

Indiana State Approved
Course Titles and Descriptions
2017-2018 School Year

LEARNING TODAY. LEADING TOMORROW.



East Central High School

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COURSE GUIDE AND SCHEDULING INFORMATION

What is the Course Guide?

The East Central High School Course Guide is a tool designed to help students and parents determine which courses to take in high school. Parents are encouraged to become actively involved with their children in the selection of coursework. The information in this Course Guide should be studied and referred to often. It is important to note the course prerequisites and graduation requirements for specific diplomas.

Selecting Courses

The courses you select can impact your future endeavors. Students and parents are encouraged to choose courses that are academically challenging and provide preparation for the future. The selection of courses is of utmost importance and includes consideration of a student's interests, abilities, and effort. Unless special permission is granted, students must carry a minimum of six credits per semester.

The Timeline of the Scheduling Process •

- Students will select next school year's courses in late winter/early spring. Students are expected to give careful consideration to course selections when they are made. After the last day of the school year, no parent/student course request changes are available. Until the first day of the new school year, counselors may change schedules and classes due to the following reasons only: 1) graduation requirement or academic need, 2) course cancellation, 3) course conflict, and/or 4) failure to meet prerequisite. Every attempt is made to place students in the courses requested. However, at times, a student may have to choose a different elective due to scheduling conflicts and availability of courses. Please have alternate courses in mind in case there is a scheduling conflict. •
- A master schedule is developed based on student course requests. Once a Master Schedule is built, course requests will be scheduled and scheduling conflicts resolved. •
- Students will be given a tentative copy of their schedule for preview by the end of the school year. Before the new school year begins, adjustments in students' schedules will be made for class failures, prerequisite requirements, and class size. The Guidance Department reserves the right to adjust what period a class meets in order to balance class sizes. •
- Students should view their schedule during Fall Registration. Two weeks prior to the beginning of the school year is the designated time to make changes in one's schedule due to credit requirements for diplomas, post-secondary schooling and career goals. After school begins, no schedule change will be made except to 1) correct a computer error, 2) balance a course size, or 3) remedy improper placement. •
- Requests to change second semester's schedules must be submitted during the last two weeks of first semester. •
- Students who choose to drop a class after the start of a course will receive a "WF" on their transcript. In addition, that "F" will calculate into the students cumulative GPA.
- Teacher/counselor requested inter-departmental change requests may be granted throughout the semester. Parents will be notified of these changes or additions.

TERMS TO KNOW

ADVANCED PLACEMENT: Through college-level AP courses, students have the opportunity to earn college credit while in high school. To earn college credit through the AP program, students must score a 3, 4 or 5 on the AP test at the end of the school year.

Biology	European History
Calculus AB	Microeconomics
Calculus BC	Statistics
Chemistry	US Government & Politics
English Language	US History
English Literature	World History

ATHLETIC ELIGIBILITY: Students must pass five classes to be eligible for inter-scholastic athletics. National Collegiate Athletic Association Guideline for College Athletes: Students desiring to play in Division I or II college sports must complete a NCAA Clearinghouse application as early as their sophomore year, but no later than the end of their Junior year. GPA, SAT and ACT requirements are based on the qualifier index scale found on their website at www.ncaaclearinghouse.net. See the athletic office for more information.

CERTIFICATIONS: East Central High School offers industry recognized certifications via the following courses. These certifications are qualifying credentials for the Technical Honors Diploma.

Culinary Arts & Hosp Mgmt	Education Professions	Human Services	Int Media Adv Comp Apps
Int Media Comp Apps	Intro to Culinary Arts	Landscape Managment	

CLASS DESIGNATION: Class designation will be determined by the number of years the student has been in high school. Thus, a first year student is a freshman and a fourth year student is a senior. Students who attend school more than four years will be designated as fifth-year seniors. While a certain number of credits are not required for class designation, it is recommended that students have a minimum of 11 credits following their freshman year, 23 credits following their sophomore year, and 35 credits following their junior year.

CREDIT: A term indicating that a student has successfully completed a class. For each class successfully completed per semester, one (1) credit will be given.

DIPLOMA TYPES A student may graduate from East Central High School with the following diplomas:

CORE 40 WITH ACADEMIC HONORS DIPLOMA: *The Academic Honors Diploma goes beyond the normal requirements for graduation. Students must have a cumulative GPA of 3.0 with all semester grades of a "C-" or above in courses that count toward the diploma and a total of 47 graduation credits.*

CORE 40 WITH TECHNICAL HONORS DIPLOMA: *The Technical Honors Diploma goes beyond the normal requirements for graduation. Students must have a cumulative GPA of 3.0 with all semester grades of a "C-" or above in courses that count toward the diploma and a total of 47 graduation credits. To obtain a Technical Honors Diploma, students must complete 6 high school credits and earn a state-recognized certification or six dual credits in the career-technical area.*

CORE 40 DIPLOMA: *The Core 40 is a set of essential high school courses that are necessary for admission to most colleges. Students must earn 40 graduation credits.*

GENERAL DIPLOMA: *The General Diploma meets minimum local and state requirements.*

****Refer to page seven for more diploma information. ****

DUAL CREDIT COURSE: Secondary-based dual credit is defined as simultaneously earning high school and Indiana University or Ivy Tech credit for coursework taught at East Central High School by East Central faculty. The secondary-level coursework may be comprised of one course or a sequence of courses. The student obtains dual credit status – earning both high school and college credit – when mastery of the subject matter is achieved.

Technical Dual Credit Classes

Count towards the technical courses for the Technical Honors Diploma

ADMF 116	BUSN 101	DESN 105
AGRI 103	BUSN 105	EDUC 101
AGRI 106	CINS 101	EECT 112
AGRI 115	DESN 101	LAND 103
AGRI 116	DESN 104	

Academic Dual Credit Classes

Count towards the dual credit required for the Academic Honors Diploma

APHY 101	FREN 101	MATH 135
BIOL 101	FREN 102	MATH 136
CHEM 101	FREN 201	MATH 137
CHEM 121	FREN 202	MATH 200
ENGL L202	HIST 105	MATH 211
ENGL W131	HIST 106	POLS Y103

MID-TERM GRADUATION: Seniors fulfilling all graduation requirements by the end of the first semester can choose to graduate at the end of the first semester. These students should request a Mid-Term Graduation Form during the scheduling process. Students who graduate after the first semester may not partake in any school activities except the Senior Awards program and graduation exercises. In addition, students can request a letter stating that they have graduated once they have completed their coursework in December. Mid-term graduates are encouraged to participate in the graduation ceremony in June.

MINIMUM CREDIT LOAD: Students are required to take a minimum of six credits each semester unless approved by Guidance.

NINE + SEMESTER GRADUATION: Students who have not met all graduation requirements at the end of eight semesters will not participate in the graduation ceremony with their class even if they meet all requirements during the summer following their eighth semester. If students cannot finish the needed coursework during the summer, they will become part of the next senior class during which they meet all graduation requirements and will be ranked with that class.

OFF-CAMPUS DUAL CREDIT: Off-campus (college-based) dual credit is defined as simultaneously earning high school and college credit for college-level coursework administered through correspondence or taught at an offsite college facility. Upon course approval through the Guidance Department, Juniors and Seniors may obtain dual credit status – earning both high school and college credit – when mastery of the subject matter is achieved. Extra periods will be allotted out of the scheduled school day to allow students to pursue off-campus educational experiences.

PREREQUISITES: Courses established for subjects where evidence of previous aptitude, ability, and achievement are necessary for successful completion of the course.

REQUIRED COURSE: A class required by the State of Indiana or by the local school corporation.

VOCATIONAL CURRICULUM: This course of study will enable students during their junior and/or senior year to attend a Vocational School for a one or two year program in a particular career field. Students attend the Southeastern Career Center in the morning and return to East Central High School for lunch and three afternoon classes. Admittance in the Vocational Program requires students to complete an application and be accepted into a program.

WITHDRAWAL FROM SCHOOL: Students are required to attend school until one of the following is met: 1) Graduation 2) Student turns eighteen 3) Student becomes sixteen years of age but is less than eighteen years of age and provides proof of one of the following situations: a. Financial hardship: Student must be employed to support family or a dependent b. Severe illness c. Order by a court that has jurisdiction over the student indicating the need for withdrawal

WORKFORCE PROGRAM (ICE): 12th grade students choosing this course of study will be released a half day from school to work at an ECHS approved place of employment. Students are responsible for working with the instructor in seeking employment, providing their own transportation, and completing coursework associated with the workforce program.

DIPLOMA TYPES: A student may graduate from East Central High School with the following diplomas:

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CORE 40 WITH TECHNICAL HONORS DIPLOMA: The Technical Honors Diploma goes beyond the normal requirements for graduation. Students must have a cumulative GPA of 3.0 with all semester grades of a "C-" or above in courses that count toward the diploma and a total of 47 graduation credits. To obtain a Technical Honors Diploma, students must earn a state-recognized certification or certificate of technical achievement in the career-technical program.

CORE 40 DIPLOMA: The Core 40 is a set of essential high school courses that are necessary for admission to most colleges. Students must earn 40 graduation credits.

GENERAL DIPLOMA: The General Diploma meets minimum local and state requirements. This diploma type is only available in exceptional cases. A conference will not be held until a student's junior or senior year to discuss placement into the general diploma track.

DIPLOMA REQUIREMENTS

INDIANA CORE40

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

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

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

* 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.

CORE40 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.

CORE40 with Technical Honors (minimum 47 credits)

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

- Complete all requirements for Core 40.
- Earn 8 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 8 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.

In addition, each student applying for graduation from East Central High School must successfully complete the "Preparing for College & Careers" course, as adopted by the Sunman-Dearborn School Corporation.

EAST CENTRAL HIGH SCHOOL COURSE OFFERINGS

Agriculture Department
Introduction to Agriculture, Food, and Natural Resources
Agriculture Power, Structure, and Technology I
Agriculture Power, Structure, and Technology II
Animal Science <i>(offered 2018-2019 & 2020-2021)</i>
Horticultural Science
Landscape Management I
Landscape Management II
Natural Resources Management <i>(offered 2017-2018 & 2019-2020)</i>
Supervised Ag Experience

Business Department
Preparing for College & Careers <i>(required)</i>
Introduction to Accounting
Advanced Accounting <i>(offered 2018-2019 & 2020-2021)</i>
Administrative & Office Management
Business Law & Ethics
Computer Science & Engineering – PLTW
Computer Science II – Programming
Int. Media: Adv Computer Applications <i>(offered 2017-2018 & 2019-2020)</i>
Int Media: Web Design
Int Media – Computer Applications
Int Media – Desktop Publishing
Principles of Business Management
Principles of Marketing: Sports & Entertainment
Principles of Marketing: Retail

Engineering & Technology Department
Construction Systems
Technology Systems
Transportation Systems
Introduction to Construction <i>(offered 2018-2019 & 2020-2021)</i>
Introduction to Manufacturing <i>(offered 2017-2018 & 2019-2020)</i>
Computers in Design & Production
PLTW Introduction to Engineering Design
PLTW Principles of Engineering
PLTW Civil Engineering & Architecture <i>(offered 2018-2019 & 2020-2021)</i>
PLTW Digital Electronics
Computer Integrated Manufacturing <i>(offered 2017-2018 & 2019-2020)</i>
PLTW Engineering Design & Development

English/Language Arts Department
English 9
English 9 Honors
English 10
English 10 Honors
English 11
English 11 Honors
Speech
Composition 12
Advanced Composition 12
English Literature 12
Genres of Literature 12
AP English Literature
AP English Language and Composition
Advanced English 12 W131/L202
Electives
Journalism
Student Media: Yearbook
Support Classes
English Lab 9
English Lab Reading

Family & Consumer Science Department
Advanced Child Development
Advanced Nutrition & Wellness
Child Development
Culinary Arts & Hospitality Management I - ProStart I
Culinary Arts & Hospitality Management II - ProStart II
Education Professions I
Education Professions II
Human Services (FCCLA)
Human & Social Services (School-Based)
Introduction to Culinary Arts
Introduction to Fashion & Textiles
Nutrition & Wellness

Fine Arts Department
Introduction to 2-D Art
Introduction to 3-D Art
Ceramics
Digital Design – Photoshop
Drawing
Jewelry
Painting
Photography I (Darkroom Photography)
Photography II (Digital Photography)
Sculpture

Fine Arts Department- Performing
<i>Chorus</i>
Intermediate Chorus – Women’s
Advance Chorus - Concert
Vocal Jazz
<i>Instrumental</i>
Intermediate Band - Symphony
Advanced Band – Marching
Jazz Ensemble
<i>Special Interest Areas</i>
Music Theory & Composition
Applied Music: Guitar
Piano & Electric Keyboard
Musical Theatre

General Support & Study Hall
Basic Skills Lab

Health & Physical Education Department
Health & Wellness
Physical Education I
Physical Education II
Elective Physical Education – Lifetime Fitness
Elective Physical Education – Strength Training

Mathematics Department
Algebra I
Math 10
Algebra II
Algebra II Honors
Geometry
Geometry Honors
Probability & Statistics
Trigonometry
Advanced Math - Finite
Pre-Calculus - Trigonometry
Pre-Calculus – Trigonometry Honors
AP Calculus AB
AP Calculus BC
AP Statistics
<i>Support Classes</i>
Algebra Lab
Math Lab – Algebra II & Geometry

Science Department
Earth & Space Science
Biology I
Biology I Honors
Integrated Chemistry-Physics
Chemistry I
Biology II
Advanced Science, Botany, & Zoology
Anatomy & Physiology
Chemistry II
Physics I
AP Biology
AP Chemistry

Senior Specialty Classes
Human & Social Services: Family and Community Health
ICE: Interdisciplinary Cooperative Education
Work-Based Learning: Athletic Training

Social Science Department
Geography & History of the World
World History & Civilization
AP World History
US History
AP US History
US Government
AP US Government & Politics
Economics
AP Microeconomics
Psychology
Sociology
AP European History

World Language Department
French I
French II
French III
French IV
Japanese I
Japanese II
Japanese III
Japanese IV
Spanish I
Spanish II
Spanish III
Spanish IV

AGRICULTURE DEPARTMENT

FFA

FFA is the career and technical education student organization that is an integral part of the instruction and operation of a total agricultural education program. As an intra-curricular organization and essential component of the total program, the local agricultural education teacher(s) serve as the FFA chapter advisors.

The many activities of the FFA parallel the methodology of the instructional program and are directly related to the occupational goals and objectives. District and state level FFA activities provide students opportunities to demonstrate their proficiency in the knowledge, skills, and attitudes they have acquired through the agricultural program. Agricultural education students demonstrating a high degree of competence in state level FFA activities are highly encouraged to represent their local communities, districts, and state by participating in national FFA activities.

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



INTRO TO AGRICULTURE, FOOD & NATURAL RESOURCES

This course introduces students to Indiana's largest industry – agriculture. Topics to be covered include careers in agriculture, the National FFA Organization, leadership development, SAE programs, animal science, plant and soil science, horticulture, landscape design and management, natural resources, and agricultural mechanization (mig welding, woodworking, small engines, etc.). Many hands on opportunities are provided to students such as building carpentry projects, working in the greenhouse, designing a floral arrangement, learning blacksmithing techniques, and working outside in the ECHS horticulture gardens.

- Grade: 9 (10,11,12)
- Prerequisites: None
- 1 credit per semester for 2 semesters
- Fulfills an elective requirement

AG POWER, STRUCTURE & TECH I

Topics in this course include shielded metal arc welding, mig welding, oxyacetylene welding and cutting, blacksmithing, woodworking and carpentry, plumbing, electrical, concrete, and small engine work. This course encompasses both classroom work and extensive work in the agriculture shop. Students have the opportunity to work on projects from home if time permits.

- Grade: 10,11,12 (9 w/Intro Ag credit)
- Credits: 1 per semester, 2 semesters
- Fulfills an elective requirement

AG POWER, STRUCTURE & TECH II

IVY TECH AGRI 106

Topics in this course include shielded metal arc welding, mig welding, oxyacetylene welding and cutting, blacksmithing, woodworking and carpentry, plumbing, electrical, concrete, and small engine work. This course encompasses both classroom work and extensive work in the agriculture shop. Students have the opportunity to work on projects from home if time permits.

- Grade: 10,11,12
- Prerequisite: Ag Power I
- Credits: 1 per semester, 2 semesters
- Fulfill an elective requirement

ANIMAL SCIENCE

IVY TECH AGRI 103

This course provides students with an overview of the animal industry. Areas that students can study can be applied to both small and large animals. Topics to be addressed include the various species of large and small animal livestock, animal anatomy, genetics and reproduction, animal nutrition, careers, animal health, ethical issues in animal agriculture, animal behavior, animal evaluation, and other topics deemed necessary.

- Grade: 10,11,12 (9 w/Intro to Ag credit)
- Credits: 1 per semester, 2 semesters
- Fulfills an elective requirement
- Offered 2018-19 & 2020-21 school years

HORTICULTURE SCIENCE

IVY TECH AGR 116

Students in this course will understand the relevance and the diversity of the horticulture industry in the United States. Students will gain knowledge in plant anatomy, plant growth, propagation, plant nutrition, pest control and more. Students will experience hands on activities that include: 1) working extensively in the ECHS greenhouse; 2) propagating plants from seeds and vegetative cutting, 3) planting flowering plants outside as well as vegetable plants in the ECHS raised bed gardens, 4) designing floral arrangements and a holiday wreath, 5) making Mother's Day hanging baskets, 6) touring Kruegger Maddux Greenhouses, 7) harvesting vegetables, and 8) operating the ECHS Horticulture Spring Plant Sale.

- Grade: 10, 11, 12 (9 w/Intro Ag credit)
- Credits: 1 credit per semester, 2 semesters
- Fulfills an elective requirement

LANDSCAPE MANAGEMENT I

Ivy Tech LAND 103

Bobcat Skid Steer Certification

Students in this course will be introduced to the three segments in the landscape industry; landscape architecture/design, landscape construction, and landscape maintenance. Students will engage in landscape design projects. Activities include multiple opportunities to work outside maintaining and installing landscapes at ECHS. Students will also build an EZ bench, design and build trellises, have the opportunity to earn Bobcat Steer certification, and have the choice of competing in the Indiana FFA State Nursery/Landscape Career Development Event.

- Grade: 10, 11, 12 (9 w/Intro Ag credit)
- Credits: 1 credit per semester, 2 semesters
- Qualifies as a quantitative reasoning course
- Fulfills an elective requirement



LANDSCAPE MANAGEMENT II

Bobcat Skid Steer Certification

Students continue to build knowledge and skill in the procedures used in landscape planning and design using current industry standards and practices. Extended laboratory experiences include application of the principles and procedures involved especially in the Midwest and Great Lakes areas with landscape construction; turf management; scheduling and oversight of landscape maintenance; weed control; non-pathogenic and disease prevention, diagnosis, and treatment; communications; management skills necessary in landscaping operations; and the use and maintenance of equipment utilized by landscapers. Students will participate in leadership development, supervised agricultural experience and career exploration activities.

- Recommended Grade Level: 10,11,12
- Prerequisite: Landscape Management I
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a quantitative reasoning course
- Fulfills an Elective requirement

NATURAL RESOURCE MANAGEMENT

IVY TECH AGRI 115

Students are introduced to careers in the field of natural resources as well as course sections covering native wildlife and waterfowl conservation, fish management, forest ecology, tree identification, timber stand improvement, soil conservation and management, water quality and watershed management, water quality testing, outdoor recreation management and outdoor safety. Hands-on activities include building birdhouses and mason bee houses, making survival bracelets and lanyards, construction a Leopold bench and other outdoor activities.

- Grade: 10, 11, 12 (9 w/Intro Ag credit)
- Credits: 1 credit per semester; 2 semesters
- Fulfills an elective requirement
- Offered 2017-2018 & 2019-2020 school years

SUPERVISED AG EXPERIENCE

Students experience and apply what is learned in the classroom, laboratory and training site to real-life situations. Students work closely with their agricultural teacher, parents and/or employers to get the most out of their SAE program.

- Grade: 10, 11, 12
- Prerequisite: Teacher approval
- Credits: 1 per semester, 6 semesters max
- Fulfills an elective requirement

BUSINESS DEPARTMENT

ECHS Business Academy

The East Central High School Business Academy was established in 2013 to better serve our stakeholders. We've created pathways, added dual credit and a more streamlined process to create tomorrow's business leaders today. Being a part of the ECHS Business Academy brings with it extra benefits such as professional business experiences, speakers from the community, business dinners and luncheons. To be accepted as a member of the ECHS Business Academy, students must meet the following criteria:



- Earn a B or higher in at least four (4) business courses (preferable in one pathway)
- Be an active member of Business Professionals of America (BPA)
- Maintain a cumulative GPA of 3.0 or higher
- Maintain attendance in accordance with the school regulations
- Enroll in the senior Principles of Business Management capstone course or another accepted alternative
- Earn a B or higher in AP or dual credit Business Academy course

Business Professionals of America



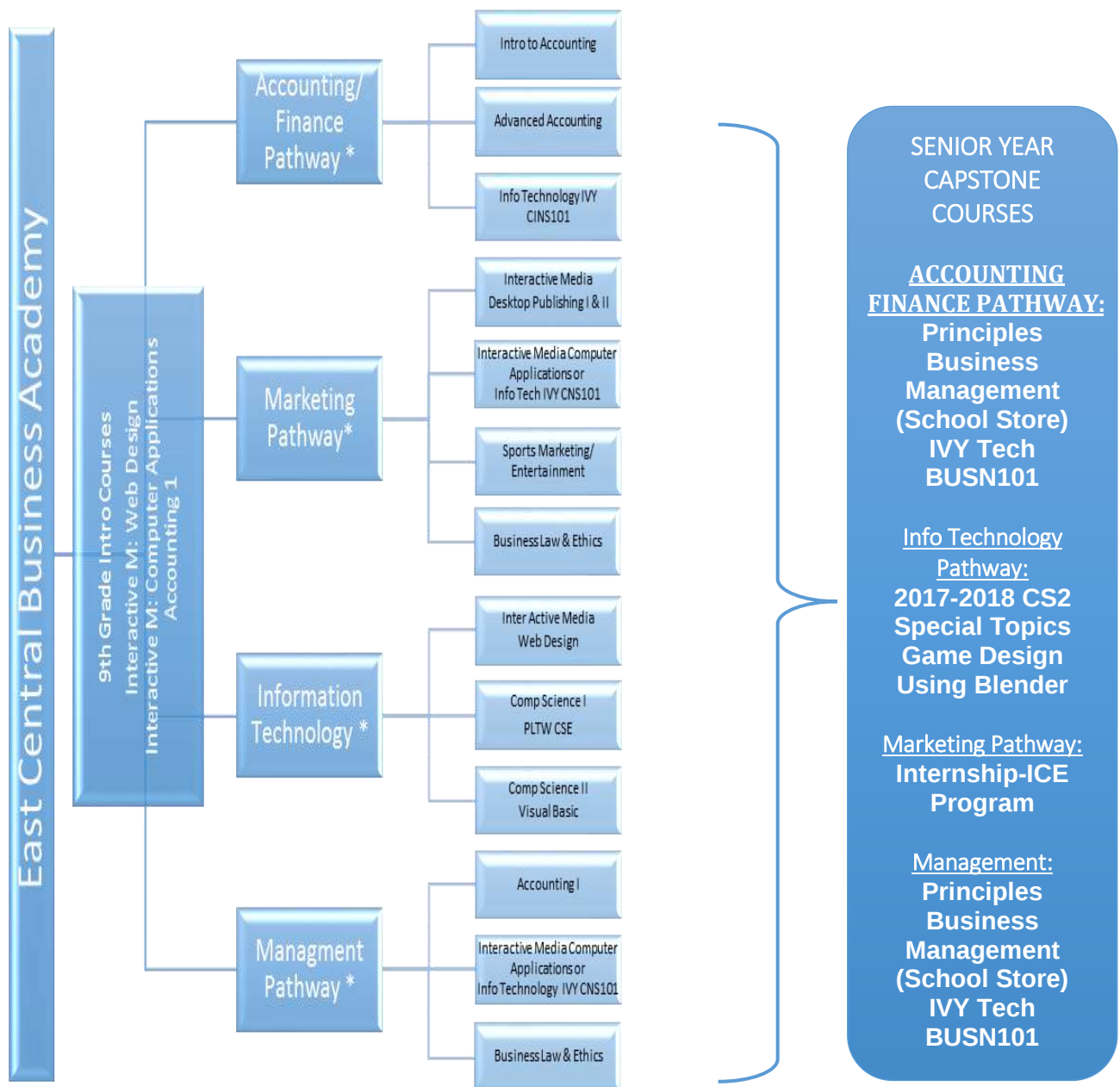
BPA is a co-curricular student organization conducted on regional, state, and national levels and tests competency in various areas of business/office occupations. The words "Business," "Professionals," and "America" define the focus of BPA. Business: the field for which we prepare our students; emphasizes that we educate our students to work efficiently, not only in an office setting, but also in a wide variety of business situations. Professionals: our students indicate they join BPA to take advantage of a wide variety of professional development

opportunities. America: symbolizes pride in our country and its free enterprise business system. The Special Recognition Awards Program and the Torch Awards Program are open to participation by all chapters and recognizes outstanding, actively involved members on the local, regional, state, and national levels.

MICROSOFT OFFICE IT ACADEMY (MIT)

East Central High School is a member of the Microsoft IT Academy. Microsoft stresses that this program provides resources that benefit all students. Acquiring skills on the latest technologies may help students to become better collaborators, communicators, critical thinkers, innovators, problems solvers, and citizens of our global economy. Students enrolling in Interactive Media Digital Citizenship, Interactive Media Computer Graphics and Illustration I & II, and Information Communication and Technology are all eligible to test and receive the Microsoft Office Specialist (MOS) certifications. MOS Certification validates mastery of Microsoft Office skills that all businesses require; setting students apart as they go on to higher education or enter the work force.





*** To graduate from the East Central Business Academy, the following criterion applies:**

- Students apply to ECBA
- Students actively participate in BPA
- Students must take four courses in the business academy, including the Business Management capstone course.
- Students do **not** need to take all the courses from one pathway, although it's recommended
- Only 3-4 'specialty' courses for each pathway are listed. Other course options, not listed in the pathways, are: Business Law & Ethics and Preparing for College & Careers

PREP FOR COLLEGE AND CAREERS

Although Preparing for College and Careers is a mandatory class for all sophomores, it is one you won't want to miss. Students will learn the 'must haves' that prep them for college, a trade, or whatever their future may hold. Students will explore who they are, what options they have after high school, and start the decision making process for their future. Students will learn the essentials of job preparation, including writing resumes, cover letters and actually conducting mock interviews!

After students learn about getting the job, then they learn how to manage the money that comes with them. Students explore the essential financial components of real life from taxes, paychecks, checking and savings to budgeting, interest, investments, credit and insurance. The project-based approach, turns this class into a must-have for all students planning to be successful in the future.

Grade: 10

- Credits: 1 credit per semester, 1 semester
- Required course for class of 2016 & beyond as adopted by the Sunman-Dearborn school corporation
- Fulfills an Elective requirement

INTRO TO ACCOUNTING

Do you want to learn how money works, how to track it, and how to manage your personal finances? Then this course is for you! Understanding Accounting is a fundamental part of business, that's why it's called, "The Language of Business." Introduction to Accounting introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. Whether you want to major in business, start your own business one day, or just have a better understand of how to make your money work for you, this course is for you. Sample projects may include playing Monopoly to understand money management practices, analyzing the stock market, and be in charge of the financial records and money management of a business in a real-life business simulation.

- Recommended Grade: 9, 10, 11, 12
- Prerequisites: None
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a Quantitative Reasoning course
- Fulfills an Elective requirement

ADVANCED ACCOUNTING

Are you planning on majoring in Business in college or starting your own business someday? Then this course is a must! Understanding accounting is a fundamental part of business, that's why it's called, "The Language of Business." After mastering the concepts of money management in Intro to Accounting, this course provides an advanced look at making money decisions for a business. Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in Introduction to Accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. Students will also be in charge of the financial records and money management of a business in a real-life business simulation. Sample projects may include analyzing stock markets, and be in charge of the financial records and money management of a business in a real-life business simulation.

- Grade: 11, 12
- Required: Introduction to Accounting
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a Quantitative Reasoning course
- Fulfills an Elective requirement
- Offered 2018-19 & 2020-21 school years

ADMINISTRATIVE & OFFICE MGT

Ivy Tech BUSN 105

Do you dream of becoming a CEO or business leader some day? Not only is this class dual credit, but this class is the second year of Business Management where students actually become the CEO/COO of the school store, the Trojan Exchange. Administrative and Office Management prepares students to plan, organize, direct, and control the functions and processes of a firm or organization and to perform business-related functions. Some classes teach about business, this class operates a business. The profit made in the school store is certainly one of the biggest incentives for these students. Being a part of the Business Academy, and running the school store, makes students eligible for scholarships offered to our Business Academy All-stars at the end of each year.

- Grade: 12
- Required: Principles of Business Management or teacher recommendation
- Credits: 1 per semester; 2 semesters
- Fulfills an Elective requirement

BUSINESS LAW & ETHICS

Does the legal system intrigue you? Would you like to someday seek out a career in law enforcement, study to be a prosecuting attorney, be employed as a corporate attorney, or spend your day as a court stenographer? Business Law & Ethics takes you through the process of learning where the laws in our country originated, and how they came to be. The textbook moves through the chapters covering criminal and civil law, as well as pointing out the legal aspects of business and corporate law. Students get to see their classroom reading and assignments come to life as they travel on a school approved field trip to the Hamilton County Courthouse and Justice Center. While there, students spend the first part of the morning listening to the outcome of the current arraignments listed on that day's docket. Next, students travel across the street to the Jury Commission office where the process of jury selection is discussed by the Jury Coordinator. Students are then escorted to one of the courtrooms to listen to a jury trial in progress. Previous students have actually attributed this class as the milestone that lead them in the direction of their legal careers.

- Grade: 11, 12
- Credits: 1 per semester, 1 semester
- Prerequisites: None
- Fulfills an Elective requirement

COMPUTER SCIENCE & ENG - PLTW

So, you spend a lot of time playing on phone apps and games. Would you like to learn how to make them yourself? Computer Science I is a year-long project and problem based course, with students working in teams to solve practical problems that occur in the real world. Students will create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people's lives. The course is not aiming to develop programming expertise in one particular programming language; it aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce a variety of computational tools that foster creativity.

- Grade: 10, 11, 12
- Prerequisite: "C-" or higher in Algebra course
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

COMPUTER SCIENCE II: PROGRAMMING

Would you like to dive deeper into the world of **game development**? Computer Science II: Programming explores and builds skills in programming and a basic understanding of the fundamentals of procedural development using the Visual Basic Programming language. Coursework emphasizes logical program design involving user-designed functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers and data file access methods.

- Grade Level: Grade 11-12
- Prerequisites: Comp Science & Eng - PLTW
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

INTERACTIVE MEDIA: ADV COMPUTER APPLICATIONS

Ivy Tech CINS 101
MOS Certification

Do you know how to get around on the computer to 'get the job done,' but it takes you way too long? This course might be for you. Adv Computer Applications teaches students to use computers to get things done on the job, or just everyday life. Students develop their skills with word processing, spreadsheets, presentations, and databases, but they also work on speed. Using the computer should be quick and easy so you have more time in your day. Learn what it means to be a good digital citizen and how to use technology for life. This class is dual-credit, and students have the opportunity to earn industry level MOS Certifications in Microsoft Word, Excel, Access, and PowerPoint for free!

- Grade Level: Grade 11-12
- Prerequisites: Int Media: Comp Apps
- Credits: 1 per semester, 2 semesters
- Fulfills an Elective requirement
- Offered 2017-18 and 2019-20 school years

INTERACTIVE MEDIA: WEB DESIGN

Ready to learn web design? This course will quickly bring you up to speed on a variety of crucial skills for building your own website, whether you have web design experience or not. You'll learn everything you need to know about HTML and CSS, the basic building blocks of web design. Upon successful completion, you'll have skills and training that will greatly enhance your employability and career prospects.

- Grade Level: Grade 9-12
- Prerequisites: None
- Credits: 1 per semester, 1 semester
- Fulfills an Elective requirement

INTERACTIVE MEDIA: DESKTOP PUBLISHING

Microsoft Word, Microsoft Excel, Microsoft Access, and Microsoft PowerPoint: These four programs make up the Microsoft Suite. This class introduces students to all four of these software programs. While in high school, students are asked to create presentations and complete projects in many of their classes. Knowing how to use these programs will not only benefit the student in this class, but in all of their classes, all four years. Once a student moves on to college or the work place, knowing how to produce hardcopy proficiently in all of the software programs above will make their jobs that much easier. A certification in Microsoft Word is offered during the semester at no cost. This certification looks good on a student's resume, and on college application.

- Grade Level: Grade 9-12
- Prerequisites: None
- Credits: 1 per semester, 2 semesters
- Fulfills an elective requirement

PRINCIPLES OF BUSINESS MGT Ivy Tech BUSN 101

Do you want to learn how to run, or work in, a business? Not only is this class dual credit, but students in this class actually operate, manage, and make **all** the business decisions for our school store, the Trojan Exchange. 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 first hand an understanding of management, team building, leadership, problem-solving steps and processes that contribute to the achievement of The Trojan Exchange's goals. The profit made in the school store is certainly one of the biggest incentives for these students. Being a part of the Business Academy, and running the school store, makes students eligible for scholarships offered to our Business Academy All-stars at the end of each year.

- Grade: 11-12
- Credits: 1 per semester; 2 semesters
- Prerequisite: C- in Accounting, Marketing, or teacher recommendation
- Fulfills an Elective requirement

PRINCIPLES OF MARKETING SPORTS & ENTERTAINMENT

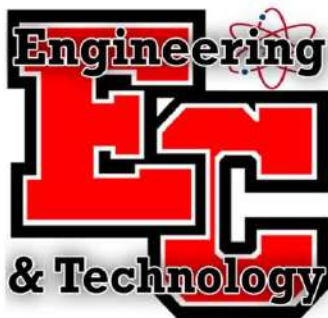
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PRINCIPLES OF MARKETING RETAIL

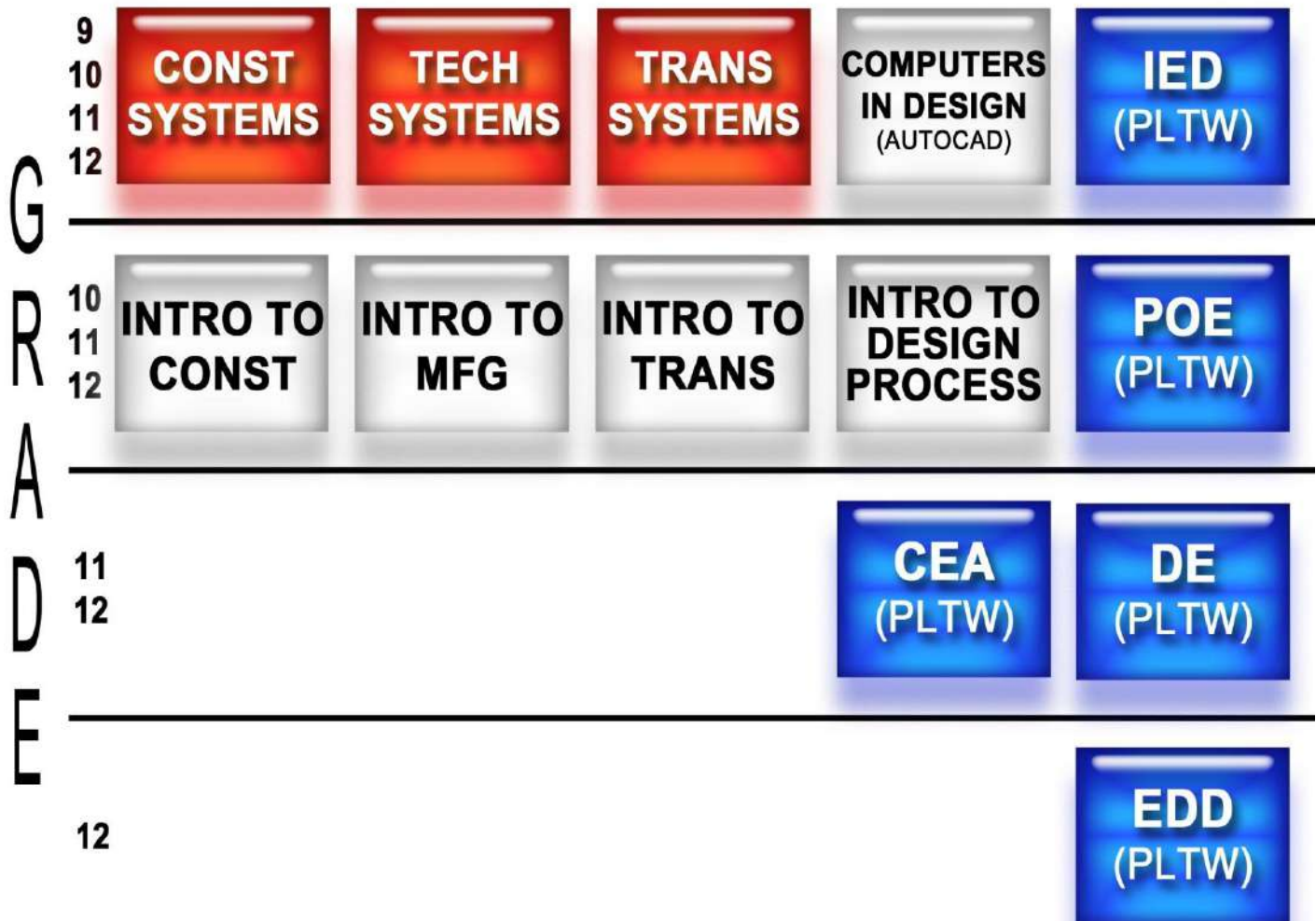
Why do you buy candy while you're in the checkout line? Did you ever see an advertisement on TV and then run out and buy the product? If so, that's because strategic **MARKETING** was taking place! During this two semester course, students will explore both Sports and Entertainment Marketing. Project based learning is a large part of the course. Students work to create the following: business plans, marketing plans, package designs, advertising media and more. Virtual Business, an online curriculum allows students to run a business and meet company goals in advertising, ticketing, staffing, sponsorship and more. Two field trips during the course of the year allow students to see marketing come to life. One favorite field trip is our visit to the Kentucky Speedway in Sparta, Kentucky. There, the marketing staff explains all aspects of hosting the Quaker State 400 and all of the other events scheduled at the facility during the course of the year. This class is a hands on fun class.

- Grade: 11, 12
- Credits: 1 credit per semester; 2 semesters
- Each semester is a stand-alone course
- Prerequisite: None
- Fulfills an Elective requirement





Engineering & Technology Course Sequence



1 Semester Course

Construction Systems
Technology Systems
Transportation Systems



2 Semester Course

Computers in Design (AutoCAD)
Introduction to Construction
Introduction to Manufacturing
Introduction to Transportation
Introduction to Design Process



2 Semester Dual
College Credit Course

Introduction to Engineering Design
Principles of Engineering
Civil Engineering & Architecture
Digital Electronics
Engineering Design & Development

ENGINEERING & TECHNOLOGY DEPARTMENT

CONSTRUCTION SYSTEMS

Overall Objective: With the completion of this class the student will be able to identify and safely use and operate hand and power tools. Be able to safely operate Woodworking machines and will have an understanding of simple measurements used in the construction field. Construction Systems is a course that specializes in how people use modern construction systems and the management of resources to efficiently produce a structure on a site. Students will explore the application of tools, materials, and energy in designing, producing, using, and assessing the construction of structures. Classroom activities introduce students to the techniques used in applying construction technology to the production of residential, commercial, and industrial buildings in addition to civil structures. Students learn how architectural ideas are converted into projects and how projects are managed during a construction project in this course. Projects Include: Saw Ponies, Folding Stools, Lamps, Toolboxes, Half Lap Stools, Framing, Electrical, and Plumbing Building Modules, and Roofing Module.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Prerequisites: None

TECHNOLOGY SYSTEMS

Students will be able to identify and use the correct system and its components to complete a challenging project. A unit in woodworking and woodworking techniques will be introduced. Students will be able to explain what the difference between motors and engines and the component of each. Students will be able to work together in a group to overcome complex challenges set before them.

Technology Systems is a course that focuses on the technologies used in the career pathways related to Architecture & Construction, Arts, A/V Technology & Communications, Manufacturing, Science, Technology, Engineering & Mathematics and the Transportation, Distribution, & Logistics career clusters. Instructional strategies include creative problem solving activities that address real-world problems and opportunities. Computer experiences are used to incorporate graphics, simulations, networking, and control systems. Students are also introduced to, and engaged in, investigating career opportunities within a career cluster of their choice. Systems thinking skills are used by students to study, diagram, and test a solution to a scenario related to their career interests.

Projects Include: Measurement Activity, Plan Reading, Belt Buckles, Laminating Project (Bandsaw Box), Part Manufacturing (Mold Making), Machining (Lathe project), Electric Motor Challenge, Electricity Challenge, and Tool making Teamwork Trust Challenge.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Prerequisites: None

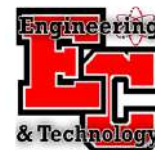
TRANSPORTATION SYSTEMS

With the completion of this course the student will be able to list and describe the four main areas of transportation. They will also be able to explain what a system is and what it consists of. Through a series of hands on projects the student will explore Land, Water, Air, and Space Transportation and the systems involved and how they are used. The student will be expected to complete individual work as well as work in a small group to complete projects and activities. This is a critical thinking and problem solving class. The student will be presented with a problem and be expected to solve it.

Transportation Systems is a course that specializes in the study of the transportation systems used to support commerce and the logistics for the efficient movement of goods and people. In this course, students will explore the systems, techniques and vehicles used to move people and cargo on land, water, air, and space. Activities allow students to understand a variety of transportation systems and investigate the energy, power and mechanical systems used to move people and products from one location to another.

Projects Include: CO2 Dragsters, Mousetrap Cars, Clean Energy Self Propelled Car, Cargo Hauler Challenge, Concrete Boats, Submersible Vehicles, Paper airplane Challenge, Self-Propelled aircraft, Model Rocketry, Guided Missile Challenge, and Transferable Energy Challenge.

- Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Prerequisites: None



INTRODUCTION TO CONSTRUCTION

With the completion of this class the student will be able to use construction skills and processes learned to build a residential structure from the ground up. They will use construction skills learned in the class to complete a series of projects to complete their structure.

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.

Projects Include: Site Preparation and Layout, Plan Reading, Foundation (Brick, Block, & Stone Masonry), Floor System, Wall System, Roof System, Electrical System, Plumbing System, and Estimating Materials.

- Grade: 10, 11, 12
- Credits: 1 credit per semester, 2 semester
- Prerequisites: None
- Offered 2018-19 & 2020-21 school years

INTRODUCTION TO MANUFACTURING

With the completion of this class the student will be able to read and utilize plans to build various woodworking projects. Use traditional and advanced manufacturing tools to create projects. The Students will take a material from raw material or industrial stock to finished product.

Introduction to Manufacturing is a course that specializes in how people use modern manufacturing systems with an introduction to manufacturing technology and its relationship to society, individuals, and the environment. An understanding of manufacturing provides a background toward developing engineering & technological literacy. This understanding is developed through the study of the two major technologies, material processing and management technology, used by all manufacturing enterprises. Students will apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students will investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. After gaining a working knowledge of these materials, students will study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling.

Projects Include: Tool Maintenance, Tool Repair, Blade and Edge Maintenance, Traditional Project (all Hand Tools), Shave Horse, Wood Joint Project, Woodturning Projects, (Lathe work), Machinists Tool Chest, Furniture Project, Material Classification, Raw to Finished Project. Casting & Molding, Deck Chairs, Manufactures Choice (Student Choice).

- Grade: 10, 11, 12
- Credits: 1 credit per semester, 2 semesters
- Prerequisites: None
- Offered 2017-18 & 2019-20 school years

COMPUTERS IN DESIGN & PRODUCTION

With the completion of this class the student will be able to gain practical working experience through classroom projects using current state-of-the-art software in architecture, 3D modeling, 2D drafting, video editing, character animation, 3D printing, and CNC machining. Students will also learn basic board drafting techniques.

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.

Projects Include: Character animation video with Pivot Stickman and Windows Movie Maker; Basic Technical Board Drafting; AutoCAD computer drafting, Inventor 3D modeling projects for 3D printer and CNC Router; Revit architectural program to create house plans; personal projects of student's choice.

- Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Prerequisites: None

PLTW INTRODUCTION TO ENGINEERING DESIGN

Ivy Tech DESN 101

The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Using Autodesk Inventor, the industry-leading 3D design software, discover the role of an engineer in taking an idea from the design process to manufacturing or production. Produce an incredible, working prototype of your project with a state-of-the-art 3D printer. You will work on projects, activities, and problems not only of interest to you, but that have global and human impacts. Work in teams to design and improve products, document your solutions, and communicate them to others.

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

Projects Include: Computer 3d modeling introductory projects for the 3d printer and CNC router; sketching techniques; design a wooden 5-piece puzzle from $\frac{3}{4}$ " wood cubes; 3d model a toy steam train engine, team design and model a unique train car, re-engineer a product.

- Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Prerequisite: None

PLTW PRINCIPLES OF ENGINEERING

Ivy Tech DESN 104

Student will be able to use critical thinking skills to complete various projects involving energy and power through mechanical means. The student will learn about how forces and shapes work together to build structures. They will be able to describe all the different forms and types of energy and how they are used. There will be an introduction to robotics and robotic control. Also, an introduction to writing Code will be used in the Robotics section.

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. NOTE: Use of the PLTW Course number is limited to schools that have agreed to be part of the Project Lead the Way network and follow all training and data collection requirements.

Projects Include: Object in Box Challenge, Simple Machines, Simple Mechanisms, Rube Goldberg Challenge, Solar/Hydrogen Powered Cars, Truss Challenge, Proto Bot (Remote Controlled Robot), Self-Propelled machine, Projectile Device. Thermodynamics Challenge.

- Grade: 9, 10, 11, 12
- Prerequisite: PLTW IED
- Credits: 1 credit per semester; 2 semesters

PLTW CIVIL ENGINEERING & ARCHITECTURE

Ivy Tech DESN 105

With the completion of this class the student will be able to identify residential architectural styles; design a residential home that adheres to Homes For Habitat guidelines; create a commercial library design that meets identified code requirements; incorporate universal and sustainable design features; complete a cost estimate of a basic building; identify changes needed to reduce heat loss/gain; calculate the change in storm water runoff between pre- and post-development of a building site; determine water supply needs; use basic surveying equipment; design a residential and commercial structure using 3D architectural software.

Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design

Projects Include: building an architectural model; use Autodesk Revit architectural 3d software to design a utility shed, a residential home, and a commercial building; calculate the cost of pouring a concrete floor slab; determine the estimated material cost to build a utility shed; calculate the total heat loss/gain for the utility shed; calculate water pressure to a residential home; calculate storm water runoff of a building site; redesign an existing building to create a public library; research landscaping code requirements and create a water-wise landscape plan for the library project; use surveying equipment to establish elevation; design a commercial project of your choosing related to the site assigned for the project and document your design in a project portfolio.

- Grade Level: 10, 11, 12
- Required: PLTW IED or POE
- Credits: 1 credit per semester; 2 semesters
- Offered 2018-19 & 2020-21 school years

PLTW DIGITAL ELECTRONICS IVY TECH EECT 112

Course encompasses design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities should provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry will be used to develop and evaluate the product design. This course engages students in critical thinking and problem-solving skills, time management and teamwork skills.

- Recommended Grade Levels: 10-12
- Recommended: PLTW IED and POE
- Credits: 1credit per semester; 2 semesters

COMPUTER INTEGRATED TECHNOLOGY

With the completion of this class the student will be able to develop skills in designing and creating products intended for mass production using state-of-the-art software programs currently being used in industry. Students will learn setup and operating procedures of a 3d printer, CNC router and other computer-controlled machinery available at East Central High School (possibly include Laser Engraver and CNC Plasma Cutter).

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

Projects Include: Create 3d models of products designed for the 3d printer and the CNC router machines; simulate a manufacturing automated assembly line using VEX robotics. Student teams will research, create prototypes and mass produce a product for a target group. Students will visit many area manufacturing companies to experience current industry best practices and manufacturing procedures.

- Grade Level: 11, 12
- Prerequisites: PLTW IED or Computers in Design and Production
- Credits: 1 credit per semester; 2 semesters

PLTW ENGINEERING DESIGN AND DEVELOPMENT

With the completion of this class the student will be able to work as part of a team to design a solution to a technical problem of your choosing. Research, design, test, and construct a solution and present your process to a panel of professional engineers and college professors. Students will use what you have experienced in previous PLTW engineering courses to guide you through the process of design and product development.

Engineering Design and Development is an engineering research course in which students work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous pre-engineering courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in critical thinking and problem-solving skills, time management and teamwork skills, a valuable set for students' future careers.

Projects Include: An introductory project to experience the design process; creating an accurate problem statement; patent research procedures; using different survey techniques; prototype building methods; developing accurate testing procedures; evaluating solution; presenting solution.

- Grade Level: 12
- Prerequisites: PLTW IED, POE, and one specialty course
- Credits: 1 credit per semester; 2 semesters



English Language Arts Department

9th Grade

- English 9
- English 9 Honors

10th Grade

- English 10
- English 10 Honors
- AP Literature

11th Grade

- English 11
- English 11 Honors
- AP Language
- Speech

12th Grade

- | | |
|---------------------------|-------------------------------|
| • Composition 12 | Speech |
| • Advanced Composition 12 | AP Literature |
| • English Literature | AP Language |
| • Genres of Literature | Advanced English IU W131/L202 |

Electives

- Journalism
- Student Media: Yearbook

Support Classes

- Language Lab 9
- Language Lab Reading

English Language Arts Department

ENGLISH 9, ENGLISH 9 HONORS

How does a writer convey an overlying message through theme and symbolism? How does point of view change the perspective of the same story? When analyzing informational text, what primary ideas comprise its summary?

English 9 is an integration of language, literature, composition, and oral communication. Students interpret, analyze, compare and evaluate a variety of works, genres and their elements. Selections from both classic literature and nonfiction contain historical and cultural significance and connect to the Indiana Academic Standards for English/Language Arts in Grades 9-10. Students compose analytical responses to literature, expository and argumentative/persuasive pieces, and research documents. One mandatory oral presentation which requires students to access, evaluate and assimilate online information is the "Unsolved Mysteries" project, which implements a study of informational text.

- Grade Level: 9 (10,11,12)
- Prerequisite for English 9: None
- Prerequisite for English 9 Honors: Teacher recommendation
- Credits: 1 per semester, 2 semesters
- Fulfills an English/Language Arts requirement

ENGLISH 10, ENGLISH 10 HONORS

In the face of adversity, what causes some individuals to prevail while others fail? How do authors use the resources of language to impact an audience? Does all communication serve a positive purpose?

This is an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9- 10. 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 in classic and contemporary literature. Additionally, students will practice active reading skills with both fiction and nonfiction texts. Students write responses to literature, argumentative/persuasive compositions, and

sustained research assignments. English 10 students prepare for and participate in one debate. For this assignment they learn to pay attention to audience and purpose. They must also access, analyze, and evaluate online information. Students in English 10 Honors will move at a faster pace and will cover material in addition to that of English 10.

- Grade Level: 10 (11,12)
- Prerequisite for English 10: None
- Prerequisite for English 10 Honors: English 9 Honors or teacher recommendation
- Credits: 1 per semester, 2 semesters
- Fulfills an English/Language Arts requirement

ENGLISH 11, ENGLISH 11 HONORS

How do the events of the times influence the nation's concept of the American Dream? Does the American Dream still exist? How do short stories, novels, and drama explore the cultural and historical perspectives of our human experience?

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

- Grade Level: 11
- Prerequisite for English 11: None
- Prerequisite for English 11 Honors: English 10 Honors or teacher recommendation
- Credits: 1 per semester, 2 semesters
- Fulfills an English/Language Arts requirement

SPEECH

What are the parts of the communication process? What is persuasive speech? What role does planning preparation and research play in effective communication and argumentation? How might cultural differences affect the outcome of a speech?

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

- Grade Level: 11, 12
- Prerequisites: None
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement

COMPOSITION 12

What should you write about to make others interested in your writing? What is your point of view and how will you convince others? What should we tell and what should we describe to make information clear? How do we best convey feelings through words on a page? What do you need to find out about a topic to understand and write about it? What do daily workplace communications require of format, content and style?

Composition is a study and application of the rhetorical (effective) writing strategies of narration, description, exposition, and persuasion. 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. Students read classic and contemporary literature or articles and use appropriate works as models for writing. Students write a variety of types of compositions with a focus on fictional narratives, reflective compositions, academic

essays, and responses to literature. Students will complete a research paper in the MLA or APA style.

- Grade Level: 12
- Prerequisites: None
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement
- Students are encouraged to combine this course with a senior Literature course

ADVANCED COMPOSITION 12

Why do we write? What are the major types of essays writers use to convey a message? What are the steps of the writing process as we work toward mastering these forms? What techniques can writers use to strengthen their work?

This course is a study and application of the writing strategies of exposition, persuasion, and analysis. It is designed to develop students' abilities to think, organize and express their ideas clearly and effectively in writing. This course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison analysis, persuasion and argumentation. Students will write narrative essays, critiques, analytical essays, and research reports.

- Grade Level: 12
- Prerequisites: English 11 Honors, AP English Language or teacher recommendation
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement
- Students are encouraged to combine this course with a senior Literature course

ENGLISH LITERATURE 12

What is the relationship between literature and place? How does literature shape or reflect society? What is the relationship of the writer to tradition?

English Literature is a study of representative works of the English-speaking authors associated with the United Kingdom and the other countries of the Commonwealth of Nations. Students examine a wide variety of literary genres that reflect the English-speaking peoples from the Anglo-Saxon Period to the present. Students analyze how the ideas and concepts presented in the works are both interconnected and distinctly reflective of

the cultures and time periods in which they were written. Students will complete literature/author-based projects using multi-media resources.

- Grade Level: 12
- Prerequisite: None
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement
- Students are encouraged to combine this course with a senior Literature course

GENRES OF LITERATURE 12

How can literary genres be identified by its characteristics? How does understanding the literary genre aid comprehension? How are genre and meaning related? How does genre influence organization, technique, and style?

Genres of Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of various literary genres, such as science fiction, horror, realistic fiction, dystopian, fantasy, folktales, fairy tales, mystery, and memoirs. Students examine contemporary/Young Adult literature in different genres and analyze how each genre shapes literary understanding or experiences. Students will also examine how certain genres have had a stronger impact on the culture than others in different historical time periods, and what the most influential genres are in contemporary times.

- Grade Level: 12
- Prerequisites: None
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement
- Students are encouraged to combine this course with a senior Literature course

AP ENGLISH LITERATURE AND COMPOSITION

What cultural or societal commentary is the author posing through this work of literature? Why this piece is considered a work of literary merit? What impact does a work have on subsequent literature and art? How does an author's style and technique enhance the meaning and significance of a work of literature?

This advanced literature course will engage students in careful reading and analysis of a challenging set of literary works from a range of genres including the novel, short story, poetry, and drama. The focus of the course will be on intensive reading and discussion of the

literature, as well introduce secondary critical essays for discussion and evaluation. This course will also include a writing component that focuses on analytical and argumentative writing about the literature through both discussion and essay format. Students are expected to be active readers as they analyze and interpret textual detail, establish connections among their observations, and draw logical inferences leading toward an interpretive conclusion. Students will read, write and discuss poetry, fiction, and drama at an advanced level while developing skills including sophisticated use of literary elements and terminology, close readings of various texts, creating, drafting, and editing analytical essays, preparing and writing timed essays, and advanced use and mastery of standard English.

- Grade Level: 10, 11, 12
- Prerequisites: Honors English 9, 10, 11 or AP English Language or teacher recommendation.
- Credits: 1 per semester, 2 semesters
- Fulfills 2 English/Language Arts requirements

AP ENGLISH LANGUAGE AND COMPOSITION

How does rhetoric shape and control human behavior? How can language manipulate thought and perception? How can skillful orators use their talents for good or ill?

This course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts. The course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based essays and speeches that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in primarily non-fiction texts, including visual forms of text (editorial cartoons, advertising, etc.) from many disciplines and historical periods.

- Grade Level: 11, 12
- Prerequisites: English 9 Honors and English 10 Honors, AP English Literature or teacher recommendation.
- Credits: 1 per semester, 2 semesters
- Fulfills 2 English/Language Arts requirements

ADVANCED ENGLISH 12
IU ENG W131
Reading, Writing, and Inquiry

What does it mean to examine and engage in scholarly investigation of sources? How can students' critical thinking and reading skills be improved? How can students' learn to recognize and utilize specific writing strategies, skills and fluency?

Reading, Writing, and Inquiry is a one-semester course that offers instruction and practice in the critical reading and writing skills required for college-level work, with an emphasis in written assignments that call for summary, critique, analysis, and arguments based on sources. This is a college course. The purpose of this course is to prepare students for the rigor of writing throughout college in all disciplines. Each unit will include preliminary work and assignments leading to a major essay to conclude.

- Grade Level: 12
- Prerequisites: 2.7 GPA, English 9, 10, and 11 Honors or AP English Language or teacher recommendation.
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement

ADVANCED ENGLISH 12
IU ENG L202
Literary Interpretation

What are the basic elements of literature, especially those distinctly characteristic of poetry, short fiction, the novel, and drama? What does it mean to argue about literature, including issues, claims, evidence, audience, and warrants? How can students appreciate the usefulness of comparing literary works with one another? What are the multiple contexts in which a literary work may be placed?

Literary Interpretation is a one-semester Indiana University course designed to help students learn how to read, think, and write critically and cogently about literature. Students will study four genres—poetry, short story, the novel, and drama—to understand how the various elements of a work of imaginative literature cohere to impart meaning. A large portion of the course will focus on how to write; students will learn how to translate close reading skills into strong critical essays, writing three peer-reviewed major papers, as well as short assignments (microthemes) and quizzes. The

class is heavily discussion-based, and features vigorous and insightful explorations of the poetry and fiction.

Students planning to attend IUB should be aware that ACP ENG-L202 will neither count toward the English major nor satisfy the intensive writing requirement at IUB.

- Grade Level: 12
- Prerequisite: Advanced English IU W131
- Credits: 1 per semester, 1 semester
- Fulfills an English/Language Arts requirement

ELECTIVE COURSES

JOURNALISM

What is the impact of the First Amendment on the press and how does it impact student journalism? What are the journalist's ethical responsibilities? How has the history of the press in America shaped our country? What role will the evolution of technology play in the field of journalism? How and why do stories become news? To what extent does the audience affect what you write and how you write it?

Journalism, a course based on Indiana's Academic Standards for English/Language Arts, is a study of news elements, journalism history, First Amendment law, ethics, fact and opinion, copy editing, news, and features as they apply to print and digital media products. It includes a comparison study of journalistic writing to other types of English writing with practical application of news, features, editorials, reviews, columns and digital media writing forms. For the second credit: Students continue to develop journalistic writing skills in addition to studying graphic design, advertising, public relations, photojournalism and emerging media development and design. By the end of the semester, students write, shoot and design stories for print and digital media products.

- Grade Level: Grades 9-12
- Prerequisites: None
- Credits: 1 per semester, 1 semester
- Fulfills an Elective requirement

STUDENT MEDIA: YEARBOOK

What is the importance of a Yearbook? What types of manufacturing tools are used to produce yearbooks? What tools are available to create yearbooks? How do you work together to create a publication? How does visual art reflect individual, community, and cultural differences throughout the world? What is the importance of advertising in student publication? What makes excellent reporting? How do reporters use various writing techniques? How do you identify a particular genre of reporting? What is role of the student newspaper in the school and local community? What are the challenges to producing unbiased reporting? How do design elements affect the reader's experience with a publication? How can a photograph tell a story?

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

Students will be required to work on class materials outside of school hours, meaning they will be in charge of covering school functions such as sporting events, school plays, competitions, dances, etc. They will also be required to come back to finish up any remaining work during summer hours if needed.

- Grade Level: Grades 11 -12
- Prerequisites: Journalism, Photoshop, or Teacher Recommendation
- Credits: 1 per semester, up to 4 semesters
- Fulfills the Fine Arts requirement for the Core 40 with Academic Honors.

ENGLISH/LANGUAGE ARTS SUPPORT CLASSES

LANGUAGE LAB 9

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing course work aligned with the Indiana Academic Standards for English Language/Arts. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.

- Grade Level: 9
- Prerequisites: Teacher recommendation
- Credits: 1 per semester, 2 semesters

LANGUAGE LAB READING

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing course work aligned with the Indiana Academic Standards for English Language/Arts focusing on the writing standards. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.

- Grade Level: 9-12
- Prerequisites: Teacher recommendation
- Credits: 1 per semester, 2 semesters

FAMILY AND CONSUMER SCIENCE DEPARTMENT

Family and Consumer Sciences has roots in both academic and career/technical (vocational) education and easily reaches beyond the education system into the community as it focuses on the needs of individuals and families. Essential preparation for success of all students includes acquisition of problem-solving, decision-making, higher order thinking, communication, literacy, and numerical skills in applied contexts. As the future members and leaders of tomorrow's families, workplaces, and communities, students need to be able to act responsibly and productively, to synthesize knowledge from multiple sources, to work cooperatively, and to apply the highest standards in all aspects of their lives.

FCCLA

Family, Career & Community Leaders of America is the official student organization for Family and Consumer Sciences Education in Indiana and across the country. The FCCLA organization helps students develop leadership and citizenship skills while synthesizing and applying Family and Consumer Sciences content and skills in family, workplace, and community settings. As a teaching/learning approach, FCCLA offers teacher-developed and student-tested strategies and materials that center the responsibility for achieving FACS standards on students through in-class and co-curricular chapter programs and projects.



High school FACS is organized into a variety of semester-long and year-long courses. State-approved high school FACS courses and the curriculum framework for each course provide guidelines for local FACS programs that focus on building strong and resilient individuals and families and helping students manage personal and family issues.

ADVANCED CHILD DEVELOPMENT

How do children grow and develop from age 1 to age 5?

This course includes a study of how children develop physically, emotionally, socially, intellectually and morally from age 1 to age 5. Topics included in the course are the professional and ethical issues in child development; child development growth and development; child development theorists, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children; and career exploration in child development and nurturing. **Students will conduct a play school during the month of April to gain a better understanding of work with children in a preschool like environment.** This course provides a foundation for students interested in continuing a post-secondary education in all career areas related to children, child development, nurturing of children and nursing.

- Grade Level: 10, 11, 12
- Prerequisite: Child Development
- Credits: 1 per semester, 1 semester

ADVANCED NUTRITION & WELLNESS

How does diet and lifestyle affect the body across the lifespan?

This course provides an extensive study of nutrition and is recommended for all students who want to improve their nutrition, learn how nutrition affects the body across the lifespan, or have interest in careers in the medical field, athletic training and dietetics. 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 provides a foundation for continuing education in all career areas related to nutrition, food, and wellness. Experiences include:

- MyPlate Dietary Guidelines, Review- Fruit Trifle, Whole Wheat Mac & Cheese, Snack Comparison
- Meal Management- Green Smoothies, Juicing Recipes, Twice Baked Potatoes, Whole Wheat Pizza, Crunchy Oven Fried Chicken Nuggets
- Nutrition Across the Lifespan & Accommodating Specific Dietary Needs - Heart Healthy and American Cancer Society Recipes
- Making Informed Choices-Cheesy Cauliflower Dippers, Million Dollar Spaghetti
- The Major Nutrients
- Influences on Food

- Grade Level: 9, 10, 11, 12
- Prerequisite: Nutrition & Wellness
- Credits: 1 per semester, 1 semester

CHILD DEVELOPMENT

How to children grow and develop from conception/prenatal to age 1?

This course includes the study of prenatal development and birth; growth and development of an infant; child care giving and nurturing; and support systems for parents and caregivers. Major topics in this class include five areas of development, prenatal development of infant and mother, birth defects, labor, delivery, and infant development. A project based approach includes caring for a Real Care Baby and sewing a quilt. This course provides a foundation for students interested in continuing a post-secondary education in all career areas related to children, child development.

- Grade Level: 10, 11, 12
- Prerequisites: None
- Credits: 1 per semester; 1 semester

CULINARY ARTS & HOSPITALITY MANAGEMENT I, II

PROSTART Certification

How do I prepare to work in the Culinary Arts & Hospitality industry or related occupations?

Culinary Arts and Hospitality Management is an advanced level course that prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two.

Work-based experiences in the food industry, including after school catering events are REQUIRED.

ProStart 1

- Welcome to the Restaurant and Foodservice Industry
- Keeping Food Safe (ServSafe)
- Workplace Safety
- Kitchen Essentials 1- Professionalism
- Kitchen Essentials 2- Equipment and Techniques
- Stocks, Sauces, and Soups
- Communication
- Management Essentials
- Fruits and Vegetables
- Serving Your Guests
- Potatoes and Grains
- Building a Successful Career in the Industry

ProStart 2

- Breakfast Food and Sandwiches
- Nutrition
- Cost Control
- Salads and Garnishing
- Purchasing and Inventory
- Meat, Poultry, and Seafood
- Marketing
- Desserts and Baked Goods
- Sustainability in the Restaurant and Foodservice Industry
- Global Cuisine 1: The Americas
- Global Cuisine 2: Europe, the Mediterranean, the Middle East, and Asia

- Grade Level: 11,12
- Prerequisite: Intro to Culinary Arts & Hospitality
- Credits: 2 per semester; 4 semesters

EDUCATION PROFESSIONS I

Ivy Tech EDUC 101
Pre-PAC Certification

&

EDUCATION PROFESSIONS II

Pre-PAC Certification

How would you describe a career in education or related careers where you work with children preschool through grade 8?

Education Professions prepares students for employment in education and related careers and provides the foundation for study in higher education. Students in Education Professions will select a school that they would like to assist a classroom. Education Professions coursework will take place every Monday afternoon at East Central High School and the lab experiences will take place Tuesday-Fridays. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom settings and career portfolios are required components. Students are monitored in their field experiences by the Education Professionals I teacher.

- Grade Level: 11, 12
- Prerequisites: Child Dev & Adv. Child Dev OR teacher recommendation
- Credits: 3 per semester, 2 semesters



HUMAN & SOCIAL SERVICES I & II

(FCCLA Officers Only)

Pre-PAC Certification

How do you lead a non-profit organization while helping the community?

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 nonprofit 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. All students will complete STAR Events in FCCLA. All students are required to be members in FCCLA. 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. Service learning experiences are highly recommended. Achievement of applicable FACS, academic, and employability competencies will be documented through a student portfolio.

- Grade: 9-12
- Prerequisite or Co-requisite: Nutrition & Wellness or Child Development
- Credits: 1 per semester, 6 semesters maximum

HUMAN & SOCIAL SERVICES I & II

(School Based)

Human and Social Services I is an introductory and exploratory course for students interested in careers in human and community services and other helping professions. Students will peer tutor in the core subject areas in a directed study hall.

- Grade Level: 10, 11, 12
- Prerequisite: None
- Credits: 1 per semester, 2 semesters

INTRO TO CULINARY ARTS & HOSPITALITY

How do I prepare safe and nutritious food for myself or the industry?

Introduction to Culinary Arts and Hospitality is recommended for all students regardless of their career cluster or pathway, in order to build basic culinary arts knowledge and skills. It is especially appropriate for students with an interest in careers related to Hospitality, Tourism, and Culinary Arts. Laboratory experiences that emphasize industry practices and develop basic skills are required components of this course. Units of Study & Laboratory experiences include:

ICAH I

- Food Safety and Storage- Chicken Stir Fry
- Preventing Accidents and Injuries- Kitchen Safety Project
- Measurements- Chocolate Chip Cookies
- Preparation Techniques/Using Recipes- Muffins, Mini Cheesecakes
- Equipping the Kitchen- Smoothies and Waffles
- Cooking Methods and Microwaving- Spaghetti with Meat Sauce, Pineapple Upside Cake
- Quick Breads- Banana Bread, Scones
- Yeast Breads- Soft Pretzels, Pizza

ICAH II

- Food Safety and Storage- review
- Preventing Kitchen Accidents- review
- Measurements- review
- MyPlate Dietary Guidelines- Energy Bites, Calzones
- Cooking Methods- BLT's, Eggs in a Basket, Roasted Vegetable Penne, Donuts, Stuffed Shells, Poached Pears.
- Stocks, Soups, and Sauces- Mac and Cheese, Biscuits and Gravy, Potato Soup
- Cinco De Mayo Celebration- Related Labs
- Cake Decorating Basics- Decorate Character Cakes

- Grade Level: 10-12
- Prerequisite: Nutrition & Wellness
- Credits: 1 per semester, 2 semesters

INTRO TO FASHION AND TEXTILES I, II

What basic concepts will be involved in the careers related to the fashion, textile, & apparel industry?

The courses include the study of fashion trends, history, terminology, fashion designers, elements and principles of design, fibers, fabrics, weaves, careers in fashion, laundry and stain removal and basic sewing techniques. A project based approach integrates instruction and lab experiences including the application of the elements and principles of design through tie-dyeing, projects over the history of fashion, trends in fashion, and stain removal. Students will also sew projects including pillowcases, pajama pants and projects of their choice and ability. Service learning projects will also be integrated into this course

- Grade: 9, 10, 11, 12
- Credits: 1 credit per semester, 2 semesters
- Fulfills the Fine Arts requirement for the Academic Honors Diploma

NUTRITION AND WELLNESS

How do I prepare safe and nutritious, healthy food for myself?

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. Direct, concrete mathematics and language arts proficiencies will be applied. This course provides a foundation for continuing education in all career areas related to nutrition, food, and wellness. Units of Study & Laboratory experiences may include:

- Making Wellness a Lifestyle Choice
- Peach Smoothies, Peach Crisp, Spaghetti Squash, Zucchini Bread
- Keeping Food Safe & Kitchen Safety
- Measurements
- Reading Recipes- Mexican Cornbread
- Factors Affecting Food Choices
- How Nutrients Become You- French Toast
- MyPlate Dietary Guidelines- Fruit Pizza
- International Foods Unit

- Grade Level: 9 (10, 11, 12)
- Prerequisite: None
- Credits: 1 credit per semester, 1 semester

FINE ARTS DEPARTMENT

In order to provide a quality education for every child in Indiana, it is important to provide for all aspects of human growth. The artistic, expressive, and cultural aspects of each child's intellectual, emotional, physical, and social development are vital components of this growth. Research involving the impact of arts education upon mental functions supports the convictions of many educators, parents, and business leaders that the fine arts are essential due to their ability to provide students with the means to think, feel, and understand the world around them in unique ways. Literacy in the arts strengthens a person's participation in society by enhancing problem solving and communication skills as well as fostering self-expression, aesthetic awareness, and multiple points of view. For these reasons, a curriculum in each of the fine arts should be available to all students so that they may become self-directed toward lifelong learning in the arts.

The purpose of each fine arts curriculum is to promote lifelong participation in the arts by developing skilled creators, performers, critics, listeners, and observers of the arts. Students can use the arts as a means of: self-expression and communication, development of critical thinking skills, self-knowledge and understanding of the world around them, and, increasing awareness of the artistic heritage of other cultures, as well as their own.

Students who are proficient in the fine arts grow in their ability to think and learn independently. Their view of the world expands as creative avenues to expression and understanding are developed. Ultimately, the entire community benefits through the creativity, vision, and empathy fostered in the fine arts. In order for this to happen, students must be immersed in opportunities to learn about the arts, perform and create in one or more of the art forms, and learn to analyze and critique the arts. The goals for students in grades kindergarten through grade twelve (k-12) are to enable each student to do the following:

- develop one's artistic skills;
- become confident in one's abilities in the arts;
- become a creative problem solver;
- appreciate the value of the arts;
- communicate through the arts;
- communicate about the arts;
- exhibit knowledge of the historical and cultural diversity of the arts; and
- exhibit knowledge of criticism and aesthetics in the arts.

VISUAL ARTS COURSE TITLES

INTRO TO 2-DIMENSIONAL ART

Introduction to 2-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students studying Introduction to 2-D art take part in sequential learning experiences that encompass art history, art criticism, aesthetics (the study of beauty), and art production in the purpose to create an art portfolio.

Students will build upon basic skills and processes. They will learn various types of drawing. These include: Whole-to-Part, Sketching, Gesture, Contour, Realistic, and Perspective drawing. In addition, students will learn: basic composition, Color Theory, Realistic painting and the elements and principles of design. Students will be given the opportunity to learn the necessary skills required in other art classes and creative endeavors.

Incorporated into this class: Students learn how to 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 academic disciplines/subjects and discover opportunities for the integration of art into life and academics; and reflect upon the analytic possibilities; incorporate literacy and presentation skills. Students will utilize the resources of books, the internet, and access information on art museums, galleries/studios, and identify art-related careers.

- Grade Level: 9, 10, 11, 12
- Credits: 1 per semester; 1 semester
- Prerequisites: None
- Fulfills 1 Fine Arts requirement for the Academic Honors Diploma

INTRO TO 3-DIMENSIONAL ART

Introduction to 3-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students studying Introduction to 3-D art take part in sequential learning experiences that encompass art history, art criticism, aesthetics (the study of beauty), and art production in the purpose to create an art portfolio.

Students will build upon basic skills and processes. They will learn various types of sculpture. These include: Kirigami/Paper-sculpture, Clay figurative forms, Soapstone and woodcarving and or wood relief carving. In addition, students will learn: Basic composition, Surface-texturing, Surface finishing, and the Elements and Principles of design. Students will be given the opportunity to learn the necessary skills required for other art classes and creative endeavors. This class is a requirement before taking any other art class.

Incorporated into this class: Students learn how to 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 academic disciplines/subjects and discover opportunities for the integration of art into life and academics; and reflect upon the analytic possibilities; incorporate literacy and presentation skills. Students will utilize the resources of books, the internet, and access information on art museums, galleries/studios, and identify art-related careers.

- Grade Level: 9, 10, 11, 12
- Prerequisite: Intro to 2-D Art
- Credits: 1 per semester; 1 semester
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

CERAMICS

Ceramics is a course based on the Indiana Academic Standards for Visual Art. Students studying ceramics take part in sequential learning experiences that encompass art history, art criticism, aesthetics (the study of beauty), and production which lead to the creation of quality art works.

Students build upon basic to advanced clay working techniques and process. They learn hand building techniques along with the process of wheel-thrown forms. These include: Vases, tea pots and cups, decorative sculptural containers, relief sculptures and figurative forms of any conceivable creature; living or imaginary. In addition, students learn about the art of glaze selection/application and decorative design processes such as: Pressed stamps; individualized clay molded forms; hand-built clay accessories; scratched and drawn-in textures, patterns or symbolic pictures and finally hand

painted glazes and designs. Lastly, students learn how to use the kiln/oven firing process. This hardens and turns the clay into a vitrified brick like pottery. In the end: Students glaze and fire pottery a second time with colored silica which melts, during the second high-heat firing, into a beautiful glass coating.

Students learn how to 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 academic disciplines/subjects; discover opportunities for the integration of art into life and academics; incorporate literacy and presentation skills. Students will utilize the resources of books, the Internet, and access information on Art in museums, galleries/studios, and identify art-related careers.

Recommended art classes to take after Ceramics 1 and 2: Sculpture and Jewelry

- Grade: 10, 11, 12
- Prerequisite: Intro 2-D Art and Intro 3-D Art
- Credits: 1 credit per semester; 2 semesters
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

DIGITAL DESIGN: PHOTOSHOP

PHOTOSHOP 1st Semester:

Students will learn how to express their ideas and thoughts through art with learning experiences of art history, criticism, aesthetics and production. Students become skillful and confident in their ability to work digitally through poster designs, logo designs, photo retouches and more. Students learn how to refine their artwork through informal art criticism and by aesthetic factors. Students also learn the influence of art in their community and their lives, and identify art-related careers.

PHOTOSHOP 2nd Semester:

In addition to Photoshop, Illustrator, a vector graphics program will be introduced. Students become more skillful and confident in their ability to work digitally through advanced digital design projects such as poster designs, logo designs, photo retouches and more. Students learn how to refine their artwork through informal art criticism and by aesthetic factors. Students also learn the influence of art in their community and their lives, and identify art-related careers.

- Grade: 10, 11, 12
- Prerequisite: Intro to 2-D Art
- Credits: 1 per semester; 2 semesters
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

DRAWING

Drawing is a course based on the Indiana Academic Standards for Visual Art. Students studying ceramics take part in sequential learning experiences that encompass art history, art criticism, aesthetics (the study of beauty), and production which lead to the creation of quality art works.

Students build upon previously learned basic skills and learn advanced drawing techniques and processes. They learn how to sketch and draw. This includes: Contour line drawing of people; still-life of objects grouped together into a pleasing arrangement/composition; Gesture drawing (free and expressive line) of people; Sketches (loose quick drawn lines) of people, and/or cartooning ideas; Realistic (life-like) shaded/rendered drawings which may include: people and/or animals, landscape and still-life objects; Perspective drawings (3-dimensional) of room and/or building/hallway. Students will learn more advanced drawing techniques using media/drawing tools such as: Pencil, pastels, charcoal, mixed-media, pen and ink.

Students learn how to reflect upon and refine their artwork; explore cultural and historical connections; analyze, interpret, and theorize about art; make informed judgments about artwork and the nature of art; relate art to other academic disciplines/subjects and discover opportunities for the integration of art into other classes; incorporate literacy and presentation skills. Students will utilize the resources of books, the internet, and access information on art museums, galleries/studios and identify related careers.

- Grade Level: 10, 11, 12
- Prerequisite: Intro to 2-D Art
- Credits: 1 credit per semester; 3 semester max
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

JEWELRY

Jewelry is a course based on the Indiana Academic Standards for Visual Art. Students studying Jewelry take part in sequential learning experiences that encompass art history, art criticism, aesthetics (the study of beauty), and art production in the purpose to create an art portfolio.

Students will learn basic skills and technical processes. They will learn various types of jewelry fabrication. These include: Filigree/wire bending, Soldered fabricated wire pendants, Pierced and Laminated sheet-metal designs that are: pierced/sawed, filed and soldered together. In addition, students will learn basic hammering techniques for making 3-D forms, basic hammered designs on metal called Chasing, surface finishes/textures/ finishes with wire brushes, hammers, chemicals and metal buffers that complete metal finishes, and the use of the Elements and Principles of design used in basic jewelry design. Students will be given the opportunity to learn the necessary skills required to continue their own jewelry design and fabrication outside of class. This class is an advanced art

subject where students are given the opportunity to work independently on their own projects.

Students learn how to 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 academic disciplines/subjects and discover opportunities for the integration of art into life and academics; and reflect upon the analytic possibilities; incorporate literacy and presentation skills. Students will utilize the resources of books, the internet, and access information on art museums, galleries/studios, and identify art-related careers.

- Grade: 9, 10, 11, 12
- Prerequisite: Intro to 2-D Art
- Credits: 1 credit per semester; 1 semester
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

PAINTING

Painting is course based on the Indiana Academic Standards for Visual Arts. 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, 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 judgements about artwork and the nature of art; relate art to the 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.

- Grade Level: 10, 11, 12
- Prerequisite: Intro to 2-D Art
- Credits: 1 per semester; 3 semester max
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

PHOTOGRAPHY I

Darkroom Photography

Photography I (Darkroom Photography) engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to a creation of portfolio quality works. Photography I is a darkroom photography class where students are given the opportunity to develop their own challenging and thought provoking learning experiences within the structure of an organized curriculum. Students reflect and refine their work, explore cultural and historical connections, analyze, interpret, theorize, and make informed judgements about their photography. Students relate photography to other art 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.

- Grade Level: 10, 11, 12
- Prerequisite: Intro 2D Art or 2.5 cumulative GPA
- Credits: 1 per semester; 1 semester
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

PHOTOGRAPHY II (Digital Photography)

Photography II (Digital Photography) engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. Students will learn how to utilize the digital camera with Photoshop for editing and creative processes. Students reflect and refine their work, explore cultural and historical connections, analyze, interpret, theorize, and make informed judgements about their photography. Students relate photography to other art 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

- Grade Level: 10, 11, 12
- Prerequisite: Intro to 2D Art or 2.5 cumulative GPA
- Credits: 1 per semester; 1 semester
- **STUDENTS MUST PROVIDE THEIR OWN DIGITAL CAMERA FOR THIS COURSE**
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

SCULPTURE

Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students studying Sculpture take part in sequential learning experiences that encompass art history, art criticism, aesthetics (the study of beauty), and art production in the purpose to create an art portfolio.

Students will build upon basic skills and processes. They will learn more advanced types of sculpture. These include: Clay sculpting of realistic and or creative imaginative forms in relief or 3-D forms; Soapstone carving of contemporary abstracted forms of people, animals or creatures; Woodcarving and or wood relief carving or whittled recognizable forms. In addition, students will learn: Basic design processes for 3-D art, Surface-texturing, Surface finishing, and the extended use of the Elements and Principles of design. Students will be given the opportunity to learn the necessary skills required in order to continue sculpting outside of art class and school. This is an advanced course that requires students to work independently on projects and meet established objectives and deadlines.

Students learn how to 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 academic disciplines/subjects and discover opportunities for the integration of art into life and academics; and reflect upon the analytic possibilities; incorporate literacy and presentation skills. Students will utilize the resources of books, the internet, and access information on art museums, galleries/studios, and identify art-related careers.

- Grade Level: 10, 11, 12
- Prerequisites: Intro 2-D Art and Intro to 3-D Art
- Credits: 1 credit per semester; 1 semester
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

MUSIC COURSE TITLES

Chorus

INTERMEDIATE CHORUS

Women's Choir

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

- Grade Level: 9, 10, 11, 12
- Required: GIRLS ONLY
- Credits: 1 credit per semester; multiple semesters permitted
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

ADVANCED CHORUS

Concert Choir

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

- Recommended Grade: 10, 11, 12
- Recommended: Intermediate Chorus
- Credits: 1 credit per semester; multiple semesters permitted
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

VOCAL JAZZ

Show Choir

Vocal Jazz develops 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. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Grade Level: 9, 10, 11, 12
- Credits: 1 credit per semester; multiple semesters permitted
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

MUSIC COURSE TITLES

Band

INTERMEDIATE CONCERT BAND

Symphony Band

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. Students are required to participate in performance opportunities outside of the school day.

- Grade Level: 9, 10, 11, 12
- Credits: 1 credit per semester; multiple semesters permitted
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

ADVANCED BAND

Marching Band

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. Students are required to participate in performances outside of the school day that extends learning in the classroom.

- Grade Level: 9, 10, 11, 12
- Prerequisite: Intermediate Concert Band or Instructor Approval
- Credits: 1 credit per semester; multiple semesters permitted
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

JAZZ ENSEMBLE

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. 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.

- Grade Level: 9, 10, 11, or 12
- Credits: 1 credit per semester; multiple semesters permitted
- Each semester fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

Special Interest Areas

MUSIC THEORY & COMPOSITION

Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music.

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

- Grade Level: 11, 12
- Prerequisites: Member of band or choir for 2 years OR instructor approval
- Credits: 1 per semester; 2 semesters
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma
- **This course is intended for those students pursuing music at the post-secondary level**

APPLIED MUSIC: GUITAR

Guitar class offers high school students the opportunity to receive small group instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music.

- Grade Level: 10, 11, 12
- Credits: 1 per semester; 1 semester
- Prerequisites: None
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

PIANO AND ELECTRONIC KEYBOARD

Piano and Electronic Keyboard offers keyboard classes in order to develop music proficiency and musicianship. Students perform with proper posture, hand position, fingering, rhythm, and articulation; compose and improvise melodic and harmonic material; create and perform simple accompaniments; listen to, analyze, sight-read, and study a variety of keyboard literature; study the elements of music as exemplified in a variety of styles; and make interpretive decisions.

- Recommended Grade: 10, 11, 12
- Credits: 1 per semester; 1 semester
- Prerequisites: None
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

MUSICAL THEATRE

Students participate in staging, choreographing, rehearsing, and performing an original or existing musical work. This class may be taught collaboratively among music, theatre, dance, and visual arts faculty. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

- Grade Level: 9, 10, 11, 12
- Prerequisites: Instructor Approval
- Credits: 1 credit per semester; 1 semester
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors diploma

GENERAL SUPPORT

BASIC SKILLS DEVELOPMENT

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

- Grade Level: 9-12
- Prerequisites: None
- Credits: 1 per semester, 8 semesters max

ADDITIONAL SUPPORT CLASSES ARE AVAILABLE IN THE FOLLOWING DEPARTMENTS:

MATHEMATICS DEPARTMENT:

Algebra Lab
Math Lab – Algebra II and Geometry

ENGLISH / LANGUAGE ARTS DEPARTMENT

Language Lab 9
Language Lab Reading

Health & Physical Education Department

Health Education

HEALTH & WELLNESS

Health & Wellness provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts), determine personal values that support health behaviors, develop group norms that value a healthy lifestyle, and develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, and 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.

- Grade Level: 10 (11,12)
- Credits: 1 per semester; 1 semester
- Fulfills the Health Requirement for all diplomas

Physical Education

Physical Education I and II and Elective Physical Education are based on *Indiana's Academic Standards for Physical Education*. These courses identify what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Through a variety of instructional strategies, students practice skills that demonstrates: competency in motor skills and movement patterns needed to perform a variety of physical activities; understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities; regular participation in physical activity to achieve and maintain a health-enhancing level of physical fitness; responsible personal and social behavior that respects self and others in physical activity settings; value for physical activity for health, enjoyment, challenge, self-expression, and/or social interaction; and physical activity as critical to the development and maintenance of good health. Through reading and writing students will also practice skills that demonstrates: an understanding of symbols, terms, and domain-specific words/phrases as related to physical education context; analyzing the structure of relationships among concepts in a text; translate technical PE information from words in a text into visual form and translate information expressed visually/mechanically into words; write informative/explanatory texts; produce clear and coherent writing; and write routinely.

- 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
- Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent being active

PHYSICAL EDUCATION I

Physical Education I focuses on lifetime fitness concepts that provides students the opportunities to participate in team sports, dual sports, and individual physical activities which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

- Grade Level: 9 (10-12)
- Credits: 1 credit per semester; 1 semester
- PE uniforms must be worn during class – no exceptions
- No jewelry is to be worn during PE class
- Fulfills a Physical Education requirement for all diplomas

PHYSICAL EDUCATION II

Physical Education II focuses on lifetime fitness concepts that provides students the opportunities to participate in team sports, dual sports, and individual physical activities which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

- Grade Level: 9 (10-12)
- Credits: 1 credit per semester; 1 semester
- PE uniforms must be worn during class – no exceptions
- No jewelry is to be worn during PE class
- Fulfills a Physical Education requirement for all diplomas

ELECTIVE PHYSICAL EDUCATION: LIFETIME FITNESS

Lifetime Fitness promotes lifetime sports and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. Students will have opportunities to participate in team sports, dual sports, and individual physical activities. Also, students may have opportunities to participate in field trips of lifetime physical activities (kayaking, canoeing, biking, hiking, disc golf). Ongoing assessment includes both written and

performance-based skill evaluation. The nature of this course allows for successive semesters of instruction provided defined proficiencies and content standards are utilized. Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.

- *Grade Level: 10-12*
- *Credits: 1 credit per semester; max 4 semesters*
- *PE uniforms must be worn during class – no exceptions*
- *No jewelry is to be worn during PE class*

ELECTIVE PHYSICAL EDUCATION: STRENGTH TRAINING

Strength Training includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifetime fitness. Students have the opportunity to design and develop a personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. The nature of this course allows for successive semesters of instruction provided defined proficiencies and content standards are utilized. Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.

- *Grade Level: 10, 11, 12*
- *Prerequisite: C in PE 1 and II*
- *PE uniforms must be worn during class – no exceptions*
- *No jewelry is to be worn during PE class*
- *Contains a rigorous five-day a week workout plan (weight training, running, agilities)*
- **PHYSICAL MUST BE COMPLETED AND ON FILE PRIOR TO THE FIRST DAY OF THE SEMESTER**

MATHEMATICS DEPARTMENT

Gr. 9

- Algebra I with Algebra Lab
- Algebra
- Algebra II OR Algebra II Honors
- Algebra II Honors and Geometry

Gr. 10

- Algebra I with Algebra Lab
- Math 10
- Algebra II and Geometry
- Pre-Calculus - Trig Honors

Algebra
Algebra II
Geometry OR Geometry Honors

Gr. 11

- Math 10
- Geometry
- Advanced Math - Finite
- Probability & Statistics (1 sem)
- AP Statistics

Algebra II
Pre-Calculus - Trig
Pre-Calculus - Trig Honors
Trigonometry (1 sem)
AP Calculus AB

Gr. 12

- Algebra II
- Geometry
- Pre Calculus - Trig
- AP Calculus, AB
- Probability & Statistics (1 sem)
- AP Statistics

Advanced Math - Finite
Probability & Statistics / Trigonometry
Pre Calculus - Trig Honors
AP Calculus BC (1 sem)
Trigonometry (1 sem)

ALGEBRA I

Algebra I formalizes and extends the mathematics 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 Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Prerequisite: None
- Credits: 1 credit per semester; 2 semesters
- Fulfills the Algebra I requirement

MATH 10

Math 10 is a new two-semester course designed to reinforce and elevate Algebra I and middle school geometry knowledge and skills necessary for students to successfully complete high school math courses beyond Algebra 1. In addition, this course will help students gain the skills needed to pass the math graduation exam. Emphasis is on a variety of instructional methods designed to meet each student's needs and delivered through competency-based units with frequent pre and post assessment data analyzed to drive instructional design and delivery.

- Prerequisite: Algebra I
- Credits: 1 per semester; 2 semesters
- *Fulfills 2 math req for the general diploma only*

ALGEBRA II

Algebra II builds on work with linear, quadratic, and exponential functions and allows for student 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, 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.

- Prerequisites: 1st Semester: C- or higher in Algebra I or completion of Math 10; 2nd Semester: Must pass 1st semester. Students who do not earn credit 1st semester will be moved to the Math 10 course.
- Credits: 1 per semester; 2 semesters
- *Fulfills the Algebra II requirement*

ALGEBRA II HONORS

Algebra II Honors is a course available to students who qualify for a faster paced and more in-depth study of the Algebra 2 concepts mentioned previously. The student enrolling in this course should be one with a high interest and aptitude in mathematics and one who is interested in completing a five-year mathematics program while in high school. Eligibility for this course is determined through our middle school's placement program or through demonstration of exceptional scholarship in Algebra I, with teacher recommendation. Students must meet placement criteria to enroll. This criteria includes a combination of previous math grades, overall GPA, and standardized test scores. Students must maintain at least a B- to remain enrolled in the Algebra II Honors course.

- Prerequisite: Algebra I Honors or Teacher Recommendation
- Credits: 1 per semester; 2 semesters
- *Fulfills 2 Math requirements for all diplomas*

GEOMETRY

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. Students will develop spatial visualization and perceive the role of inductive and deductive reasoning. In addition, the complementary elements of algebra and geometry will allow students to strengthen basic algebraic skills. Five critical areas comprise the Geometry course: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three-dimensional Solids. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Prerequisite: C- or higher in Algebra or completion of Algebra II or Math 10
- Credits: 1 per semester; 2 semesters
- Fulfills the Geometry requirement

GEOMETRY HONORS

Honors Geometry formalizes and extends students' geometric experiences from the middle grades and is designed for the students who plan to continue their mathematical studies in the Honors Pre-Calculus, AP Calculus and AP Statistics courses. Students explore more complex geometric situations and deepen their explanations of geometric relationships, while learning to formalize mathematical arguments through the methods of two-column proofs and proof by contradiction. Five critical areas comprise the Geometry course: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three-Dimensional Solids. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations

- Grade Level: 10, 11, 12
- Prerequisite: Algebra I Honors or an A in Algebra I with teacher recommendation
- Credits: 1 semester; 2 semesters
- Fulfills Geometry requirement for all diplomas

PROBABILITY AND STATISTICS

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 calculator and computer programs is encouraged.

- Prerequisite: C- in Algebra II and Geometry
- Credits: 1 per semester; 1 semester
- Counts as an advanced Math requirement for honors diplomas

TRIGONOMETRY

Trigonometry provides students with the skills and understanding that are necessary for advanced manipulation of angles and measurement.

Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including, music, engineering, medicine, and finance (and nearly all other STEM disciplines). Trigonometry consists of the following strands: Unit Circle, Geometry, Right Triangles, Trigonometric Functions, Identities, and Vectors. The Eight Process

Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience Mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Prerequisite: C- in Algebra II and Geometry
- Credits: 1 per semester; 1 semester
- Counts as an advanced Mathematics requirement for honors diplomas

ADVANCED MATH, FINITE

Ivy Tech MATH 135

Advanced Mathematics, College Credit is an advanced mathematics course offered for credit by an accredited postsecondary institution through an adjunct agreement with a secondary school. Course content will focus on surveys solving and graphing linear equations and inequalities, elementary set theory, matrices and their applications, linear programming, and elementary probability; standard finite mathematics course.

- Prerequisite: C- or higher in Algebra II & Geometry
- Credits: 1 per semester; 2 semesters
- Fulfills 2 advanced math requirements for honors diplomas

PRE-CALCULUS/TRIG, PRE-CALCULUS/TRIG HONORS IVY TECH MATH 136 & 137

Pre-Calculus/Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Students will also advance their understanding of *imaginary* numbers through an investigation of complex numbers and polar coordinates. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses.

- Prerequisite – Pre-Calculus: C- in Algebra II and Geometry
- Pre-requisite – Pre-Calculus Honors – A- in Algebra II and Geometry Honors with teacher recommendation.
- Credits: 1 per semester; 2 semesters
- Fulfills the advanced Math requirements for honors diplomas

AP CALCULUS AB
IVY Tech MATH 211
AP CALCULUS BC

AP Calculus AB/BC develops the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

- Grade Level: 11, 12
- Prerequisite: B or higher in Pre-Calculus
- Credits: 1 per semester; 2 semesters
- Fulfills the advanced Math requirements for honors diplomas

AP STATISTICS
IVY TECH MATH 200

AP Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: (1) exploring data: describing patterns and departures from patterns; (2) sampling and experimentation: planning and conducting a study; (3) anticipating patterns: exploring random phenomena using probability and simulation; and (4) statistical inference: estimating population parameters and testing hypotheses. The use of graphing calculators and computer software is required.

- Recommended Grade: 11, 12
- Prerequisite: B- in Algebra II and Geometry and Teacher Recommendation
- Credits: 1 per semester; 2 semesters
- Counts as an advanced Math requirement for honors diplomas

Math Support Classes

ALGEBRA I LAB

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

- Prerequisite: Teacher recommendation
- Credits: 1 per semester; 2 semesters
- Counts as a Math Course for General Diploma only or as an Elective for all other diplomas
- Algebra I Lab is a support course for Algebra I. Students taking Algebra I Lab must also be enrolled in Algebra I during same academic year

MATH LAB – ALGEBRA II & GEOMETRY

Mathematics Lab provides students with individualized instruction designed to support success in completing Algebra II and Geometry coursework aligned with Indiana's Academic Standards for Mathematics. Math Lab is to be taken in conjunction with an Algebra II or Ge, and the content of Mathematics Lab should be tightly aligned to the content of its corresponding course.

- Grade Level: 10-12
- Credits: 1 per semester, 4 semesters max
- Prerequisite: Concurrent enrollment in Algebra II and/or Geometry

SCIENCE DEPARTMENT

Gr. 9

- Earth & Space Science
- Biology I
- Biology I Honors
- Chemistry I (by approval only)

Gr. 10

- Earth & Space Science
- Chemistry I
- Advanced Science: Botany & Zoology

Biology I
Chemistry II

Int Chem Physics
Biology II

•**AFTER BIOLOGY I, STUDENTS SHOULD TAKE A CHEMISTRY- OR PHYSICS-BASED COURSE TO COMPLETE DIPLOMA REQUIREMENTS AND MEET PREREQUISITES FOR HIGHER LEVEL SCIENCE CLASSES **

Gr. 11

- Earth & Space Science
- Integrated Chemistry & Physics
- Chemistry I
- Biology II - BIOL 101
- Chemistry II - CHEM 101/121
- Physics I
- Advanced Science, Botany & Zoology
- Anatomy & Physiology - APHY 101
- AP Biology
- AP Chemistry

Gr. 12

- Earth & Space Science
- Integrated Chemistry & Physics
- Chemistry I
- Biology II - BIOL 101
- Chemistry II - CHEM 101/121
- Physics
- Advanced Science, Botany & Zoology
- Anatomy & Physiology - APHY 101
- AP Biology
- AP Chemistry

EARTH AND SPACE SCIENCE

How and why is the Earth constantly changing? How do Earth's processes and human activities affect each other? What is Earth's place in the universe?

This course will provide students with the basic knowledge of Earth & Space science as it relates to them. The students will discover how all of Earth's systems and processes are interconnected through discussion and hands-on lab experiences. Students will be exposed to geology, paleontology, meteorology, and astronomy, as well as discussions and activities concerning natural disasters, environmental problems, and space exploration. Students collaborate with peers on STEM projects including earthquake tower building and exploring/developing new approaches for renewable energy.

- Grade Level: 9-12
- Prerequisite: None
- Credits: 1 per semester; 2 semesters
- Fulfills a Science requirement

BIOLOGY I

How do organisms live, grow, develop, reproduce, & maintain homeostasis? How do biological processes that occur at a cellular level influence the structure, function, & behavior at all biological levels?

Biology is the science that studies living things. This course focuses on the process of scientific investigation through the study of living things and the world in which we live. This scientific knowledge will be gained by participating in regular laboratory, cooperative learning, hands-on activities, dissection, as well as classroom discussions. Students will specifically explore the following topics: basic chemistry, biochemistry, cell structure and function, cellular reproduction, protein synthesis, genetics, evolution, matter and energy transfer and interdependence of organisms.

- Grade Level: 9, 10
- Prerequisite: None
- Credits: 1 per semester; 2 semesters
- Fulfills the Biology requirement

BIOLOGY I HONORS

How does Biology affect a person's daily life? What are the characteristics shared by all living things?

Biology Honors focuses on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation. Students will be designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations. Honors Biology is a fast paced course

that is very lab intensive. Students must maintain a C- at semester in order to stay in the course.

- Grade Level: 9
- Prerequisite: Teacher recommendation
- Credits: 1 per semester; 2 semesters
- Fulfills the Biology requirement

INTEGRATED CHEMISTRY/PHYSICS

How can I make better decisions behind the wheel? How do I become a more informed and healthier consumer?

The course is focused on the core Physics topics of: motion in one dimension; Newton's Laws and forces; energy and momentum. It also focuses the core Chemistry topics of: the properties of atoms and the organization of the periodic table; types of chemical bonds, writing formulas and naming compounds; chemical reactions and balancing chemical equations; solutions and solubility; fluids; temperature, heat and thermal energy. Special projects include a catapult project semester 1 and a bridge building project semester 2. The instruction of these topics is focused on the understanding that knowledge is gained through observation and experimentation in conjunction with investigations, critical thinking and problem solving.

- Grade Level: 10, 11, 12
- Prerequisite: Min C- in Algebra I or completion of Math 10
- Credits: 1 per semester; 2 semesters
- Fulfills the Chemistry/Physics requirement

CHEMISTRY I

What are the building blocks that construct our world? How do elements behave, bond, & interact individually & with other elements?

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

- Grade Level: 9, 10, 11, 12
- Prerequisite: B- in Algebra I and completion of or concurrent enrollment in Algebra II OR completion of Integrated Chemistry & Physics OR teacher recommendation
- Credits: 1 credit per semester; 2 semesters
- Fulfills the 2 Chemistry requirement

BIOLOGYII

IVY TECH BIOL 101

How do the seven characteristics of life control how an organism functions and interacts within its environment? To what extent does the natural environment affect the development of an organism?

Biology II is an advanced laboratory, field and literature investigations-based course. Students enrolled in Biology II examine in greater depth the structures, functions, and processes of living organisms. Students also analyze and describe the relationship of Earth's living organisms to each other and to the environment in which they live. Students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of the unifying themes of biology to biological questions and problems related to personal and community issues in the life sciences.

- Grade Level: 10, 11, 12
- Prerequisite: C- in Biology I and C- in either Chemistry or Integrate Chemistry Physics
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement

ADV SCIENCE, BOTANY & ZOOLOGY

What is plant biology? What is animal biology? How and to what extent have humans affected their natural environment?

Botany and Zoology is a course in which students investigate in-depth concepts and principles related to the plants and animals of an ecosystem with an emphasis on environmental science. The course introduces students to basic plant and animal structure. It also covers ecology, evolution, taxonomy, and the behavior of those organisms. This program is lab intensive including a shark dissection, live animal labs, and two off campus labs that take place at Wolf Creek Habitat and the Newport Aquarium.

- Grade Level: 10
- Prerequisite: Biology I Honors and concurrent enrollment of Chemistry I
- Grade Level: 11, 12
- Prerequisite: B- in Biology I (or Teacher Approval) and completion of Chemistry I
- Credits: 1 per semester, 2 semesters
- Fulfills a Science requirement

ANATOMY & PHYSIOLOGY

IVY TECH APHY 101

What are the structural levels of organisms? How does the structure of a cell, tissue, or organ relate to its function?

Anatomy and Physiology introduces students to the cell which is the basic structural and functional unit of all organisms, and covers tissues, integument, skeleton, muscular, nervous, and circulatory 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. Some students in this course will also have the opportunity to take part in a cadaver laboratory experience presented by Beacon Orthopedics.

- Grade Level: 11,12
- Prerequisite: C- in Biology and Chemistry
- Credits: 1 per semester; 2 semesters
- Fulfills a Science requirement

CHEMISTRY II

IU CHEM 101/121 and IVY TECH CHEM 101

What type of reaction can occur in living and non-living materials? What type of procedures can help solve problems in a laboratory setting?

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

- Grade Level: 10, 11, 12
- Prerequisite: Min of B in Chemistry I & Algebra II
- Credits: 1 per semester; 2 semesters
- Fulfills a Science requirement

PHYSICS I

How can I improve my performance on the playing field?

The course is focused on the following core topics: motion in one and two dimensions; Newton's Laws and forces; energy and momentum; temperature, heat and thermal energy; electricity and magnetism; vibrations and waves; light, sound and optics. Special projects include a catapult project semester 1 and a bridge building project semester 2. The instruction of these topics is focused on the understanding that knowledge is gained through observation and experimentation in conjunction with investigations, critical thinking and problem solving.

- Recommended Grade: 11, 12
- Recommended: Algebra II
- Credits: 1 credit per semester; 2 semesters
- Fulfills the 2 credit requirement for Chemistry I, Physics I, or Integrated Chemistry and Physics
- Counts as a Science course
- Credits: 1 credit per semester; 2 semesters

AP BIOLOGY

What are the concepts of Biology and what is their relevance to themselves and society? How does evolution account for the unity and diversity of life? How does science benefit from a cooperative and diverse viewpoint?

AP Biology is a course based on the content established by the College Board. The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis. Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties. This program is lab intensive with 15 college level labs being completed throughout the school year. Some students in this course will also have the opportunity to take part in a cadaver laboratory experience presented by Beacon Orthopedics.

- Grade Level: 11, 12
- Prerequisite: Chemistry I and Biology Honors or a B- in Biology I
- Credits: 1 per semester, 2 semesters
- Fulfills a Science Requirement

AP CHEMISTRY

What is a deeper understanding of the atomic structure and how atoms interact with one another? How can the rate of a reaction be calculated?

The AP Chemistry course provides students with a college-level foundation to support future advanced course work in Chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

- Grade Level: 11, 12
- Prerequisite: Min of B in Chemistry II
- 1 per semester; 2 semesters
- Fulfills a Science requirement

Senior Specialty Courses

HUMAN & SOCIAL SERVICES

Family & Community Health

Human and Social Services I is an 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 nonprofit services. In this course, students will intern at local agencies in our community. These students will be leaving the high school during 6 and 7th period and will need to provide their own transportation.

Location: TBD – Area health and community service sites

Teachers/Instructors - Supervisors via site-based learning

East Central High School Instructor, FACS area

- Grade Level: 12
- Prerequisite: Nutrition & Wellness, Child Development or Teacher Recommendation
- Credits: 2 per semester; 2 semesters

ICE - INTERDISCIPLINARY COOPERATIVE EDUCATION

Interdisciplinary Cooperative Education (ICE) spans all career and technical education program areas through an interdisciplinary approach to training for employment. This approach is especially valuable in enriching the small school's career and technical education program where a traditional cooperative program of clustered occupations cannot be identified because of varied student interest and diverse training stations. Time allocations are a minimum of fifteen hours per week of work-based learning and approximately five hours per week of school-based instruction. The following two components must be included as part of the Interdisciplinary Cooperative Education course.

Related Instruction, that is classroom based, shall be organized and planned around the activities associated with the student's individual job and career objectives in a career cluster area; and shall be taught during the same semesters as the student is receiving on-the-job training. The concepts, skills, and attitudes basic to occupational competence are to be taught in school and are to be applied and tested on the job. The sequence of related instructional topics in school shall be continuously correlated with the student's job activities. Because each student's on-the-job activities will vary according to the types of occupations in which they have been placed, part of the related instructional time needs to be individualized in such ways as: (a) using group instruction, but individualizing the assignment so that the learning is applied to each student's own work experience, and (b) using individual study assignments such as projects, job study guides, and individual reading assignments.

On-the-Job Training is the actual work experience in an occupation in any one of the Indiana career clusters that relates directly to the student's career objectives. On-the-job, the student shall have the opportunity to apply the concepts, skills, and attitudes learned during Related Instruction, as well as the skills and knowledge that have been learned in other courses. The student shall be placed on-the-job under the direct supervision of experienced employees who serve as on-the-job trainers/supervisors in accordance with pre-determined training plans and agreements and who assist in evaluating the student's job performance.

- Grade Level: 12
- Prerequisites: None
- Credits: 3 per semester; 2 semesters

WORK BASED LEARNING: ATHLETIC TRAINING

Work Based Learning Capstone is a culminating course in a student's logical sequence of courses for a chosen career pathway. In this course, students have the opportunity to apply the concepts, skills, and dispositions learned in previous coursework in their pathways in real world business and industry settings. Therefore, at least two courses in a student's pathway would be prerequisite to the student enrolling in the stand-alone WBL courses.

Location: ECHS

Teachers/Instructors: Beacon Orthopedics, ECHS Sports Trainer

East Central High School Instructor, CTE area

- Grade Level: 12
- Prerequisites: Preparing for College and Careers, 4 credits related to pathway
- Credits: 1 per semester, 2 semesters

SOCIAL STUDIES DEPARTMENT

Gr. 9

- Geography & History of the World
- World History

Gr. 10

- AP World History (can't take if World History has been taken in gr. 9)

Gr. 11

- U. S. History
- U. S. History / IU H105 & H106

Gr. 12

- U. S. Government **OR** AP U. S. Government & Politics
- Economics **OR** AP Microeconomics

Electives

- AP European History (Full Year)
- Psychology (Each Semester)
- Sociology (Each Semester)

SOCIAL STUDIES DEPARTMENT

Geography & History of the World

How do the five core themes of Geography contribute to both sovereignty & globalism for all nations around the world?

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

- Grade Level: 9, 10
- Prerequisite: None
- Credit: 1 per semester, 2 semesters
- Fulfills a Social Studies requirement

World History & Civilization

How did we get here?

World History emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced people and places 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.

- Grade Level: 9, 10
- Prerequisite: None
- Credit: 1 per semester, 2 semesters
- Fulfills a Social Studies requirement

AP World History

Do you know how to analyze a point of view or how to interpret historical evidence that can be used to build & support an argument, or are you interested in developing historical thinking skills?

The AP World history course focuses on developing understanding of world history from approximately 8000 BCE to the present. The course investigates the content of world history for significant events, individuals, developments, and processes in six historical periods. You will learn to develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interactions of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures) that will allow you to explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographic regions of the globe: Africa, the Americas, Asia, Europe, and Oceania.

- Grade Level: 10, 11, 12
- Prerequisite: 3.0 GPA
- Credit: 1 per semester, 2 semesters
- Fulfills a Social Studies requirement

United States History

How have the key events of the late 19th, 20th, and 21st centuries created the United States standing in world affairs today?

United States History builds upon concepts developed in previous studies of US History. Students are expected to identify and review significant events, persons, and movements on 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 on 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 US 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 on the nation over time.

- Grade Level: 11
- Prerequisite: None
- Credit: 1 per semester, 2 semester
- Fulfills the US History requirement

AP United States History

IU H105 and IU H106

How have various individuals, groups, and institutions contributed to the construction of the unique American culture?

AP United States History is a course based on the content established by the College Board. The course has a chronological frame from 1492 to the present and focuses on multiple causation and change in United States history over time. A variety of historical themes are examined in order to place the history of the United States onto larger analytical contexts. Students are expected to analyze and interpret primary sources and develop awareness of multiple interpretations of historical issues in secondary sources. Historical events and issues in US history are to be examined from multiple perspectives.

- Grade Level: 11
- Prerequisite: 3.0 GPA
- Credit: 1 per semester, 2 semester
- Fulfills the US History requirement

United States Government

What is Government? What was the significance of the Bill of Rights when it was first adopted and why does it remain important today?

United States Government provides a framework for understanding the purpose, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of

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

- Grade Level: 12
- Prerequisite: None
- Credit: 1 per semester, 1 semester
- Fulfills the US Government requirement

AP US Government & Politics

How does our government really work?

AP United States Government & Politics 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.

- Grade Level: 12
- Prerequisite: 3.0 GPA
- Credit: 1 per semester, 1 semester
- Fulfills the US Government requirement

Economics

How does the free market society affect my life, our community, our society, and our world?

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. Students will explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include 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 also participate in a Stock Market simulation throughout the semester in order to understand how the Stock Market works.

- Grade Level: 12
- Prerequisite: None
- Credit: 1 per semester, 1 semester
- Fulfills the Economics requirement

AP Microeconomics

How do the laws of supply & demand, consumer choice, production & costs, and theory of the firm affect the overall state of the economy?

AP Microeconomics is a course based on content established by the College Board. The course gives students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economics system. Topics include: (1) basic economic concepts; (2) the nature and functions of product markets; (3) factor markets; and (4) market failure and the role of government. A comprehensive description of this course can be found on the College Board AP Central Course Description website at <http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>.

- Grade Level: 12
- Prerequisite: 3.0 GPA
- Credit: 1 per semester, 1 semester
- Fulfills the Economics requirement

Psychology

How does the brain control our behavior and social interactions?

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

- Grade Level: 11, 12
- Prerequisite: None
- Credit: 1 per semester, 1 semester

Sociology

Why are cultures so different across the world?

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.

- Grade Level: 11, 12
- Prerequisite: None
- Credit: 1 per semester, 1 semester

AP European History

Students will learn basic historiography & practice working with primary source documents, as well as scholarly works.

AP European History is a course based on content established by the College Board. Topics include: (1) intellectual and cultural history, (2) political and diplomatic history, and (3) social and economic history. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

- Grade Level: 11, 12
- Prerequisite: World History, 3.0 GPA
- Credit: 1 per semester, 2 semesters

WORLD LANGUAGE DEPARTMENT

French I

How do I use another language to communicate? How do I present information, concepts, & ideas in another language in a way that is understood?

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.

- Grade Level: 9
- Prerequisite: C- min in English 8
- Grade Level: 10-12
- Prerequisite: None
- Credit: 1 per semester, 2 semesters

French II

How do I use my understanding of culture to communicate and function appropriately another culture?

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.

- Grade Level: 9
- Prerequisite: C- Min French I
- Credit: 1 per semester, 2 semesters

French III

How do I use my understanding of another language and culture to reinforce and expand my knowledge of other disciplines and vice versa?

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.

- Grade Level: 11-12
- Prerequisite: C- Min French II
- Grade Level: 11-12
- Credit: 1 per semester, 2 semesters

French IV

How do I demonstrate an understanding of the similarities, differences, and interactions across cultures?

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.

- Grade Level: 12
- Prerequisite: C- Min French III
- Grade Level: 12
- Credit: 1 per semester, 2 semesters

Japanese I

How does the experiences you gained in this course enrich your life? What did you learn about the culture, language and history of Japan, and how could you use the knowledge to enrich your life?

Japanese I 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.

- Grade Level: 9
- Prerequisite: C- min in English 8
- Grade Level: 10-12
- Prerequisite: None
- Credit: 1 per semester, 2 semesters

Japanese II

What are the possible careers you could have by using the knowledge and skills you gained from this course?

Japanese II 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.

- Grade Level: 10-12
- Prerequisite: C- Min Japanese I
- Credit: 1 per semester, 2 semesters

Japanese III

How could you behave/react/think differently when you work with people who speak a language other than English?

Japanese III 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.

- Grade Level: 11-12
- Prerequisite: C- Min Japanese II
- Grade Level: 11-12
- Credit: 1 per semester, 2 semesters

Japanese IV

What did you learn about the culture, language, and history of Japan, and how could you use the knowledge to enrich your life?

Japanese IV 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.

- Grade Level: 12
- Prerequisite: C- Min Japanese III
- Grade Level: 12
- Credit: 1 per semester, 2 semesters

Spanish I

Why is it important to learn a second language? What career choices will you have by using the Spanish language in the future?

Spanish I introduces students to effective strategies for beginning Spanish language learning, and to various aspects of Spanish-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief, guided conversations on familiar topics, and write short passages with guidance. The course also emphasizes the development of reading and writing comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products, and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom. Students will be given the opportunity to do multiple projects to enhance their understanding of the Hispanic culture. They may make masks, flowers, cacti, flags, posters, brochures and flyers. Students also do a project over a Spanish-speaking country and create their own dream home using Spanish vocabulary. Students are usually given "cultural breaks" after each chapter to help them understand cultural traditions and history about multiple Spanish speaking countries.

- Grade Level: 9
- Prerequisite: C- min in English 8
- Grade Level: 10-12
- Prerequisite: None
- Credit: 1 per semester, 2 semesters

Spanish II

How does the knowledge gained in this course help you currently and in the future? What career choices will you have by using the Spanish language in the future?

Spanish II builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills. 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. Students will describe the practices, products, and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom. Students will be given the opportunity to do multiple projects to enhance their understanding of the Hispanic culture. They may make masks, flowers, cacti, flags, posters, brochures and flyers. Students are usually given "cultural breaks" after each chapter to help them understand cultural traditions and history about multiple Spanish speaking countries.

- Grade Level: 10-12
- Prerequisite: C- Min Spanish I
- Credit: 1 per semester, 2 semesters

Spanish III

Based on conversational, grammatical, and cultural knowledge from Spanish III, in what ways can I apply this information to assist me in aiding, conversing, or working with Hispanics that live in my community?

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

Additionally, students will continue to develop understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.

Spanish III is an opportunity to engage more spontaneously in the language. Some examples include but are not limited to weekly critiques of Latin Top 40 music videos, reading chapter books in Spanish and visiting local Hispanic restaurants to converse in Spanish with restaurant staff.

- Grade Level: 11-12
- Prerequisite: C- Min Spanish II
- Credit: 1 per semester, 2 semesters

Spanish IV

Based on conversational, grammatical, and cultural knowledge from Spanish IV, in what ways will this course benefit my post high school endeavors to further my Spanish language skills as I pursue a life career?

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

Spanish IV classes participate in the Spanish AR reading program offered by our school library. The classes also study the great Hispanic artists. The students create their own version of a Picasso work as well as visit the Cincinnati Art Museum with a private tour given in Spanish.

- Grade Level: 12
- Prerequisite: C- Min Spanish III
- Credits: 1 per semester, 2 semesters

Computers

Southeastern Career Center

Versailles, IN
812.689.5253

Computer Aided Drafting

During the first year, students will learn to do technical drawings. They will start with free-hand sketching and go through 3D Computer Aided Drawings of parts. They will finish the first year working in animation software.

During the second year, student will choose between the 3 options of Architecture (Drawing and designing houses), Mechanical (Drawing and Designing parts and assemblies), or Game Design and Animation (Using Stop and Cel Animation techniques as a few references). These will be year long courses that will extend and expand the knowledge gained during the first year in the area of the students interest.

Dual Credits from Vincennes University are available.



Computer Repair & Networking

Students in this program start by diving inside the personal computer. From repairing hardware to trouble shooting operating systems, the course covers a wide variety of technical topics. Students get direct experience working with today's networking technology. From home and small business wireless networks to large, enterprise-scale routers, students will get direct experience using a wide variety of hardware down to the bare wire. The course also includes exercises in installing, maintaining, and administering servers.



Digital Media

During the first year, students learn the foundations of building a website, designing and creating images, taking and manipulating photos, creating animation, and designing digital art. The software used is Adobe CS.

During the second year, students continue to grasp a deeper understanding of multi-media while incorporating videography and photography. Students also complete projects from individuals inside and outside the school.

Dual Credits from Ivy Tech are available.



<http://www.sccusa.org/>

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Construction Technology

Building Trades

During the first year, students complete construction models in the shop as well as small projects on site. They are introduced to construction safety, framing, roofing interior and exterior finish, plumbing, concrete and masonry skills.

Second-year students take on large-scale, real-life building projects (homes, garages, pole barns, light commercial, remodels, etc.).

Dual Credits from Vincennes University are available.



Electrical Trades

The first year students are introduced to the safety of electrical work in addition to residential wiring and blueprint reading.

Second-year students are introduced to commercial and industrial wiring. They also learn about electrical theory, national electrical code and NCCER core curriculum (National Center for Construction Education and Research). During the 2nd year students take on large-scale, real-life building projects (homes, garages, pole barns, light commercial, remodels, etc.).

Dual Credits from Ivy Tech are available.



Heavy Equipment

Students will receive training in the operation of backhoes, excavators, bobcats, dump trucks, and forklifts. They are also trained on pipe laying, job estimating and bidding, blue print reading, preventative maintenance (fuel/lubricants), and grade operations.

Students are also prepared to test for their CDLs, for forklift certification, and for OSHA 10-Hour Certification.



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Health Science

Health Science/Medical Technology

During the first year, students are introduced to varied instructional strategies and technologies. They are introduced to medical terminology, Anatomy and Physiology, career exploration; with emphasis on a healthy lifestyle, wellness, health maintenance, and disease prevention. Various skills will be performed in a lab setting.

Health Science II is designed to help students gain further insight into the health care industry by introducing them to a number of health disciplines. They will also be instructed in the knowledge, attitude and skills needed to make the transition from high school to college or work. The instruction will be lecture, demonstration, laboratory, computer and live work. The student will be expected to work individually as well as on group projects. During the second semester, the students will be placed in a non-paid extended lab setting. Drivers license and transportation required.

A one year intensive program, Medical Technology, is available for seniors only.

CPR & First Aid Certification
NIMS 100 & 700a
6 hrs. of Dementia Training
CNA & HHA Certifications
Internships during 2nd yr./2nd sem.

Dual Credits are available from Ivy Tech



Dental Careers

Course content includes dental anatomy, dental charting, oral hygiene, and identification & utilization of dental instruments. Students also learn various laboratory skills during the program.

During the second year students are taught radiology (x-rays). They also focus on dental specialties which include: orthodontics, endodontics, oral surgery and others.

Students can also earn 2-6 weeks clinical rotations in dental offices as close to their home school as possible.

Dual Credits are available from Ivy Tech.



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Hospitality

Cosmetology

Students perform haircuts, hair color, chemical texture services, and spa services (such as facial and scalp massages, waxing, manicures, and pedicures) during their first year in Cosmetology. As they enter their second year they progress and continue to work towards completing their 1500 hours in order to graduate and take the state certification to become a licensed cosmetologist. These students also work in the Career Center's Salon and Spa and service clients.

*Students must have transportation in order to be enrolled.

Dual Credits from Vincennes University are available.



Culinary Arts

Culinary training focuses on lessons that prepare students how to handle food as well as the artwork of food. Topics include cooking and baking techniques, cake decorating, sanitation, nutrition, and much more. As students complete their first year, they continue to Advanced Culinary Arts.

Dual credits from Vincennes University are available.



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Manufacturing & Fabrication

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Precision Machine

First year students will learn about shop safety, measurement, layout and inspection, machine tool processes and operations, tooling identification and uses, metallurgy, heat treatment, shop math, blueprint reading and GD&T, CNC programming and setup fundamentals, & CAD/CAM systems.

During the second year, students will be introduced to advanced measurement, layout, and inspection. They will cover level II machine tool processes and operations, tooling identification and uses. Level II shop math will be applied as well as advanced blueprint reading and GD & T fixture design & build, fasteners & locators, operations sequencing, advanced CNC programming and setup, & CAD/CAM system application.

Dual Credits from Vincennes University are available.



Welding

First year students will learn how to Arc Weld (welding rod), Mig Weld (welding wire), Tig Weld (Tungsten), Oxy Weld (welding torch), and operate a cutting torch. They will get to weld in flat, horizontal, vertical, and overhead positions.

During the second year, students will get to weld aluminum, weld brass, Weld coupons for bend tests, Weld pipe, cut metal with a plasma cutter, work in a fabrication shop welding and repairing anything and everything.

Dual Credits from Vincennes University are available.



<http://www.sccusa.org/>

Public Safety

Southeastern Career Center

Versailles, IN
812.689.5253

Emergency Services

Students experience hands-on training with firefighting, emergency medical services, and technical rescue operations. This one-year program utilizes the entire school building and grounds, the Versailles Fire Station, and the Versailles Fire Department Training Tower. Students receive the following certifications:

NFPA Firefighter I & II Certification
EMS Medical Responder Certification
CPR Certification
Indiana State Mandatory Firefighter Cert.
Haz-Mat Awareness & Operations Certs.
FEMA: NIMS 100, 200, 700, & 800 Certs.

Dual Credits from Vincennes University is available.



Criminal Justice

This one-year program introduces students to procedures in the legal field such as arrest techniques, self defense, search and seizure, crime scene evaluation, weapon identification, weapon safety, marksmanship, and situational shooting (we now have a weapon simulator). Class time is spent learning about the law, the Bill of Rights and the Constitution, notable crimes and crime scene investigations, and drugs and their effect on the body. PT (physical training) is a required part of the Criminal Justice program.

Dual Credits from Vincennes University are available.



<http://www.sccusa.org/>

Transportation

Southeastern Career Center

Versailles, IN

812.689.5253

Auto Collision Repair

During the first year, students will learn how to straighten metal, grind, sand and smooth areas by the use of fillers for concealment of imperfections.

During second year, the students will learn how to replace panels, both bolt on and welded on, computerized paint, mixing and tinting. They also are introduced scientific principles related to adhesives, color-mixing abrasive materials, metallurgy, and composite materials.

ASE Certification and Dual Credits from Vincennes University are available.



Auto Service Tech

Students in this two-year program will develop the basic knowledge in all 8 of the ASE (Automotive Service Excellence) testing areas. These areas of study include: engine repair, electrical & Electronics, automatic transmission (general services), brakes & braking systems, steering & suspension systems, manual drive-trains (general svcs.), heating & A/C (general svcs.), and engine performance.

ASE Certification Preparation and Dual Credits from Vincennes University are available.



Diesel Technology

During the first year, students disassemble and assemble running engines. Measure and diagnose all internal parts for discard or repair. Students will work on a variety of engines and get a basic understanding how diesel powered equipment works. Students are also introduced to basic welding and hydraulic principles hands-on.

During second year, students are introduced to air and hydraulic braking systems. Students will study the repair and diagnose of all parts of the brake systems as well as drive train repair. Students will get to run Cummins trainer engines and do diagnostics of engine fault codes and repair.

Dual Credits from Vincennes University are available.



Motorcycle, ATV, Boat Repair & Services

This one year program introduces students to the role of a motorcycle, ATV, and marine repair service technician. Students receive hands-on experience in multiple areas of training pertaining to motorcycles, ATVs, and watercraft. Students learn about preventative maintenance, engine repair, electrical diagnostics, brakes, carburetion and fuel injection diagnostics, styles, designs, accessories, and much more.



<http://www.sccusa.org/>



East Central High School



INDIANA TRANSFER GENERAL EDUCATION CORE

Transfer General Education Core (TGEC) classes are designed for students who plan to transfer their Ivy Tech credits to a four year college or university. See detailed information at: <http://www.ivytech.edu/core>.

Students must earn at least 15 (of the 30) credit hours from Ivy Tech.

Ivy Tech Community College Courses Fulfilling Indiana Transfer General Education Core Competencies (2013-2014 academic year and later)

	# Credits Needed
<u>Written Communication</u>	<u>3 Credits</u>
ENGL 111 English Composition -- Indiana University W131 @ EC- gr. 12	3
<u>Speaking & Listening</u>	<u>3-6 credits</u>
COMM 101 Fundamentals of Public Speaking (To be taken at Ivy Tech; early release; parents pay tuition; REQUIRED)	3
<u>Quantitative Reasoning</u> (all courses offered @ EC)	<u>3-9 Credits</u>
MATH 135 Finite Math (Adv. Math CC @ EC)	3
MATH 136 College Algebra (Pre Calc @ EC)	3
MATH 137 Trig w/Analytic Geometry (Pre Calc @ EC)	3
MATH 211 Calculus I (AP Calc AB @ EC)	3
<u>Scientific Ways of Knowing</u>	<u>3-10 Credits</u>
BIOL 101 Introduction to Biology (BIO II @ EC)	3
CHEM 101 Introductory Chemistry (CHEM II @ EC)	3
OR Indiana University CHEM 101/121 @ EC	3
<u>Social & Behavioral Ways of Knowing</u>	<u>3-9 Credits</u>
HIST 101 Survey of American History I -- IU H105 @ EC – gr. 11	3
HIST 102 Survey of American History II -- IU H106 @ EC – gr. 11	3
PSYC 101 Introduction to Psychology (To be taken at Ivy Tech; early release; parents pay tuition; REQUIRED)	3
<u>Humanistic & Artistic Ways of Knowing</u>	<u>3-9 Credits</u>
ENGL 206 Introduction to Literature -- Indiana University L202 @ EC- gr. 12	3
FREN 101 French Level I (French III @ EC)	3
FREN 102 French Level II (French III @ EC)	3
FREN 201 French Level III (French IV @ EC)	3
FREN 202 French Level IV (French IV @ EC)	3

TOTAL TRANSFER GENERAL EDUCATION CORE (TGEC):
30 minimum credits (15 from Ivy Tech)

QUANTITATIVE REASONING COURSES

In November 2011, the State Board of Education passed new graduation requirements that affect students in the class of 2016. During the SENIOR year of high school, students must pay particular attention to the need to have Quantitative Reasoning Courses.

- For the Core 40, Academic Honors (AHD), and Technical Honors (THD) diplomas, students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.
- For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.
- A quantitative reasoning course is a high school course that "advances a student's ability to apply mathematics in real world situations and contexts" and that "deepens a student's understanding of high school mathematics standards."
- The Indiana Department of Education will provide an annual review to determine the high school courses that meet these criteria.
- List below is a list of courses in addition to math classes that have been determined to meet the criteria for quantitative reasoning courses for East Central High School for the 2017–2018 school year.

Agriculture

Landscape Management

Business Academy

Intro to Accounting

Advanced Accounting

Computer Science (PLTW)

Computer Science II: Programming

Engineering & Technology

Computer Integrated Manufacturing

PLTW Civil Engineering & Architecture

PLTW Digital Electronics

PLTW Engineering Design & Development

PLTW Principles of Engineering

Science

Biology, Advanced Placement

Chemistry I

Chemistry II

Chemistry, AP

Integrated Chemistry – Physics

Physics I

Social Studies

Economics

Microeconomics, Advanced Placement

Trade & Industrial

Architectural Drafting and Design II

Construction Technology: Electrical II

Construction Trades II

Diesel Services II

Precision Machining I

Precision Machining II

East Central High School
1 Trojan Place, Suite A
St. Leon, IN 47012



Consideration for Enrollment AP / DUAL CREDIT / HONORS CLASSES

As the number of AP, Dual Credit, and Honors courses and the number of students involved continues to grow at East Central High School, it becomes necessary to standardize the process whereby students are admitted to these courses.

As the discussion progresses towards the formulation of a fair, consistent policy, we must consider the following:

- The primary “driver” behind the increased numbers of students enrolling in AP / Dual Credit / Honors courses are the Common Core Standards and academic rigor.
- Because of scheduling time limitations and the sheer number of transcripts that must be analyzed, the agreed upon process must be done early, straightforward, and efficient.
- The level of academic performance for these types of courses is of high standard. The course will not be adapted to you; you will be expected to adapt to it by displaying a positive and contributory attitude. These courses will emphasize rigorous college-level coursework and demanding time obligations. **THIS IS AN ACADEMIC COMMITMENT!**

REQUIREMENTS FOR ENROLLMENT:

1. Overall GPA of 3.0 or higher
2. Any student who qualifies and is admitted to the course must maintain a “B-” each semester in order to remain in the course. Teacher discretion will be applied.
3. Any student with a GPA below a 3.0 will be denied enrollment in AP/Dual Credit/Honors courses since a 3.0 cumulative GPA is required for the Indiana Academic Honors Diploma.
4. An appeal process is available for those students desiring admission but do not have the requirements listed. The appeal process will analyze standardized test scores, academic test scores and grades in previous related courses. In addition, the Appeals Form must be signed by the student and parent so as to document the understanding of the requirements of the program. Final decisions will be made during the summer and reflected on the student’s schedule.
5. Students must maintain a “B-” average each semester to remain in the course.

*East Central High School
1 Trojan Place, Suite A
St. Leon, TN 47012*



AP / DUAL CREDIT / HONORS CLASSES APPEAL FORM

COURSE TITLE: _____

You have registered for an AP / Dual Credit / Honors course at East Central High School. A review of your transcript reveals that you do not currently possess the academic credentials recommended for success in these courses at East Central.

Thus, you may be admitted to the course(s) on an appeals basis with the following understandings:

- ❖ Academic commitment to any AP / Dual Credit / Honors course is a must! All students must be prepared for rigorous college-level coursework and demanding time obligations.
- ❖ AP / Dual Credit / Honors courses are collaborative in nature. A positive and contributory attitude is expected!
- ❖ You must raise your level of academic performance to that expected in this high-level course. The course will be taught to a high standard and will not adapt to you; you will be expected to adapt to it!
- ❖ The AP exam in May will be optional; however, if pursuing an Indiana Academic Honors Diploma, it may be needed. Reviewing your transcript with your counselor is highly recommended.
- ❖ You must maintain a “B-“ average each semester to remain in the course.

I agree to the above conditions and ask to be admitted into my chosen AP / Dual Credit / Honors course for the upcoming school year.

Student Signature

Date

Parent Signature

Date

Teacher Approval

Date

Counselor Signature

Date

Approved _____

Denied _____

Initial _____

ADVANCED PLACEMENT / DUAL CREDIT

AP (AP) and Dual Credit courses are intended to be equivalent to a similar college level course. The course content, rigor, requirements, and structure are established to replicate the requirements of post-secondary education. Since these are college level courses, students should be prepared for the amount of work required in the course. It is important to remember the college grades will be found on the college transcript from the issuing institution.

Through an initiative with Indiana University, East Central High School offers a select number of courses available as dual credit with Indiana University. There are various requirements associated with the Indiana University dual credits and information is listed below. In addition, ECHS offers dual credit classes through IVY Tech College at no cost to students. As with all dual credit courses, it is important to check with the post-secondary institution which enrollment is desired to determine how and if dual credits are transferrable.



<http://acp.indiana.edu/>

Admission Standards

High school seniors and some juniors who have a solid academic preparation and a desire for more advanced work are good candidates for Advance College Project (ACP) classes. The basic premise of ACP is to provide an opportunity for high school students to succeed in college course work.

ACP students, at a minimum:

- Should be on track toward fulfilling the basic academic preparation for admission to a four-year college or university;
- Have a GPA of 2.70 or higher on a 4.00-point scale (as evidenced by a college preparatory curriculum and advanced coursework);
- Have appropriate high school endorsements from teachers and guidance counselors.

Further, acceptance to take an ACP course does not guarantee admission to IU. To achieve regular admission to IU, students must apply through the Office of Admissions at the selected campus.

These are minimum standards for admission to the ACP program. Fulfilling these minimum requirements does not guarantee acceptance to take an ACP course; some high schools may require additional academic criteria for prospective ACP students. Each high school decides, based upon the number of students interested in ACP and scheduling limitations, the number of course sections and when each course will be offered. Check with your school guidance counselor for information about other requirements specific to your high school.

Tuition and Payment

Tuition Rate

Through the Advance College Project (ACP) students can get full college credits at an incredible savings compared to standard on-campus rates.

Subject to the approval of the Indiana University (IU) Board of Trustees, ACP students pay a special off-campus undergraduate resident tuition rate that is lower than the per-credit-hour rate on any of the IU campuses because ACP students do not use campus facilities and services.

ACP students who are eligible for free or reduced lunch will receive a full fee remission.

Payment

Please be aware that once the application is signed by a parent or guardian and is approved by the ACP office, the student is responsible for the tuition associated with the ACP course(s) chosen.

Electronic Billing: If a student has opened an email account at Indiana University, he or she may receive his or her bill through email, and a paper statement may or may not be mailed to the student. The student is responsible for making sure that the bill is paid in full. Click [here](#) for payment options.

Questions regarding your IU bill can be directed to the IU Office of the Bursar at:

IU Bloomington (812) 855-2636
IU East (765) 973-8345

Visit the [Registration Process](#) page for more specific details about payment procedures for each IU campus.

Tuition Schedule for ACP Courses

ACP works to maintain a reasonable fee structure for high school students that is less than the standard rate for students on campus. The ACP fee is \$25.00 per credit hour. The fee statement from the Office of the Bursar includes no additional fees, such as technology fees or health fees. The following fees have been approved by the IU Board of Trustees:

3 credit hour ACP courses (Fee: \$75.00)

L202	Literary Interpretation
H105	American History I
H106	American History II
W131	Composition

5 credit hour ACP courses (Fee: \$125.00)

C101/C121	Chemistry I (includes lab)
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Financial Aid Benefits

ACP Fee Remission for Students Eligible for Free or Reduced Lunch

Effective with the Fall 2006 term, the Advance College Project will offer fee remission (i.e., there will be no charge) to qualified ACP students who meet the eligibility requirements of the National School Lunch Program (NSLP). The student's parent or guardian will need to sign the line on the back of the ACP application (or signature page for IUB schools) that allows to school to share this information with our office. The Bloomington ACP Office will then verify each student's status with the financial office at the local school corporation.

In summary, eligible students must complete *both* of the following.

- ACP Student Application. Students must meet the admission standards for ACP (2.70 GPA on 4.0 Scale). They must submit the complete (including all required signatures) Student Application to the school (teacher or guidance counselor) by the school's deadline.

Students who meet ACP admission standards and who are eligible for free or reduced lunch through the National School Lunch Program (NSLP) will not be charged a tuition fee for their ACP course(s).



For information regarding the IVY Tech Dual College Credit Courses, visit the IVY Tech website @

<https://www.ivytech.edu/dual-credit/>

Tuition

THERE IS NO TUITION CHARGED FOR IVY TECH HIGH SCHOOL-BASED DUAL CREDIT COURSES that are offered @ East Central High School.

Prerequisites

To participate in the Ivy Tech high school-based dual credit program, students need to meet the prerequisites established for each course. They must demonstrate a readiness for college-level work. This is determined by tests such as the PSAT, SAT, ACT, or ACCUPLACER. Courses must also be taken in the proper sequence.

Transcripts

Once enrolled, students have an official transcript with Ivy Tech. From that point forward, grades, regardless of what is earned, are recorded on this transcript. This is important to understand because it could have an impact on a student's ability to be admitted to other colleges and get scholarships or financial aid.

Transferability

When students have successfully completed a high school-based dual credit course on the Indiana Core Transfer Library with a grade of "C" or better, students can transfer those Ivy Tech credits to any other public college or university in Indiana. However, students should check with specific schools to determine exactly how the credits will transfer. It is also possible that dual credits can transfer to private or out-of-state colleges or universities, but again, students need to check with specific schools to be sure. Ultimately, it is up to the receiving institution to determine which credits transfer and how they can be used.

