION, PLTW HUMAN BODY SYSTEMS, PLTW MEDICAL INTERVENTIONS, PLTW PRINCIPALS OF BIOMEDICAL SCIENCES) 5218, 5216 Two Semesters/3 periods 6 Credits

<u>PLTW Principles of the Biomedical Sciences</u> 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.

<u>PLTW Human Body Systems</u> 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.

### 5217, 5219 Two Semesters/3 credits 6 Credits

<u>PLTW Medical Interventions</u> 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.

PLTW 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. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

- Recommended Grade Level: Grade 11-12
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Opportunities: IU BIOT 107 Biotechnology
- Certification Opportunities: PBS End-of-Course Assessment, HBS End-of-Course Assessment, MI End-of-Course Assessment

### **CONSTRUCTION TRADES I**

5580 Two Semesters/3 Periods

6 credits

### **CONSTRUCTION TRADES II**

5578 Two Semesters/3 Periods 6 credits

Construction Technology I includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures. Student will learn the history of building construction to present-day applications emphasizing future trends and construction as a career. This course also provides instruction and practice in the use of working drawings and applications from the print to the work. Includes relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Examines the design and construction of floor and wall systems and student develops the skill needed for layout and construction of floor and wall systems from blueprints and professional planning documents. Instruction will be given in the following areas, administrative requirements, definitions, building planning, foundations, wall coverings, roof and ceiling construction, and roof assemblies. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration's Safety & Health Standards for the construction industry. In this course, students will build a house and will be outside in all weather.

Construction Technology II includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures including recent trends in residential construction industry. Information is presented concerning materials, occupations, and professional organizations within the industry. Students will develop basic knowledge, skills, and awareness of interior trim. This course provides training in installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will develop skills in the finishing of the exterior of a building. Student will obtain skills in the installation of the cornice, windows, doors and various types of sidings used in today's market place. Students study the design and construction of roof systems and use of the framing square for traditional rafter and truss roofing. In this course, students will build a house and will be outside in all weather.

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Introduction to Construction
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

- Dual Credit Opportunities
   – Ivy Tech: CONT 101 Introduction to Construction Technology (3 credits); CONT 102 Construction Materials (3 credits); CONT 106 Construction Blueprint Reading (3 credits); BCOT 104 Floor and Wall Layout (3 credits)
- Certification Opportunities: Home Builders Institute Carpentry Basic, Indiana-Kentucky-Ohio Regional Council of Carpenters Joint Apprenticeship

# CONSTRUCTION TRADES: ELECTRICAL I 4830 Two Semesters/3 periods 6 credits CONSTRUCTION TRADES: ELECTRICAL II 4832 Two Semesters/3 periods 6 credits

Construction Technology: Electrical I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical structures. This course includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules and plot plans. This course covers both AC and DC circuits. Studies include electron theory, Ohm's Law, Watt's Law, Kirchoff's Law, series circuits, series-parallel circuits, electromagnetic induction, current, voltage, resistance, power, inductance, capacitance, and transformers. Students will demonstrate the use of electrical equipment, troubleshooting techniques, the installation of hardware, metering equipment, lights, switches, and safety procedures and practices. Students will use the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law. Mathematical principles will be used to solve electrical problems. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies.

Construction Technology: Electrical II includes classroom and laboratory experiences concerned with the practice of residential wiring, including electrical service, metering equipment, lighting, switches, outlets and other common components, and methods of installation and maintenance of the residential wiring system in accordance with the current National Electrical Code. Additionally, it presents methods and techniques for troubleshooting appliances, motors, motor controls, relay wiring, commercial wiring and industrial wiring systems. It also covers wiring methods and material selection for commercial and industrial wiring systems. Studies include mechanical installation of hardware as well as electrical design and layout. This course also focuses on tool use, material selection, and installation of machines in the industrial setting. Instruction in thinking critically to analyze, synthesize, and evaluate technical problems and information will also be covered as it relates to health, safety, and welfare standards and codes as dictated by local, state or federal agencies

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Introduction to Construction
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Opportunities: Ivy Tech CONT 127 Electrical Basics, BCOT 129 Residential Wiring
- Certification Opportunities: Home Builders Institute Wiring Basic, Indiana-Kentucky-Ohio Regional Council of Carpenters Joint Apprenticeship

### **COSMETOLOGY I and II**

### Two Semesters/3 periods 6 Credits

Cosmetology I offers an introduction to cosmetology with an emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, bacteriology, and sanitation. In the second semester greater emphasis is placed on the application and development of these skills. The State of Indiana requires a total of 1500 hours of instruction for licensure.

Cosmetology II emphasis will cover the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology.

- Recommended Grade Level: Grade 11 and 12
- Counts as Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Opportunities: COSM 100 (7 credits), COSM 150 (7 credits), COSM 200 (7 credits), COSM 250 (9 credits)
- State Board of Cosmetology License (1500 hours to sit for exam)

### CRIMINAL JUSTICE I/FIRE AND RESCUE I

### 5822/5820 Two Semesters/3 Periods 6 credits

Criminal Justice I Introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Fire and Rescue I; Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. 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. The Fire and Rescue curriculum may include five Indiana state fire certifications: (1) Mandatory, (2) Firefighter I, (3) Firefighter II, (4) Hazardous Materials Awareness, (5) Hazardous Materials Operations. An additional two industry certifications may be earned by adding (6) First Responder, and (7) Emergency Medical Technician-Basic to the curriculum.

- Recommended Grade Level: Grade 11-12
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Ivy Tech: LAWE 100 and LAWE 160

### **DENTAL CAREERS I**

5203 Two Semesters/3 Periods 6 credits

### **DENTAL CAREERS II**

Two Semesters/3 Periods 6 credits

**Dental Careers I** prepares the student for an entry-level dental assisting position. Emphasis is placed on the clinical environment, chair-side assisting, equipment/instrument identification, tray set-ups, sterilization, and characteristics of microorganisms and disease control. In addition, oral, head and neck anatomy, basic embryology, histology, tooth morphology, charting dental surfaces, and illness are all introduced. Simulated inschool laboratories and/or extended laboratory experiences are also included to provide opportunities for students to further develop clinical skills and the appropriate ethical behavior. Leadership skills are developed and community service provided through HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level

**Dental Careers II** is a course designed to provide the dental assisting student with specific knowledge of the administrative planning, book-keeping, recall programs, banking, tax records, computer software, insurance, office practice and management as related to the dental office. In addition, students will practice Oral and Maxillofacial Surgery, Periodontics, Endodontics, Prosthodontics, Pediatric Dentistry, and Orthodontics. Opportunity for increased skill development in clinical support and business office procedures is routinely provided. The importance of the clinical behavior of materials and biological factors are also stressed. Leadership skills are developed and community service provided through HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level.

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: Nutrition and Wellness
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Opportunities: HLHS 101 Medical Terminology, HLHS 111 Health and Wellness
- Certification Opportunity: HSII National CONSORTIUM for Health Science Education (NCHSE)

### EARLY CHILDHOOD EDUCATION I

5412 Two Semesters/3 Periods 6 credits EARLY CHILDHOOD EDUCATION II

Two Semesters/3 Periods 6 credits

Early Childhood Education prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to

integrate the study of suggested topics. Major course topics include: career paths in early childhood education; promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula, and services available to young children. Students examine basic principles of child development, importance of family, licensing, and elements of quality care of young children. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings; developmentally appropriate practices of guidance and discipline; application of basic health, safety, and nutrition principles when working with children; overview of management and operation of licensed child care facilities or educational settings; child care regulations and licensing requirements; and employability skills. Intensive experiences in one or more early childhood settings, resumes, and career portfolios are required components. A standards-based plan for each student guides the laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Early Childhood Education teacher. Student laboratory/field experiences may be either school-based or "on-the-job" in community-based early childhood education centers or in a combination of the two. Dual credit agreements with postsecondary programs are encouraged.

- Recommended Grade Level: Grade 11, 12
- Recommended Prerequisites: Preparing for College and Careers
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Opportunities: ECED 100 Intro to Early Childhood Ed, ECED 101 Health Safety Nutrition, and ECED 105 Child Development Associate
- Certification Opportunities: Pre-Professional Assessment and Certification (PRE-PAC), First Aid CPR

### WELDING TECHNOLOGY I

5776 Two Semesters/3 Periods 6 credits

### WELDING TECHNOLOGY II

5778 Two Semesters/3 Periods 6 credits

Welding Technology I includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and Shielded Metal Arc welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Design, Research or Engineering. Emphasis is placed on safety at all times. OSHA standards and guide lines 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 college and career success.

Welding Technology II includes classroom and laboratory experiences that develop a variety of skills in Gas Metal Arc welding, Flux Cored Arc Welding, Gas Tungsten Arc welding, Plasma Cutting and Carbon Arc. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Design, Research or Engineering. Emphasis is placed on safety at all times. OSHA standards and guide lines 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 college and career success.

- Recommended Grade Level: Grade 11-12
- Recommended Prerequisites: None
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Dual Credit Opportunities:- Ivy Tech: INDT 114, WELD 108, WELD 109, WELD 100
- Certification Opportunities: AWS American Welding Society Level 1 Modules 2, 3, 8-Unit 1, 8-unit 3, and 9 plus one welding process

### **Jay County High School**

(Subject to change per Jay County course availability during period 1)

### Courses offered 2014-15

### **Graphics**

Graphic Design I = 18 weeks – August through December Graphic Design II = 18 weeks – January through May - Vincennes Dual Credit Graphic Technology = 36 weeks – August through May

### **Agriculture**

### 1st half of the school year

Agriculture Business Mgnt. – 18 weeks – August through December – Ivy Tech credit Animal Science – 18 weeks – August through December

Agriculture Power Technology – 18 weeks – August through December Introduction to Agriculture – 18 weeks – August through December

### 2<sup>nd</sup> half of the school year

Food Science – 18 weeks – January through May Agriculture Power Technology – 18 weeks – January through May Sustainable Energy Alternatives – 18 weeks – January through May – Ivy Tech credit Plant & Soil – 18 weeks – January through May

### Radio & TV

Radio & TV I - 18 weeks - August through December - Vincennes dual credit Radio & TV II - 18 weeks - January through May - Vincennes dual credit

Students can enroll in the 36 week long classes or take two - 18 week classes.

Jay County courses offered for 2015-16 have not been disclosed at this time due to Jay County still being in their scheduling phase.