

Indiana State Approved
Course Titles and Descriptions
2016-2017 School Year

LEARNING TODAY. LEADING TOMORROW.



East Central High School

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St. Leon, IN 47012
(812) 576-4811*

<http://echs.sunmandearborn.k12.in.us>

TABLE OF CONTENTS

AP/ DUAL CREDIT/HONORS COURSES.....	8
AGRICULTURAL EDUCATION	13
BUSINESS ACADEMY	16
ENGINEERING AND TECHNOLOGY EDUCATION.....	20
ENGLISH/LANGUAGE ARTS.....	24
FAMILY AND CONSUMER SCIENCES	28
FINE ARTS (ART, MUSIC)	32
HEALTH AND PHYSICAL EDUCATION	37
MATHEMATICS	39
MULTIDISCIPLINARY	42
SCIENCE	43
SOCIAL STUDIES	46
WORLD LANGUAGES	50
SOUTHEASTERN CAREER CENTER.....	53
DIPLOMA REQUIREMENTS	60
EAST CENTRAL HIGH SCHOOL & IVY TECH -- INDIANA TRANSFER GENERAL EDUCATION CORE.....	61
QUANTITATIVE REASONING COURSE INFORMATION	62



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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.

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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

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)

C105/C125	Chemistry I (includes lab)
C106/C126	Chemistry II (includes lab)

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.

ADMINISTRATIVE & OFFICE MGT (FORMERLY ADV. BUSINESS MGT)

IVY TECH BUSN 105

Advanced Business Managements prepares students to plan, organize, direct, and control the functions and processes of a firm or organization (Trojan Exchange) and to perform business-related functions. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance. Individual experiences will be based upon the student's career and educational goals.

- Recommended Grade: 12
- Required: Principles of Business Mgt.
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective credit

ADVANCED ENGLISH 12 INDIANA UNIVERSITY W131, L202

Offers instruction and practice in the reading, writing, and critical thinking skills required in college. Emphasis is on written assignments that require synthesis, analysis, and argument based on sources. W131 class size is capped at 25 students, regardless of how many are taking the course for college credit; course develops critical skills essential to participation in the interpretive process. Through class discussion and focused writing assignments, the class introduces the premises and motives of literary analysis and critical methods associated with historical, generic, and/or cultural concerns. L202 class size is capped at 30 students.

- Recommended Grade: 12
- Required: 2.7 GPA
- Recommended: Teacher recommendation
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English/Language Arts requirement

ADVANCED ENGLISH: SPEECH IVY TECH COMM 101

Advanced English College Credit will focus on speech and communication fundamentals. Students will deliver focused and coherent speeches that convey outlining, outlining, research, delivery, critical listening, and evaluation, presentational aids, and the use of appropriate technology.

- Recommended Grades: 11, 12
- 1 credit per semester; 1 semester
- Fulfills Elective credit

ADVANCED MATH, COLLEGE CREDIT IVY TECH MATH 135

Course will include surveys solving and graphing linear equations and inequalities, elementary set theory, matrices and their applications, linear programming, and elementary probability. Students will work with solving and graphing linear equations

and inequalities, elementary set theory, matrices and their applications, linear programming, and elementary probability. A standard finite math course.

- Recommended Prerequisite: Algebra II & Geometry w/semester grades of C- or higher
- Credits: 1 credit per semester; 2 semesters
- Counts as a Math Course

AG POWER, STRUCTURE & TECH I, II IVY Tech AGRI 106

A lab intensive course in which students develop an understanding of basic principles of selection, operation, maintenance and management of agricultural equipment in concert while incorporating technology. Topics covered include: safety, electricity, plumbing, concrete, carpentry, metal technology, engines, emerging technologies, leadership development, supervised agricultural experience and career opportunities in the area of agriculture power, structure and technology.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 4 semesters
- Fulfills an Elective requirement

ANIMAL SCIENCE IVY TECH AGRI 103

Course provides students with an opportunity to participate in a variety of activities and lab work including real and simulated animal science experiences and projects. All areas that the students study can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, social and political issues related to the industry and management practices for the care and maintenance of animals while incorporating leadership development, supervised agricultural experience and learning about career opportunities in the area of animal science.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 2 semesters
Fulfills an Elective requirement

ANATOMY & PHYSIOLOGY IVY TECH APHY 101

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

and function of the various components of the healthy body in order to apply this knowledge.

- Recommended Grades: 11, 12
- Required: Biology I, Chemistry I
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective credit

BIOLOGY II

IVY TECH BIOL 101

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.

- Recommended Grades: 10, 11, 12
- Recommended: Biology I
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement

BIOLOGY, AP

Major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and interactions possess complex properties.

- Recommended Grades: 11, 12
- Recommended: Biology I H, Chemistry I
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement
- Qualifies as a quantitative reasoning course

CALCULUS AB, AP

IVY TECH MATH 211

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.

- Recommended Grades: 11, 12
- Recommended: Pre-Calculus
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Math requirement

CALCULUS BC, AP

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; (3) integrals; and (4) polynomial approximations and series. 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.

- *Calculus BC* is designed to qualify the student for placement in a course that is one course beyond that granted for *Calculus AB*.
- Recommended Grade: 11, 12
- Recommended: Pre-Calculus
- Credits: 1 credit course, 1 semester only
- Fulfills a Math requirement

CHEMISTRY II

IVY TECH CHEM 101

Chemistry II is an extended laboratory, field, and literature investigations-based course. Students examine the chemical reactions of matter in living and nonliving materials. Students use the methods of scientific inquiry to answer chemical questions and solve problems concerning personal needs and community issues related to chemistry.

- Recommended Grade: 11, 12
- Recommended: Chemistry I, Algebra II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement

CHEMISTRY, ADV SCIENCE, CC

INDIANA UNIVERSITY CHEM 105 & 125

Content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics. Basic principles including stoichiometry, thermochemistry, atomic and molecular structure, gases, solutions, and selected topics in descriptive chemistry are covered. Introduction to laboratory experimentation with emphasis on the collection and use of experimental data, some properties of solutions, stoichiometry, thermochemistry, and synthesis are also introduced.

- Recommended Grade: 11, 12
- Recommended: Chemistry I (with a grade of "B" or higher), Algebra II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement

CHEMISTRY, ADV SCIENCE, CC

INDIANA UNIVERSITY CHEM 106 & 126

Content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics. Chemical equilibria, with emphasis on acids, bases, solubility, and electrochemistry, elementary thermodynamics, chemical kinetics, and selected topics in descriptive chemistry are introduced. A continuation of C125 with emphasis on equilibria, qualitative analysis, acids and bases, oxidation-reduction including electrochemistry, chemical kinetics, and synthesis is also included.

- Recommended Grade: 12
- Recommended: IU Chemistry 105/125, Algebra II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement

EDUCATION PROFESSIONS I

IVY TECH EDUC 101

Education Professions prepares students for employment in education and related careers and provides the foundation for study in higher education. The course 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. A standards-based plan guides the field experiences.

- Recommended Grade: 11, 12
- Recommended: Child Development, Adv. Child Development, Nutrition and Wellness, and Interpersonal Relationships
- Credits: 3 credits per semester, 2 semester
- Fulfills an Elective requirement

ENGLISH LANGUAGE & COMP, AP

Course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both writing and reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions & the resources of language contribute to effectiveness in writing.

- Recommended Grade: 11, 12
- Recommended: Teacher recommendation
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English/Language Arts requirement

ENGLISH LIT & COMP, AP

Course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to

provide both meaning and pleasure for their readers. Students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Course includes intensive study of representative works from various genres & periods, concentrating on works of recognized literary merit.

- Recommended Grade: 10, 11, 12
- Recommended: Teacher recommendation
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English/Language Arts requirement

EUROPEAN HISTORY, AP

Topics include intellectual and cultural history; political & diplomatic history; and social & economic history. The goals of AP European History are to develop an understanding of some of the principal themes in modern European history, an ability to analyze historical evidence & historical interpretation, & an ability to express historical understanding in writing.

- Recommended Grade: 11, 12
- Recommended: World History
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

FRENCH III

IVY TECH FREN 101 & FREN 102

French III 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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: French I and II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

FRENCH IV

IVY TECH FREN 103 & FREN 104

French 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 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.

- Recommended Grade: 10-12
- Recommended: French I, II and III
- Credits: 1 credit per semester; 2 semesters
Fulfills a World Language requirement

U S GOVERNMENT & POLITICS, AP

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.

- Recommended Grade: 12
- Credits: 1 credit per semester; 1 semester
- Fulfills the US Government requirement

HORTICULTURE SCIENCE

IVY TECH AGR 116

Course addresses the biology and technology involved in the production, processing, and marketing of plants and its products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest and pest management. Students participate in activities including extensive laboratory work usually in a school greenhouse, leadership development, supervised agricultural experience and learning about career opportunities in the area of horticulture science.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

INTERACTIVE MEDIA: INFO TECH

IVY TECH CINS 101

Course prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace".

- Recommended Grade: 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

LANDSCAPE MANAGEMENT I

IVY Tech LAND 103

Course introduces students to the procedures used in the planning and design of landscape using current technology practices, principles and procedures of landscape construction, determination of maintenance schedules, communications and management skills necessary in landscape operations and the care and use of equipment utilized by landscapers.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 2 semesters
- Qualifies as a quantitative reasoning course
- Fulfills an Elective requirement

MICROECONOMICS, AP

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: basic economic concepts, the nature and functions of product markets, factor markets, and market failure and the role of government.

- Recommended Grade: 12
- Credits: 1 credit per semester; 1 semester
- Fulfills the Economics requirement
- Qualifies as a quantitative reasoning course

NATURAL RESOURCES

IVY TECH AGRI 115

Course provides hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife and safety.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

PLTW CIVIL ENGINEERING & ARCH

IVY TECH DESN 105

Course introduces students to application and design principles used with mathematical and scientific knowledge. Computer software programs allow students opportunities to design, simulate, and evaluate construction of buildings and communities. Emphasis is placed on related transportation, water resource, and environmental issues.

- Recommended Grade: 11, 12
- Recommended: PLTW IED, POE
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement
- Qualifies as a Quantitative Reasoning course

PLTW DIGITAL ELECTRONICS

IVY TECH ADMF 113

Course encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Activities provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry software will be used to develop and evaluate the product design.

- Recommended Grade: 11, 12
- Recommended: PLTW IED, POE
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement
- Qualifies as a Quantitative Reasoning course

PLTW INTRO TO ENGINEERING

IVY TECH DESN 102

An introductory course which develops student problem solving skills using the design process. Students document progress of solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Algebra I
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

PLTW PRINCIPLES OF ENGINEERING

IVY TECH ADMF 115

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. Activities are organized to allow students to work in teams and use modern technological processes,

computers, CAD software, and production systems in development and presenting solutions.

- Recommended Grade: 9, 10, 11
- Recommended: PLTW IED
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement
- Qualifies as a Quantitative Reasoning course

PRE-CALCULUS

IVY TECH MATH 136 & 137

Provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus is made up of five strands: Polar Coordinates and Complex Numbers; Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will 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. The Process Standards for Mathematics apply throughout each course and prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended: Algebra II, Geometry
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Math requirement

PRINCIPLES OF BUSINESS MGT

IVY TECH BUSN 101

Course focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of goals. The management of human & financial resources is emphasized. Students will be in charge of managing the school store. Students are encouraged to join BPA.

- Recommended Grade: 11, 12
- Recommended: 3 other business courses
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

STATISTICS, AP IVY TECH MATH 200

Course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: exploring data: describing patterns and departures from patterns; sampling and experimentation: planning and conducting a study; anticipating patterns: exploring random phenomena using probability and simulation; and statistical inference. The use of graphing calculators and computer software is required.

- Recommended Grade: 11, 12
- Recommended: Algebra II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Mathematics requirement

UNITED STATES HISTORY INDIANA UNIVERSITY H105 & H106

Students will study the evolution of American society: political, economic, social structure; racial and ethnic groups; sex roles; Indian, inter-American, and world diplomacy of the United States; evolution of ideology, war, territorial expansion, industrialization, urbanization, international events and their impact on American history. Emphasis is given to the interaction of key events, people, and political, economic, social, and cultural influences in the national developments from the late 19th century through the present.

- Recommended Grade: 11
- Credits: 1 credit per semester; 2 semesters
- Fulfills the US History requirement

WORLD HISTORY, AP

The course will have a chronological frame from the periods 8000 B.C.E. to the present. AP World History focuses on five overarching themes: Interaction between Humans and the Environment, Development and Interaction of Cultures, State-Building, Expansion, and Conflict, Creation, Expansion, and Interaction of Economic Systems, Development and Transformation of Social Structures.

- Recommended Grade Level: 10
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Social Studies requirement

AGRICULTURAL EDUCATION

FFA

The 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. As an integral part of the instructional program, 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 science and agricultural business total 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.

AG POWER, STRUCTURE & TECH I, II

IVY Tech AGRI 106

A lab intensive course in which students develop an understanding of basic principles of selection, operation, maintenance and management of agricultural equipment in concert while incorporating technology. Topics covered include: safety, electricity, plumbing, concrete, carpentry, metal technology, engines, emerging technologies, leadership development, supervised agricultural experience and career opportunities in the area of agriculture power, structure and technology.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 4 semesters
- Fulfills an Elective requirement

ANIMAL SCIENCE

IVY TECH AGRI 103

Course provides students with an opportunity to participate in a variety of activities and lab work including real and simulated animal science experiences and projects. All areas that the students study can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, social and political issues related to the industry and management practices for the care and maintenance of animals while incorporating leadership development, supervised

agricultural experience and learning about career opportunities in the area of animal science.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

HORTICULTURE SCIENCE

IVY TECH AGR 116

Course addresses the biology and technology involved in the production, processing and marketing of plants and its products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest and pest management. Students participate in a variety of activities to include extensive lab work usually in a school greenhouse, leadership development, supervised agricultural experience and career opportunities in horticulture science.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

INTRODUCTION TO AGRICULTURE, FOOD AND NATURAL RESOURCES

Course is recommended as a prerequisite to and a foundation for all other agricultural classes. The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics to be covered include: animal science, plant and soil science, food science, horticultural science, agricultural business management, landscape management, natural resources, agriculture power, structure and technology, leadership development, supervised agricultural experience and career opportunities.

- Recommended Grade: 9
- Recommended Prerequisites: None
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

LANDSCAPE MANAGEMENT I

IVY Tech LAND 103

Course introduces students to the procedures used in the planning and design of landscape using current technology practices, principles and procedures of landscape construction, determination of maintenance schedules, communications and management skills necessary in landscape operations and the care and use of equipment utilized by landscapers.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 2 semesters
- Qualifies as a quantitative reasoning course
- Fulfills an Elective requirement

LANDSCAPE MANAGEMENT II

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

NATURAL RESOURCES

IVY TECH AGRI 115

Course encourages students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife and safety.

- Recommended Grade: 9, 10, 11, 12
- Recommended Prerequisites: Intro to Ag
- Credits: 1 credit per semester; 2 semesters
- Course will be offered 2016-2017 school year and offered on an every other year basis
- Fulfills an Elective requirement

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.

- Recommended Grade: 10, 11, 12
- Recommended: Intro to Ag
- Credits: 1 credit per semester, 6 semesters max
- Fulfills an Elective requirement





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



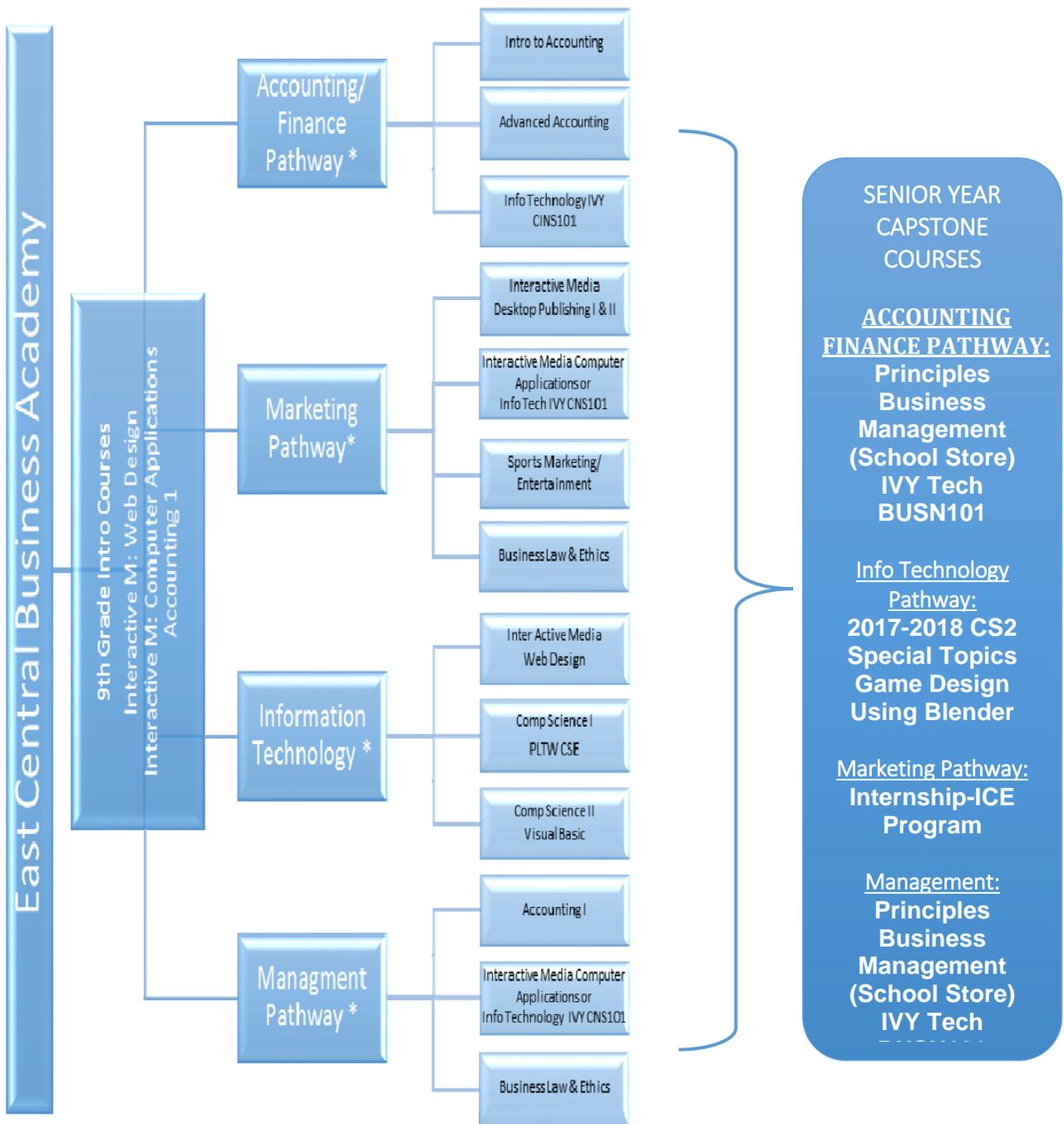
BUSINESS PROFESSIONALS OF AMERICA

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, Digital Citizenship, and Preparing for College & Careers

ADMINISTRATIVE & OFFICE MGT (FORMERLY ADV. BUSINESS MGT)

IVY TECH BUSN 105

Course prepares students to plan, organize, direct, and control the functions and processes of the Trojan Exchange and to perform business-related functions. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance.

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

ADVANCED ACCOUNTING

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in Intro to Accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. Course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.

- Recommended Grade: 10, 11, 12
- Required: Introduction to Accounting
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a Quantitative Reasoning course
- Course will be offered 2016-2017 school year and offered on an every other year basis.
- Fulfills an Elective requirement

BUSINESS LAW & ETHICS

Topics covered include: basics of the judicial system, contract, personal, employment and property law. Application of legal principles and ethical decision-making techniques are presented through problem-solving methods and situation analyses.

- Recommended Grade: 11, 12
- Credits: 1 credit per semester; 2 semesters
- This course will be offered 2015-2016 school year and offered on an every other year basis.
- Fulfills an Elective requirement

COMPUTER SCIENCE I-PLTW COMPUTER SCIENCE & ENGINEERING

Computer Science I is year-long project- and problem-based course, with students working in teams to develop computational thinking and solve open-ended, 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.

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

COMPUTER SCIENCE II: PROGRAMMING

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. An emphasis on logical program design using a modular approach involving task oriented program functions. Required prerequisite is Computer Science I.

- Recommended Grade Level: Grade 11-12
- Required Prerequisites: Computer Science I
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

INTERACTIVE MEDIA:

DESKTOP PUBLISHING I, II (2 CREDITS)
COMPUTER APPLICATIONS (1 CREDIT)
INFORMATION TECH (2 CREDITS)

IVY TECH CINS 101

WEB DESIGN (1 CREDIT)

Course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace".

Desktop Publishing I, II introduces students to the computer's use in visual communication. The focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive, and page layout software. The course includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, produce vector illustrations, graphics and logos, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design products

that impart information and ideas. Advanced instruction might also include experiences in silk screening and air brush techniques as well as activities in designing product packaging and commercial displays or exhibits.

Computer Applications introduces students to the 2013 Microsoft Office Suite. During this one-semester course, students will be taught computer driven lessons using Microsoft Word, Excel, PowerPoint, and Access. Students develop knowledge of word processing, spreadsheets, database, presentation, and communications software. These software programs prepare students to use computer technology while creating presentations for higher level assignments in grades 9-12 at East Central High and in college.

Information Technology introduces students to the physical components and operation of computers. Technology is used to build students decision-making and problem-solving skills. Students should be given the opportunity to seek an industry-recognized digital literacy certification. THIS COURSE WILL BE OFFERED 2015-2016 SCHOOL YEAR AND OFFERED ON AN EVERY OTHER YEAR BASIS

Web Design is a course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing.

Instructional strategies should include peer teaching, collaborative instruction, project-based learning activates and school community projects.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester, max 6 credits
- Fulfills an Elective requirement

INTRO 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.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a Quantitative Reasoning course for the General diploma only
- Fulfills an Elective requirement

PREP FOR COLLEGE AND CAREERS

Preparing for College and Careers focuses on the impact of today's choices on tomorrow's possibilities. Topics to be addressed include 21st century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios.

- Recommended 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

PRINCIPLES OF BUSINESS MGT

IVY TECH BUSN 101

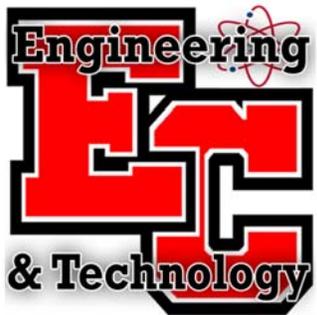
Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized. Students will be in charge of managing the school store. Students are recommended to join BPA.

- Recommended Grade: 12
- Recommended: 3 other business courses
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

PRINCIPLES OF MARKETING

Emphasis is placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising / promotion / selling, distribution, financing, marketing-information management, pricing, and product / service management. Special emphasis will be placed on the Sports and Entertainment industry.

- Recommended Grade: 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement



Engineering & Technology Course Sequence

G R A D E	9	CONST SYSTEMS	TECH SYSTEMS	TRANS SYSTEMS	COMPUTERS IN DESIGN (AUTOCAD)	IED (PLTW)
	10					
	11					
	12					
	10	INTRO TO CONST	INTRO TO MFG	INTRO TO TRANS	INTRO TO DESIGN PROCESS	POE (PLTW)
11						
12						
11				CEA (PLTW)	DE (PLTW)	
12						
12					EDD (PLTW)	



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

COMPUTERS IN DESIGN & PRODUCTION

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. Course content addresses major technological content related to topics such as: Architectural drawing and print design, design documentation using CAD systems; assignments involving the interface of CAD, CNC, CAM, and CIM technologies; computer simulation of products and systems; publishing of various media; animation and related multimedia applications; 3-D modeling of products or structures; digital creation and editing of graphics and audio files; control technologies; and automation in the modern workplace.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

CONSTRUCTION SYSTEMS

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. In this course, your student will learn how to measure with various forms of measurement devices. The students will learn the safe operating procedures for hand and power tools used in the construction trades. The class will consist of learning safety, tools and machines, measurement, and proper procedures in producing wood projects. There will be an emphasis on residential construction (house building) and civil construction (bridge building), but the class will also touch on commercial and industrial construction forms and operations.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

INTRODUCTION TO CONSTRUCTION

Students will be introduced to the history and traditions of construction trades and will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. 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 in accordance with space and technologies. 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 investigate topics related to purchasing and maintenance of structures, special purpose facilities, green construction and construction careers.

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester, 2 semester
- Fulfills an Elective requirement

INTRO TO DESIGN PROCESSES

Students use the design process to analyze research, develop ideas, and produce products solutions. This process gives a framework through which they design, manufacture tests present their ideas. Students will demonstrate and utilize design principles and elements for visual presentation. Designing aspects will also cover aesthetics, ergonomics, the environment, safety, and production. The design process is a core-learning tool for many courses enabling the student to solve problems in a systematic, logical and creative manner. Students develop a good understanding of the way the process helps them think creatively and developing aesthetic ideas. The design process encourages the students to engage in higher level thinking to create solutions for many types of problems.

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

INTRODUCTION TO MANUFACTURING

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. 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. The student will complete projects and activities to represent each 1 of the 6 types of material processes. At the end of the course, students will create a furniture project of their choosing.

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

INTRO TO TRANSPORTATION

Students will gain and apply knowledge and skills in the safe application, design production, and assessment of products, services, and systems as it relates to the transportation industries. Content of this course includes the study of how transportation impacts individuals, society, and the environment. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant transportation related activities, problems, and settings.

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

PLTW CIVIL ENGINEERING & ARCHITECTURE

IVY TECH DESN 105

This course 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. Only those schools having a signed agreement with the national Project Lead the Way organization can use this course title.

- Recommended Grade: 10, 11, 12
- Recommended: PLTW IED and POE
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

PLTW DIGITAL ELECTRONICS

IVY TECH ADMF 113

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: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

PLTW ENGINEERING DESIGN AND 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.

- Recommended Grade: 12
- Recommended: PLTW IED, POE, one specialty course
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a Quantitative Reasoning course
- Fulfills an Elective requirement

PLTW INTRODUCTION TO ENGINEERING DESIGN

IVY TECH DESN 102

Introduction to Engineering Design develops student problem solving skills using the design process. Students document progress of solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts. They develop hand sketches using 2D and 3D drawing techniques. Computer Aided Design (CAD).

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

PLTW PRINCIPLES OF ENGINEERING

IVY TECH ADMF 115

Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems.

- Recommended Grade: 9, 10, 11, 12
- Recommended: PLTW IED
- Credits: 1 credit per semester; 2 semesters
- Qualifies as a quantitative reasoning course
- Fulfills an Elective requirement

TECHNOLOGY SYSTEMS

Technology Systems focuses on 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 introduced to, and engaged in, investigating career opportunities within a career cluster of their choice. In this class, students will participate in projects and activities where they will learn about all the sections involving technology systems. The sections being focused upon are construction, manufacturing, transportation, communication, engineering, and problem solving. The class will involve measuring and related math.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

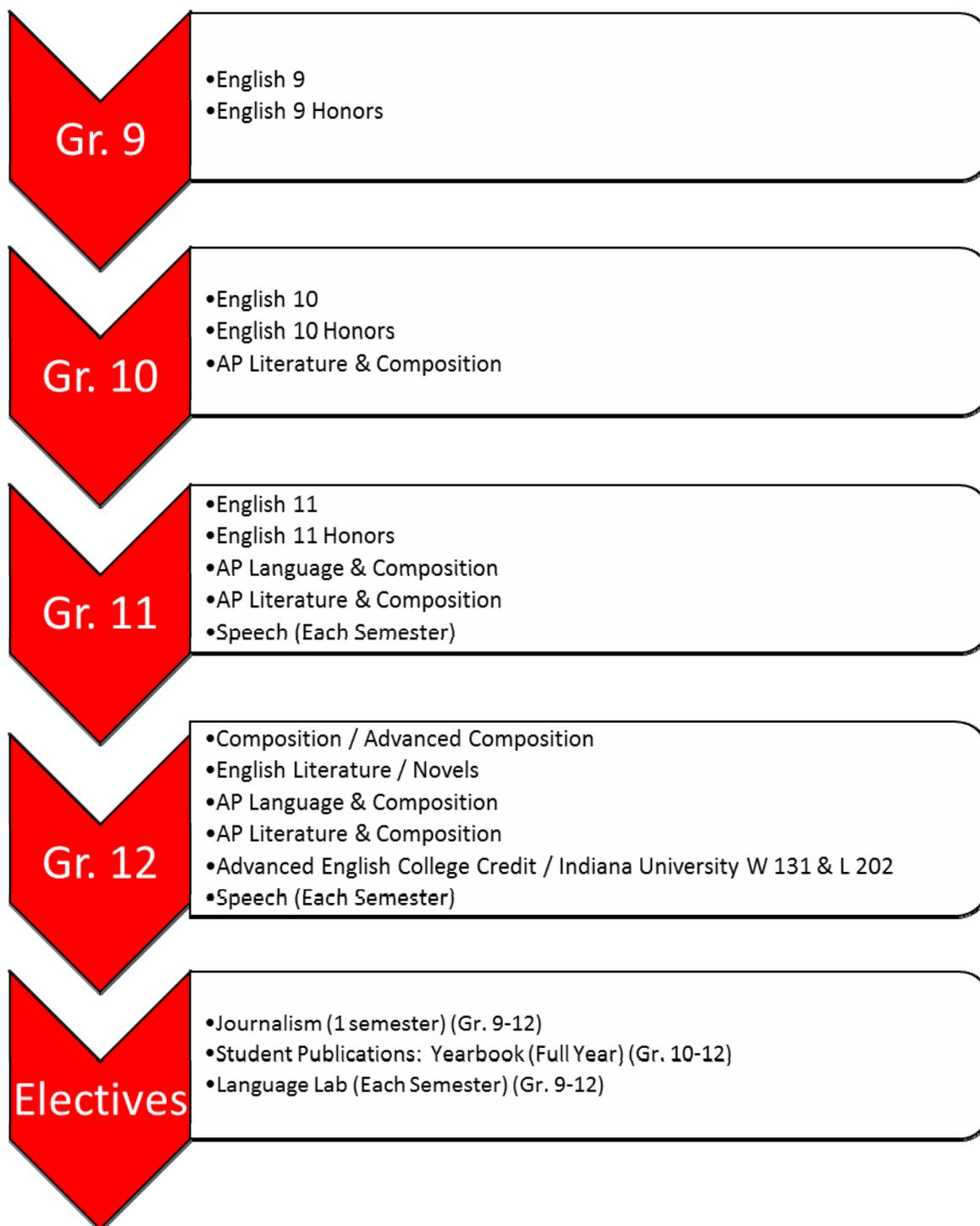
TRANSPORTATION SYSTEMS

Transportation Systems explores 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. This class will be broken into sections with the use of projects and activities. The students will learn about land, water, air, and space transportation methods. Other sections to be included are energy and power and mechanical systems. The students will participate in an activity for each of these sections.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement



English Courses by Grade



ADVANCED COMPOSITION

Advanced Composition is a study and application of the rhetorical writing strategies of exposition and persuasion. Students write expository critiques of nonfiction selections, literary criticism of fiction selections, persuasive compositions, and research reports. **ADVANCED COMPOSITION PROJECT:** Students write job applications, resumes, and other informational documents that may include the development of flyers, posters, brochures, program agendas, or reports incorporating visual information in the form of pictures, graphs, or tables.

- Recommended Grade: 12
- Recommended: English 9, 10, 11
- Credits: 1 credit
- Fulfills an English/Language Arts requirement
- **MUST** combine course with a literature course

ADVANCED ENGLISH 12 INDIANA UNIVERSITY W131, L202

IU ENGLISH - ENG W131 Reading, Writing, and Inquiry (3 cr.)

Course offers instruction and practice in the reading, writing, and critical thinking skills required in college. Emphasis is on written assignments that require synthesis, analysis, and argument based on sources. W131 class size is capped at 25.

IU ENGLISH - ENG L202 Literary Interpretation (3 cr.)

Successful completion of the English composition course is required. Develops critical skills essential to participation in the interpretive process. Through class discussion and focused writing assignments, introduces the premises and motives of literary analysis and critical methods associated with historical, generic, and/or cultural concerns. L202 class size is capped at 30.

- Recommended Grade: 12
- Recommended: teacher recommendation
- Credits: 1 credit per semester
- Fulfills an English/Language Arts requirement

ADVANCED ENGLISH COLLEGE CREDIT IVY TECH COMM 101

Course will focus on speech and communication fundamentals. Students will deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Course will introduce fundamental concepts and skills for effective public speaking, including audience analysis, outlining, outlining, research, delivery, critical listening, and evaluation, presentational aids, and the use of appropriate technology.

- Recommended Grade Level: Grade 11, 12
- Recommended Prerequisites: English 9, 10
- Credits: 1 credit
- Fulfills an Elective requirement

COMPOSITION

Composition is a study and application of the rhetorical 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.

- Recommended Grade: 12
- Recommended: English 9, 10, 11
- Credits: 1 credit
- Fulfills an English/Language Arts requirement
- **MUST** combine course with a literature course

ENGLISH 9, ENGLISH 9 HONORS

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

- Recommended Grade: 9
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English/Language Arts requirement

ENGLISH 10, ENGLISH 10 HONORS

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

- Recommended Grade: 10
- Recommended: English 9
- Credits: 1 credit per semester; 2 semester
- Fulfills an English/Language Arts requirement

ENGLISH 11, ENGLISH 11 HONORS

English 11 is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes in a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

- Recommended Grade: 11
- Recommended: English 9, 10
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English Language Arts requirement

ENGLISH LANGUAGE & COMP, AP

English Language and Composition, AP engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both writing and reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing.

- Recommended Grade: 11, 12
- Recommended: English 9, 10, 11
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English/Language Arts requirement
- English 11 will be incorporated

ENGLISH LITERATURE

English Literature is a study of representative works of the English-speaking authors associated with the Commonwealth of Nations, including England, Scotland, Ireland, Wales, Canada, Newfoundland, Australia, New Zealand, India, South Africa, Kenya, Botswana, and others. 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 the countries in which they were written.

- Recommended Grade: 12
- Recommended: English 9, 10, 11
- Credits: 1 credit
- Fulfills an English/Language Arts requirement
- **MUST** combine course with a composition course

ENGLISH LIT & COMP, AP

English Literature and Composition, AP engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit.

- Recommended Grade: 10, 11, 12
- Recommended: English 9, 10, 11
- Credits: 1 credit per semester; 2 semesters
- Fulfills an English/Language Arts requirement

JOURNALISM

Journalism 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.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit
- Fulfills an Elective requirement

LANGUAGE LAB

Language Lab supplemental course that provides students with individualized or small group instruction designed to support success in completing language arts course work aligned with *Indiana's Academic Standards for English/Language Arts* in Grades 9-12.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 8 credits max
- Fulfills an Elective requirement

NOVELS

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

- Recommended Grade: 12
- Recommended: English 9, 10, 11
- Credits: 1 credit
- Fulfills an English/Language Arts requirement
- **MUST** combine course w/composition course

SPEECH

Speech 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. Students use the same Standard English conventions for oral speech that they use in writing.

- Recommended Grade: 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an English/Language Arts requirement

STUDENT PUBLICATIONS: YEARBOOK

Student Publications is the continuation of the study of journalism. Students demonstrate their ability to do journalistic writing and design for high school publications, specifically the school yearbook. 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. Members of the yearbook staff are entrusted to plan the yearbook from cover to cover. It is a fast paced, deadline oriented team of hard workers. Truth and trust are key elements of the mission. By selecting this class, students are accepting a trusted role in recording the school's history, becoming a member of a team and a co-curricular activity that will REQUIRE after school hours, time during the summer or other breaks, and Saturdays in order to make deadlines.

- Recommended Grade: 10, 11, 12
- Recommended: Journalism, English 9
- Credits: 1 credit per semester; 6 semester max
- Fulfills the Fine Arts requirement for the Core 40 with Academic Honors
- Fulfills an Elective requirement for all other diplomas
- **Course will REQUIRE after school hours, time during breaks, and possible Saturday workdays.**

FAMILY AND CONSUMER SCIENCES

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.

ADULT ROLES AND RESPONSIBILITIES

Adult Roles and Responsibilities is recommended for all students as life foundations and academic enrichment, and as a career sequence course for students with interest in family and community services, personal and family finance, and similar areas. These courses build knowledge, skills, attitudes, and behaviors that students will need as they complete high school and prepare to take the next steps toward adulthood in today's society. The course includes the study of interpersonal standards, lifespan roles and responsibilities, individual and family resource management, and financial responsibility and resources. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into

the study of adult roles and responsibilities. Direct, concrete mathematics and language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides the foundation for continuing and postsecondary education in all career areas related to individual and family life.

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

ADVANCED CHILD DEVELOPMENT

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

- Recommended Grade: 10, 11, 12
- Recommended: Child Development
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

ADVANCED NUTRITION & WELLNESS

Advanced Nutrition and Wellness is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. *Advanced Nutrition and Wellness* is an especially appropriate course for students interested in careers in the medical field, athletic training and dietetics. This course builds on the foundation established in *Nutrition and Wellness*, which is a required prerequisite. This is a project-based course; utilizing higher-order thinking,

communication, leadership and management processes. Topics include extensive study of major nutrients, nutritional standards across the lifespan, influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills; attention will be given to nutrition, food safety and sanitation.

This course is the second in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

- Recommended Grade: 10, 11, 12
- Recommended: Nutrition and Wellness
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

CHILD DEVELOPMENT

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

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

CULINARY ARTS & HOSPITALITY MANAGEMENT I, II

Culinary Arts and Hospitality Management prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications;

principles of purchasing, storage, preparation, and service of food and food products; ; apply basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. 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 are strongly encouraged. A standards-based plan guides the students' laboratory experiences.

- Recommended Grade: 11,12
- Recommended: Nutrition and Wellness, Introduction to Culinary Arts & Hospitality
- Credits: 2 credits per semester; 4 semesters
- Fulfills an Elective requirement

EDUCATION PROFESSIONS I

IVY TECH EDUC 101

Education Professions I provides the foundation for employment in education and related careers and prepares students for study in higher education. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom settings and career portfolios are required components. A standards-based plan guides the students' field experiences.

- Recommended Grade: 11, 12
- Recommended: Nutrition & Wellness, Child Development, Adv. Child Development
- Credits: 3 credits per semester, 2 semesters
- Fulfills an Elective requirement

EDUCATION PROFESSIONS II

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

- Recommended Grade: 12
- Recommended: Education Professions I
- Credits: 3 credits per semester; 2 semesters
- Fulfills an Elective requirement

HUMAN & SOCIAL SERVICES I

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

- Recommended Grade: 10, 11, 12
- Recommended: Nutrition & Wellness, Interpersonal Relationships, Child Development
- Credits: 1 credit per semester, 6 semesters maximum
- Fulfills an Elective requirement

INTERPERSONAL RELATIONSHIPS

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

foundation for continuing and post-secondary education for all career areas that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, and the general public.

- Recommended Grade: 11, 12
- Credits: 1 credit per semester, 1 semester
- Fulfills an Elective requirement

INTRO TO CULINARY ARTS & HOSPITALITY I, II

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. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended. Topics include basic culinary skills in the foodservice industry, safety and sanitation, nutrition, customer relations and career investigation. Students are able to explore this industry and examine their own career goals in light of their findings. Laboratory experiences that emphasize industry practices and develop basic skills are required components of this course.

- Recommended Grade: 10, 11, 12
- Recommended: Nutrition and Wellness, Advanced Nutrition and Wellness
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

INTRO TO FASHION AND TEXTILES I, II

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

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester, 2 semesters
- Fulfills an Elective requirement

NUTRITION AND WELLNESS

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

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester, 1 semester
- Fulfills an Elective requirement



FINE ARTS

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.

Music Course Titles

ADVANCED CHORUS

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
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors Diploma
- Fulfills an Elective requirement

ADVANCED 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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intermediate Concert Band
- Credits: 1 credit per semester; multiple semesters permitted
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

APPLIED MUSIC/THEORY & COMP

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.

- Recommended Grade: 11, 12
- Recommended: Member of band or choir for 2 years OR approval of instructor
- Credits: 1 credit per semester; 2 semesters
- Counts as an Elective requirement
- **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.

- Recommended Grade: 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

INTERMEDIATE CHORUS

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: 9, 10, 11, 12
- Required: GIRLS ONLY
- Credits: 1 credit per semester; multiple semesters permitted
- Fulfills an Elective requirement

INTERMEDIATE CONCERT 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.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; multiple semesters permitted
- Fulfills an Elective requirement

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.

- Recommended Grade: 10, 11, or 12
- Credits: 1 credit per semester; multiple semesters permitted
- Fulfills an Elective requirement

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.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement
- **Course will be offered 2nd semester; students must be approved by instructor**

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 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

VOCAL JAZZ

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.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; multiple semesters permitted
- Fulfills an Elective requirement

Visual Arts Course Titles

CERAMICS I, II

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

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art, Intro 3-D Art
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

DIGITAL DESIGN: PHOTOSHOP I, PHOTOSHOP II

Digital Design engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students incorporate desktop publishing, multi-media, digitized imagery, computer animation, and web design. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art

- Credits: 1 credit per semester; 2 semesters
- PHOTOSHOP I: for those interested in producing digital art, such as poster designs, logo designs and photo retouches through an introduction to the Adobe Photoshop graphics program. The instruction is sequential and provides students the opportunity to develop challenging and thought-provoking studio experiences within the structure of an organized curriculum. Students will learn to become skillful and confident in their ability to work digitally; to creatively solve visual problems; to appreciate the value of their art and the art of others; better ways to communicate about art and through art; to exhibit knowledge of the historical and cultural connections in the arts and of art criticism and aesthetics; to integrate their art into other academic subjects; to reflect upon and refine their work; to identify art-related careers; and to utilize art museums, galleries, studios, and community resources. Students will have a portfolio of art work.
- PHOTOSHOP II: engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students will learn more advanced applications of the software. In addition to Photoshop, Illustrator, a vector graphics program will be introduced. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.
- Fulfills an Elective requirement

DRAWING

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

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art

- Credits: 1 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

INTRO TO 2-DIMENSIONAL ART

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

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

INTRO TO 3-DIMENSIONAL ART

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

- Recommended Grade: 9, 10, 11, 12
- Recommended: Intro to 2-D Art
- Credits: 1 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

JEWELRY

Jewelry is a course based on the Indiana Academic Standards for Visual Art. Students in Jewelry engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of jewelry design and fabrication techniques including, sawing, piercing, filing, and soldering. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments

about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art, Intro to 3-D Art
- Credits: 1 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

PAINTING I, II

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

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art
- Credits: 1 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

PHOTOGRAPHY I (DARKROOM PHOTOGRAPHY)

Photography I engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the 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.

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art
- Credits: 1 credit per semester; 1 semester

- **STUDENTS MUST PROVIDE THEIR OWN 35mm CAMERA FOR THIS COURSE**
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

PHOTOGRAPHY II (DIGITAL PHOTOGRAPHY)

Photography II engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and 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 judgments 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.

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art
- Credits: 1 credit per semester; 1 semester
- **STUDENTS MUST PROVIDE THEIR OWN DIGITAL CAMERA FOR THIS COURSE**

- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective Requirement

SCULPTURE

Sculpture engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials such as plaster, clay, metal, paper, wax, and plastic, students create portfolio quality works. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Recommended: Intro to 2-D Art, Intro to 3-D Art
- Credits: 1 credit per semester; 1 semester
- Fulfills requirement for 1 of 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Fulfills an Elective requirement

HEALTH & WELLNESS EDUCATION

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

- Recommended Grade: 10
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

PHYSICAL EDUCATION I

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

- Recommended Grade: 9
- Credits: 1 credit per semester; 1 semester
- **PE UNIFORMS MUST BE WORN – NO EXCEPTIONS!**
- **NO JEWELRY OF ANY KIND PERMITTED**
- Fulfills part of the Physical Education requirement
- 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 in activity

PHYSICAL EDUCATION II

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in four of the following that were not in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade: 9
- Recommended: Physical Education I
- Credits: 1 credit per semester; 1 semester
- **PE UNIFORMS MUST BE WORN – NO EXCEPTIONS!**
- **NO JEWELRY OF ANY KIND PERMITTED**
- Fulfills part of the Physical Education requirement
- 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 in activity

ELECTIVE PHYSICAL EDUCATION: STRENGTH TRAINING & LIFETIME FITNESS

Advanced Fitness Education identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate

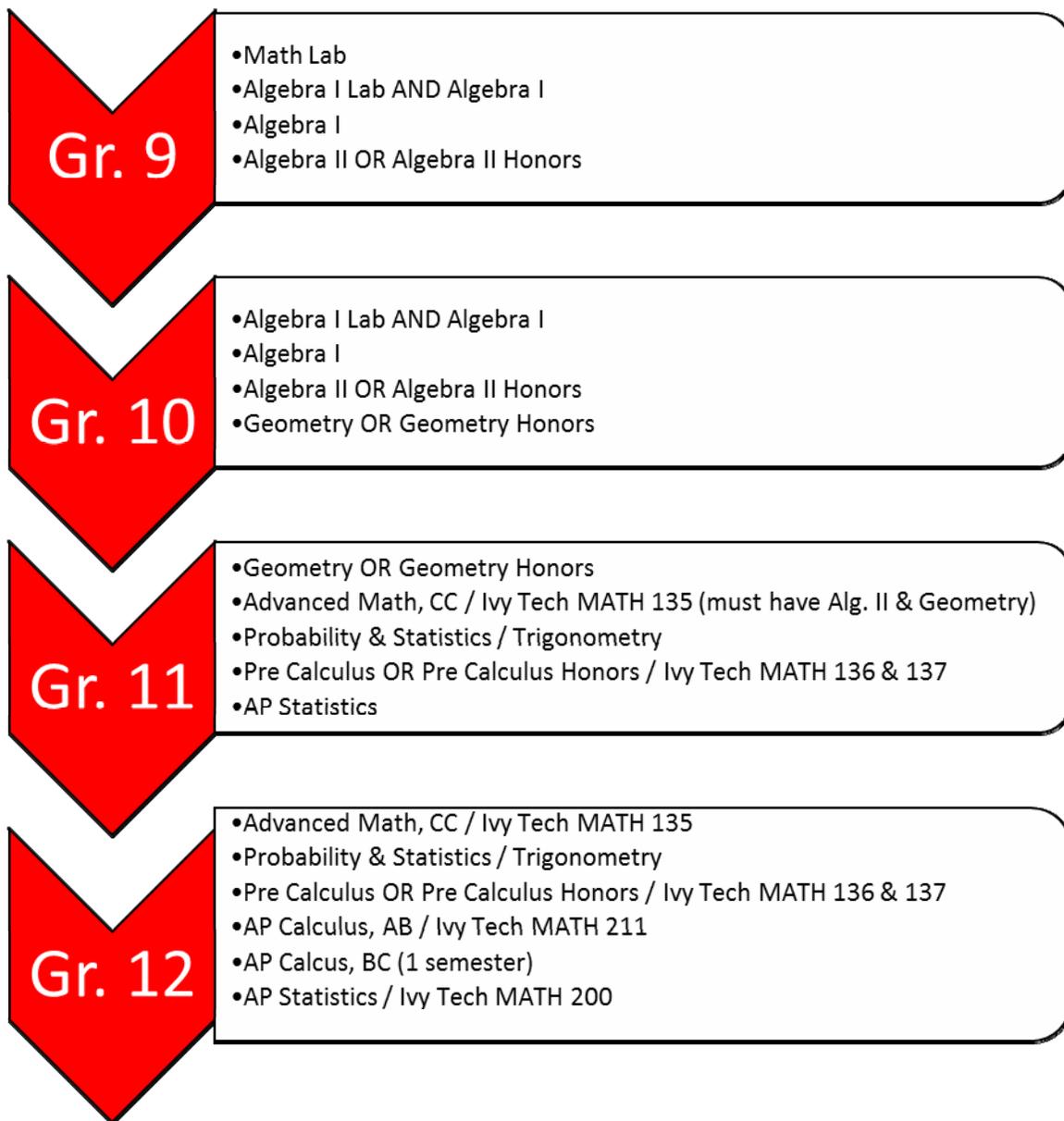
personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade: 10, 11, 12
- Recommended: Physical Education I and II
- **PE UNIFORMS MUST BE WORN – NO EXCEPTIONS!**
- **NO JEWELRY OF ANY KIND PERMITTED**
- **STRENGTH TRAINING COURSE**
CONTAINS A RIGOROUS FIVE-DAY A WEEK WORKOUT PLAN (weight training, running, agilities)
- **STRENGTH TRAINING COURSE - PHYSICAL MUST BE COMPLETED AND ON FILE PRIOR TO THE FIRST DAY OF SCHOOL**
- **LIFETIME FITNESS COURSE**
EMPHASIZES INDIVIDUAL ACTIVITIES AND THE RECREATIONAL VALUES OF ALL

AREAS THAT HAVE BEEN PRESENTED IN THE BASIC P.E. COURSE (i.e., tennis, badminton, table tennis and disc golf are presented).

- Credits: 1 credit per semester; there is no maximum amount of credits that may be earned provided that there is no course or skill level duplication.
- Fulfills an Elective requirement
- 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.
- 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 in activity.

Math Courses by Grade



ADVANCED MATH, COLLEGE CREDIT

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.

- Recommended: Algebra II & Geometry
- Credits: 1 credit per semester; 2 semesters
- Counts as a Mathematics credit

ALGEBRA I

Algebra I formalizes and extends the mathematics that students learned in the middle grades. Five critical areas comprise Algebra I: Relations and Functions; Linear Equations and Inequalities; Quadratic and Nonlinear Equations; Systems of Equations and Inequalities; and Polynomial Expressions. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Credits: 1 credit per semester; 2 semesters
- Fulfills the Algebra I requirement

ALGEBRA I LAB

(FORMERLY ALGEBRA ENRICHMENT)

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.

- Credits: 1 credit 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. Student taking Algebra I Lab must also be enrolled in Algebra I during same academic year

ALGEBRA II, ALGEBRA II HONORS

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended: Algebra I
- Credits: 1 credit per semester; 2 semesters
- Fulfills the Math requirement for diplomas
- **Passing the end-of-course assessment is strongly recommended before enrolling in this course**

CALCULUS AB, AP

IVY TECH MATH 211

Calculus AB, AP 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.

- Recommended Grade: Grades 11, 12
- Recommended: Pre-Calculus
- Credits: 1 credit per semester; 2 semesters
- Counts as a Mathematics Course

CALCULUS BC, AP

Calculus BC, AP is primarily concerned with developing 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; (3) integrals; and (4) polynomial approximations and series. 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.

- Content of *Calculus BC* is designed to qualify the student for placement & credit in a course that is one course beyond that granted for *Calculus AB*.
- Recommended Grade: 11, 12
- Recommended: Pre-Calculus
- Credits: 1 credit per semester; 1 semester
- Counts as a Math Course

GEOMETRY, GEOMETRY HONORS

Geometry explores more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Six critical areas comprise the *Geometry* course: Congruency and Similarity; Measurement; Analytic Geometry; Circles; and Polyhedral. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school CCSS. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended: Algebra I, Algebra II
- Credits: 1 credit per semester; 2 semesters
- Fulfills the Geometry requirement
- **Passing the end-of-course assessment is strongly recommended before enrolling in this course**

MATHEMATICS LAB

Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with *Indiana's Academic Standards for Mathematics*. It is recommended that *Mathematics Lab* is taken in conjunction with a Core 40 mathematics course, and the content of *Mathematics Lab* should be tightly aligned to the content of its corresponding course.

- Credits: 1-8 credit elective course
- Counts as an Elective for all diploma types
- **Recommended for students needing to improve upon Algebra I skills prior to enrolling in Algebra I**

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.

- Recommended: Algebra II and Geometry
- Credits: 1 credit per semester; 2 semesters
- Counts as a Math Course

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 calculators and computer programs is encouraged.

- Recommended: Algebra II
- Credits: 1 credit per semester; 1 semester
- Counts as a Mathematics Course

STATISTICS, AP

IVY TECH MATH 200

Statistics, AP 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
- Recommended: Algebra II
- Credits: 1 credit per semester; 2 semesters
- Counts as a Mathematics Course

TRIGONOMETRY

Trigonometry provides the foundation for common *periodic* functions that are encountered many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Students will also advance their understanding of *imaginary* numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming.

- Recommended: Algebra II and Geometry
- Credits: 1 credit per semester; 1 semester
- Counts as a Mathematics Course

BASIC SKILLS DEVELOPMENT: READING

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

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester, max of 8 credits
- Fulfills an Elective requirement

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.

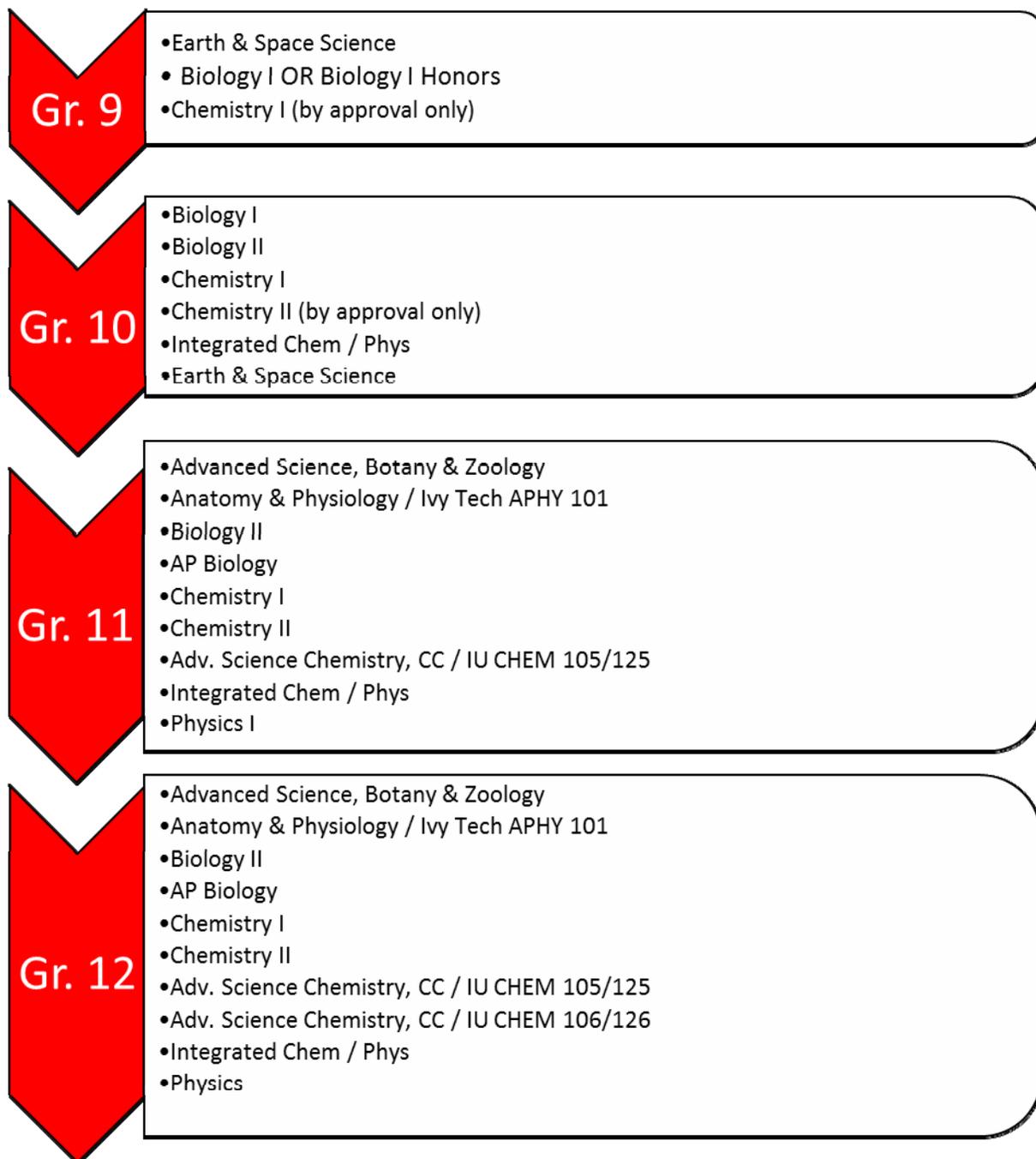
- Recommended Grade: 12
- Credits: 3 credits per semester; 2 semesters
- Fulfills an Elective requirement

WORK BASED LEARNING: ATHLETIC TRAINING

Work Based Learning builds students' skills and knowledge in their chosen career path or furthers their study within the area of interest. *Athletic Training* is designed for students to assume the role of an athletic trainer assistant and practice technical skills, including information on the health care system and employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care terms, and legal and ethical considerations. It prepares students with the knowledge, skills, and attitudes essential for providing basic care under the direction of licensed Athletic Trainers.

- Recommended Grade: 12
- Required: Preparing for College and Careers
- Recommended: Anatomy and Physiology
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

Science Courses by Grade



ADV SCIENCE, BOTANY & ZOOLOGY

Botany and Zoology is a course in which students investigate the in-depth concepts and principles related to the Flora and Fauna of an ecosystem with an emphasis on environmental science. The course introduces students to basic plant and animal structure and function. It also covers the ecology, evolution, taxonomy, and behavior of those organisms.

- Recommended Grade: 11, 12
- Recommended: Biology I, Chemistry I
- Credits: 1 credit per semester, 2 semesters
- Counts as a Science Course

ANATOMY & PHYSIOLOGY

IVY TECH APHY 101

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

- Recommended Grade: 11,12
- Recommended: Biology
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Core 40 Science course requirement as an Elective for general diploma

BIOLOGY I, BIOLOGY I HONORS

Biology I focuses on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grade: 9
- Credits: 1 credit per semester; 2 semesters
- Fulfills the Biology requirement

BIOLOGY II

IVY TECH BIOL 101

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.

- Recommended Grades: 10, 11, 12
- Recommended: Biology I
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Science requirement

BIOLOGY, AP

Biology, AP is a course based on the content established by the College Board. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties.

- Recommended Grade: 11, 12
- Recommended: Biology I and Chemistry I
- Credits: 1 credit per semester, 2 semesters
- Counts as a Science Course

CHEMISTRY I

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

- Recommended Grade: 10, 11, 12
- Recommended: Algebra II (can be taken concurrently)
- Credits: 1 credit per semester; 2 semesters
- Fulfills the 2 credit requirement for Chemistry I

CHEMISTRY II

IVY TECH CHEM 101

Chemistry II examines the chemical reactions of matter in living and nonliving materials. Based on the unifying themes of chemistry and the application of physical and mathematical models of the interactions of matter, students use the methods of scientific inquiry to answer chemical questions and solve problems concerning personal needs and community issues related to chemistry.

- Recommended Grade: 11, 12
- Recommended: Chemistry I, Algebra II
- Credits: 1 credit per semester; 2 semesters
- Counts as a Science course

CHEMISTRY, ADV SCI, COLLEGE CREDIT

INDIANA UNIVERSITY CHEM 105 & 125

Basic principles including stoichiometry, thermochemistry, atomic and molecular structure, gases, solutions, and selected topics in descriptive chemistry as well as an introduction to laboratory experimentation with emphasis on the collection and use of experimental data, some properties of solutions, stoichiometry, thermochemistry, and synthesis are covered; 5 college credits for this year-long course.

- Recommended Grade: 11, 12
- Recommended: Chemistry I, Algebra II
- 1 credit per semester; 2 semesters
- Counts as a Science Course

CHEMISTRY, ADV SCI, COLLEGE CREDIT

INDIANA UNIVERSITY CHEM 106 & 126

Chemical equilibria, with emphasis on acids, bases, solubility, and electrochemistry, elementary thermodynamics, chemical kinetics, and selected topics in descriptive chemistry as well as a continuation of C125 with emphasis on equilibria, qualitative analysis, acids and bases, oxidation-reduction including electrochemistry, chemical kinetics, and synthesis are covered; 5 college credits for this year-long course.

- Recommended Grade: 12
- Recommended Prerequisite: IU Chemistry 105 & 125, Algebra II
- Credits: 1 credit per semester; 2 semesters
- Counts as a Science Course

EARTH AND SPACE SCIENCE

Earth and Space Science is a course focused on the following core topics: study of the earth's layers; atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction focuses on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grade: 9-10
- Credits: 1 credit per semester; 2 semesters
- Counts as a Science Course

INTEGRATED CHEMISTRY/PHYSICS

Integrated Chemistry-Physics focuses on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures

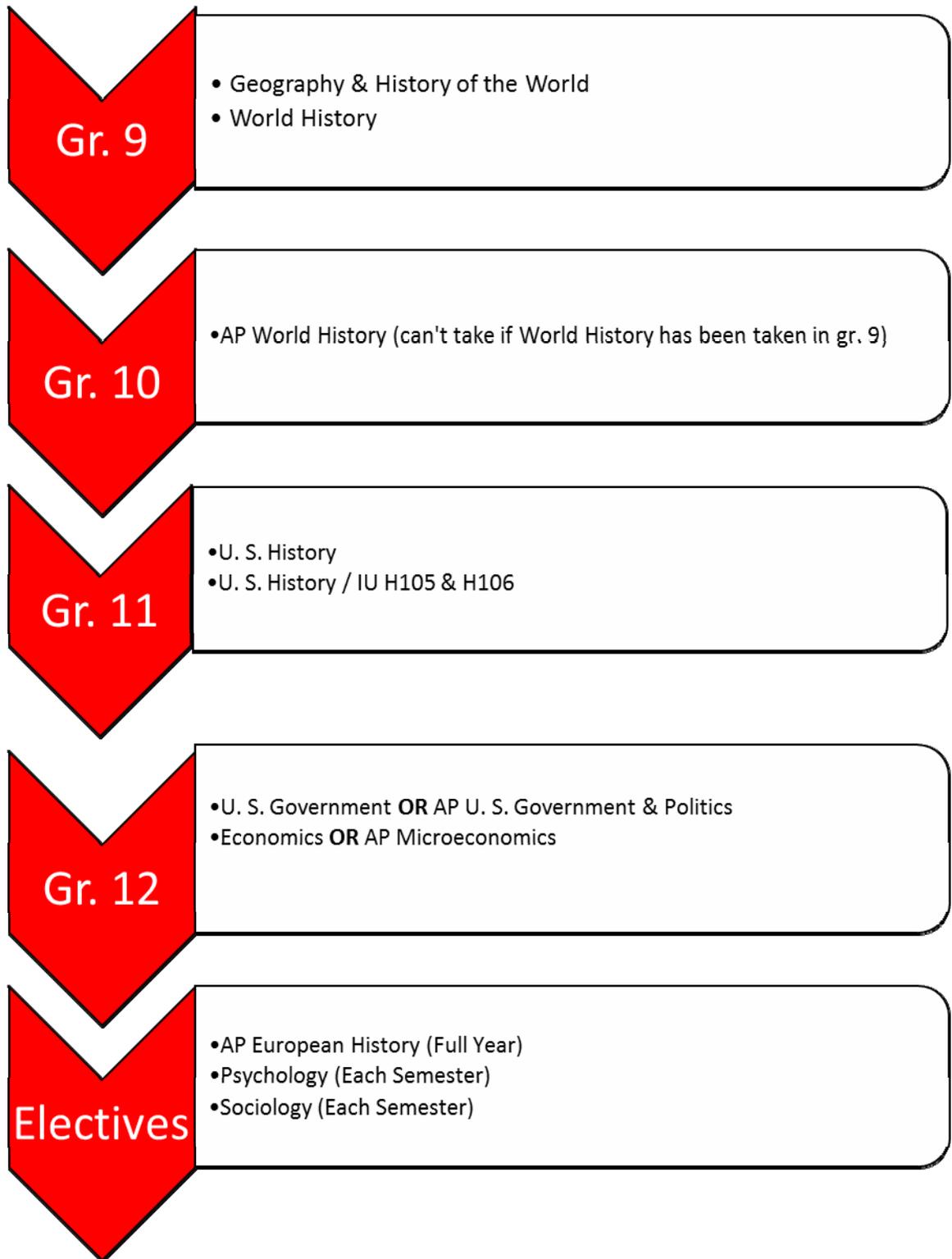
- Recommended Grade: 10
- Recommended: Algebra I (may be taken concurrently with this course)
- Credits: 1 credit per semester; 2 semesters
- Fulfills the 2 credit requirement for Chemistry I, Physics I, or Integrated Chemistry and Physics

PHYSICS I

Physics I focuses on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grade: 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

Social Studies Courses by Grade



ECONOMICS

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

- Recommended Grade: 12
- Credits: 1 credit per semester; 1 semester
- Fulfills the Economics requirement

EUROPEAN HISTORY, AP

European History, AP includes topics related to: (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 an understanding of some of the principal themes in modern European history, an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in writing.

- Recommended Grade: 12
- Recommended: World History
- Credits: 1 credit per semester; 2 semesters
- Fulfills an Elective requirement

GEOGRAPHY & HISTORY OF THE WORLD

Geography and History of the World is designed to enable students to use geographical tools, skills, and historical concepts to deepen their understanding of major global themes including the origin and spread of world religions; exploration; conquest, 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, planning for the future, and documenting and presenting findings orally or in writing. The historical geography concepts used to explore the global themes include change over time, origin, diffusion, physical systems, cultural

landscapes, and spatial distribution/patterns and interaction/relationships.

Students use the knowledge, tools, and skills, obtained from this course in order to analyze, evaluate, and make predictions about major global developments. This course is designed to nurture perceptive, responsible citizenship, to encourage and support the development of critical thinking skills and lifelong learning.

- Recommended Grade: 9
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Social Studies requirement

MICROECONOMICS, AP

Microeconomics, AP 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: basic economic concepts, the nature and functions of product markets, factor markets, and market failure and the role of government.

- Recommended Grade: 12
- Credits: 1 credit per semester; 1 semester
- Course & exam are intended to be comparable to the corresponding college level course.
- Fulfills the Economics requirement

PSYCHOLOGY

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 and 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 the various treatments used for them. Socio-Cultural Dimensions of Behavior covers topics such as conformity, obedience, perceptions, attitudes and influence of the group on the individual. Psychological Thinking explores how to think like a psychologist and expand critical thinking skills needed in the day-to-day life of a psychologist.

- Recommended Grade: 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

SOCIOLOGY

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 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 analyze the role of individuals in the community and social problems in today's world.

- Recommended: 11, 12
- Credits: 1 credit per semester; 1 semester
- Fulfills an Elective requirement

UNITED STATES GOVERNMENT

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students will understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students 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, political, and civic activities and the need for civic and political engagement of citizens in the United States.

- Recommended Grade: 12
- Credits: 1 credit per semester; 1 semester
- Fulfills the Government requirement

U S GOVERNMENT AND POLITICS, AP

United States Government and Politics, AP 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.

- Recommended Grade: 12

- Credits: 1 credit per semester; 1 semester
- Fulfills the US Government requirement

UNITED STATES HISTORY

United States History is a two-semester course that builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U. S. History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

- Recommended Grade: 11
- Credits: 1 credit per semester; 2 semesters
- Fulfills the US History requirement

UNITED STATES HISTORY

INDIANA UNIVERSITY H105 & H106

Students will study the Evolution of American society: political, economic, social structure; racial and ethnic groups; sex roles; Indian, inter-American, and world diplomacy of the United States; evolution of ideology, war, territorial expansion, industrialization, urbanization, international events and their impact on American history.

- Recommended Grade: 11
- Credits: 1 credit per semester; 2 semesters
- Fulfills the US History requirement

WORLD HISTORY AND CIVILIZATION

World History emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice skills and process of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes

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

- Recommended Grade: 9
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Social Studies requirement

WORLD HISTORY, AP

World History, AP is a course that provides students with the content established by the College Board. The course will have a chronological frame from the periods 8000 B.C.E. to the present. AP World History focuses on five overarching themes: Interaction between Humans and the Environment, Development and Interaction of Cultures, State-Building, Expansion, and Conflict, Creation, Expansion, and Interaction of

Economic Systems, Development and Transformation of Social Structures.

- Recommended Grade: 10
- Credits: 1 credit per semester; 2 semesters
- Fulfills a Social Studies requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas or counts as an Elective for any diploma.
- Students may NOT take the AP World History if World History and Civilization has already been taken.

FRENCH I

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

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

FRENCH II

French II 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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: French I
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

FRENCH III

IVY TECH FREN 101 & FREN 102

French III 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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: French I and II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

FRENCH IV

IVY TECH FREN 103 & FREN 104

French 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 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.

- Recommended Grade: 10-12
- Recommended: French I, II and III
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

JAPANESE I

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.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

JAPANESE II

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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Japanese I
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

JAPANESE III

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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Japanese I and II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

JAPANESE IV

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.

- Recommended Grade: 10, 11, 12
- Recommended: Japanese I, II and III
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

SPANISH I

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. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across

content areas and the application of understanding Spanish language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

SPANISH II

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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Spanish I
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

SPANISH III

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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Spanish I and II
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

SPANISH IV

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.

- Recommended Grade: 9, 10, 11, 12
- Recommended: Spanish I, II and III
- Credits: 1 credit per semester; 2 semesters
- Fulfills a World Language requirement

Southeastern Career Center

Versailles, IN
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Computers

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.



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Construction Technology 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

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 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 Manufacturing & Fabrication

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.



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Public Safety Public Safety

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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.

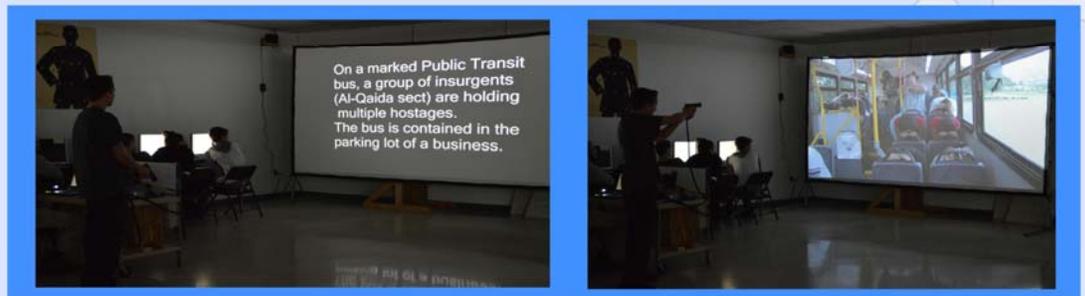
Dual Credits from Vincennes University is available.



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 Vincenes University are available.



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

Transportation

Southeastern Career Center

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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/>

DIPLOMA REQUIREMENTS



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 <small>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.</small>
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 <small>(College and Career Pathway courses recommended)</small>
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 exam
 - B. Earn 6 verifiable transcribed college credits in dual credit courses from priority course list
 - C. Earn two of the following:
 1. A minimum of 3 verifiable transcribed 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 exam
 - 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 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
 1. Pathway designated industry-based certification or credential, or
 2. Pathway dual credits from the lists of priority courses resulting in 6 transcribed 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 68, 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



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)

	<i># Credits Needed</i>
<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
CHEM 105 General Chemistry -- Indiana University CHEM 105/125 @ EC	5
<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 that have been determined to meet the criteria for quantitative reasoning courses for East Central High School for the 2015–2016 school year.

Advanced Placement/Dual Credit

Biology, AP
 Calculus, AB & BC / IVY Tech Math 211
 Chemistry IU Chem105/125, 106/125
 Computer Science A, AP
 Microeconomics, AP
 Statistics, AP / IVY Tech Math 200

Agriculture

Landscape Management

Business Academy

Accounting
 Advanced Accounting
 Computer Programming I, II

Engineering & Technology

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 / IU Chem 105/125 or 106/126
 Integrated Chemistry – Physics
 Physics I

Social Studies

Economics
 Microeconomics, Advanced Placement

Trade & Industrial

Construction Technology: Electrical II
 Precision Machining I
 Precision Machining II