**FRONTIER**

**HIGH SCHOOL**

COURSE DESCRIPTION

**HANDBOOK**

**2024-2025**



 **FRONTIER JR.-SR. HIGH SCHOOL**

 **MISSION STATEMENT**

The primary mission of Frontier Jr-Sr High School is to challenge and enable students to think logically, act responsibly, recognize their own self-worth and become contributing, committed members of the global community.

## INTRODUCTION

One of the most important decisions that a person makes during his/her lifetime is the decision that he/she makes in selecting and formulating educational and vocational goals. This decision affects family, friends, hobbies, general satisfaction, mental well-being, and total life style; therefore, educational planning becomes a vital part of a student’s high school experience.

It is the purpose of this guide to assist students in selecting the required courses for graduating from high school and for preparing themselves wisely for advancement toward their educational and vocational goals. Students receive considerable attention from the school counselor with whom they have numerous meetings, both in individual conferences and in group sessions to help them with their goal identifications and course selections. Teachers and people earning their living in other fields of interest provide additional information and advice about the world of work and the choices that students may consider.

**COURSE SELECTION**

Students make preliminary choices about their courses for the following year in individual or small group sessions with the guidance counselor. It is extremely important that students choose wisely, for the master schedule is generated from these course selections. Each student will complete a pre-registration form and create and/or revisit their individual four year plan. Four year plan guides are provided to assist students and parents in keeping track of requirements, credits, and career plans.

The final responsibility for course selection, however, rests entirely on the student (with his/her parent’s consent). The student selects elective courses and should keep count of credits toward graduation. After the courses have been selected, the official registration form must be approved by the student’s parents.

**SCHEDULE CHANGES**

Students are discouraged from making changes to their schedules after they have submitted their

Pre-registration form. If changes are necessary, students may make changes one week after the end of the current school year or one week prior to the first day of the following school year. Changes due to academic reasons will be made through the Guidance Department within the first three days of the new school year. Students may drop a course only with the permission from the principal but, will receive an F for that course on his/her permanent transcript. The student is still responsible for any textbook rental fees for that course.

**Table of Contents**

* Academic Requirements
	+ Diploma Requirements
	+ Graduation Pathway Checklist
	+ Credit Check Sheet
	+ Grading Policy
* Indiana Course Descriptions
	+ English
	+ Fine Arts
	+ Foreign Languag
	+ Mathematics
	+ Physical Education/Health
	+ Science
	+ Social Studies
	+ Quantitaive Reasoning Courses
* Next Level Programs of Study
	+ Agriculture
	+ Family Consumer Scienc
	+ Business
	+ Health Science
	+ Automotive Services
	+ Law Enforcement
	+ Construction Trades
* Career Technical Education (CTE) electives not included in Next Level Programs of Study
* Ivy Tech Articulated Courses
* Indiana University Kokomo Articulated Courses
* Indiana College Core

ACADEMIC REQUIREMENTS

**Mathematics Requirements**

The State Board set the expectation that all students earning a Core 40 Diploma, Core 40 with Academic Honors, or Core 40 with Technical Honors must earn six (6) credits in Mathematics in Grades 9-12.

**Quantitative Reasoning Courses**

The State Board created a new category of courses called “Quantitative Reasoning” courses. These are existing courses that help advance a student’s ability to apply mathematics in real-world situations and contexts. General diploma students will be required to earn two (2) credits in a Mathematics course **or** a Quantitative Reasoning course during their junior or senior year. Core 40, Academic Honors, and Technical Honors students will be required to be enrolled in a Mathematics course **or** a Quantitative Reasoning course each year they are in high school.

Credit Requirements

Due to the number of credits could earn during their four years in high school, a Cooperation decision was made to increase the number of credits required to earn the following diplomas:

* Academic and Technical Diplomas must earn 54 credits
* Core 40 Diplomas must earn 47 credits
* General Diplomas must earn 40 credits

FOUR-YEAR PLANS

The four-year plan is a student’s foundation for connecting her/his career and post-high school goals with the courses that he/she will need to take to meet these goals. Information is provided in this handbook to help the student make the most effective decisions for the four-year plan, as well as, next year course requests. Sample four-year plans for the four different diplomas are provided for students to help guide the development of their own four-year plans. Sample four-year plans based on the Indiana Department of Education’s College and Career Pathways are also provided to help students identify courses that they may need for their post-high school goals.

The following pages cover the following diploma types:

 Core 40 with Academic Honors

Core 40 with Technical Honors

Core 40

General Diploma

**with ACADEMIC HONORS**

**

|  |
| --- |
| **Course and Credit Requirements** |
| **English/LanguageArts** | **8 credits** |
| 2 credits: English 92 credits: English 102 credits: English 112 credits: English 12 |
| **Mathematics** | **6 credits (in grades 9-12)** |
| 2 credits: Algebra I 2 credits: Geometry2 credits: Algebra IIAll students in the Class of 2016 and beyond are required to take a Math –OR– Quantitative Reasoning \*(QR) course each year in high school. *QR course does not count as a math credit.* |
| **Science** | **6 credits** |
| 2 credits: Biology I2 credits: Biology II, Chemistry I or Integrated Chemistry-Physics2 credits: any Core 40 science course |
| **Social Studies** | **6 credits** |
| 2 credits: U.S. History1 credit: U.S. Government1 credit: Economics2 credits: World History and Civilization or  Geography and History of the World |
| **Directed Electives** | **6 credits** |
| World Languages (Some colleges require 2 years.)Fine ArtsCareer/Technical Education |
| **Physical Education** | **2 credits** |
| **Health and Wellness** | **1 credit** |
| **Electives** | **6 or more credits** (College and Career Pathway Recommended)\*\* |
|  **40 Total Credits Required** |

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

* Complete all requirements for Core 40
* Earn 2 additional credits in a Math or QR course in addition to the 6 required Math credits.
* Earn 6-8 Core 40 World Language credits (Three years of one language or two years each of two languages).
* Earn 2 Core 40 Fine Arts credits (Art, Band or Chorus).
* Earn semester grades of “C” or above in all courses that will count toward the diploma with
* Have a grade point average of a “B” or better.
* Complete one of the following:
	+ Two AP courses (4 credits) and corresponding AP exams
	+ Dual high school/college courses from an accredited postsecondary institution, resulting
	in 6 transferable college credits
	+ Combination of one AP course (2 credits) and corresponding AP exam **and** dual high school/college credit course(s) resulting in 3 transferable college credits
	+ Score 1250 or higher combined SAT critical reading + math + writing and no less than 560 on math and 590 on evidence based reading and writing, or score a 26 or higher composite ACT Plus Writing

**with TECHNICAL HONORS**

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

* Complete all requirements for Core 40
* Earn 2 additional credits in a Math or QR course in addition to the 6 required Math credits.
* Earn semester grades of “C” or above in courses that will count toward the diploma
* Have a grade point average of a “B” or better.
* Earn 6 credits in a 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 transferable college credits.
* Complete any one of the following:

 A. Any one of the options (A-D) of the Core 40 with Academic Honors diploma (see above)

 B. Earn the following minimum scores on WorkKeys: Reading for Info: 6; Math: 6; Locating Info: 5

 C. Earn the following minimum scores on Accuplacer: Writing 80, Reading 90, Math 75.

 D. Earn the following minimum scores on Compass: Algebra 66, Writing 70, Reading 80.

**47**

\*\* All students are strongly encouraged to complete a College and Career Pathway (selecting electives in a deliberate manner) to take full advantage of career exploration and preparation opportunities.

|  |
| --- |
| **Indiana General High School Diploma**  |
| **The completion of Core 40 is an Indiana graduation requirement. Indiana’s Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce. Beginning with the class of 2023, the Graduation Pathway Checklist will be the new requirement checklist.To graduate with less than Core 40, the following formal opt-out process must be completed:** * The student, the student’s parent/guardian, and the student’s counselor meet to discuss the student’s progress.
* The student’s career and course plan is reviewed.
* The student’s parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
* If the decision is made to opt-out of Core 40, the student is required to complete the course and credit requirements for a general diploma and the career/academic sequence the student will pursue is determined.
 |
| **Course and Credit Requirements for General High School Diploma** |
| **English/Language Arts** | **8 credits** |
| 2 credits: English 92 credits: English 102 credits: English 112 credits: English 12 |
| **Mathematics** | **6 credits** |
| 2 credits: Algebra I 2 credits: Any Math Course 2 credits in a Math **–OR–** Quantitative Reasoning\* (QR) course during grade 11 or 12. See page 42 for QR courses. |
| **Science** | **4 credits** |
| 2 credits: Biology I2 credits: Any Science Course (At least one credit must be from a Physical Science or Earth and Space Science Course) |
| **Social Studies** | **4 credits** |
| 2 credits: U.S. History1 credit: U.S. Government1 credit: Any Social Studies Course |
| **Career Exploration** | **1 credit** Preparing for College and Careers  |
| **Physical Education** | **2 credits** |
| **Health and Wellness** | **1 credit**  |
| **College and Career Pathways** | **6 credits** |
| Flex Credit | **5 credits** |
| To earn 5 Flex Credits a student must complete one of the following:* Additional courses to extend the college and career pathways
* Advanced career-technical education, dual credit/double up
* Additional courses in academic subjects, in world languages, or fine arts.
 |
| **Electives** | **6 credits** |
|  | 40 Total Credits Required for FHS General Diploma |





|  |
| --- |
|  CREDIT CHECK SHEET  |
| **Core 40 - Academic Honors** | **S1** | **S2** | **Core 40 Diploma** | **S1** | **S2** | **General Diploma** | **S1** | **S2** |
| **Diploma (College) 54 Credits** |  |  | **(College) 47 Credits \*\*** |  |  | **(Non-College) 40 Credits** |  |  |
| **English (8 cr)** | **English (8 cr)** | **English (8 cr)** |
| 9 |   |   | 9 |   |   | 9 |   |   |
| 10 |   |   | 10 |   |   | 10 |   |   |
| 11 |   |   | 11 |   |   | 11 |   |   |
| 12 |   |   | 12 |   |   | 12 |   |   |
| **Math (6 Cr)** | **Math (6 Cr)** | **Math (4 Cr)** |
|  Algebra I |   |   |  Algebra I |   |   |  Algebra I |   |   |
|  Geometry |   |   |  Geometry |   |   |  Any Math Course |   |   |
|  Algebra II |   |   |  Algebra II |   |   |   |   |   |
|  Pre-Calclulus |   |   |   |   |   |   |   |   |
| QR/Math\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |   |   | QR/Math\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |   |   | QR \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |   |   |
| **Science (6 cr)** | **Science (6 cr)** | **Science (4 cr)** |
|  Biology I |   |   |  Biology I |   |   |  Biology I |   |   |
|  ICP/Chemistry I/Physics |   |   |  ICP/Chemistry I |   |   |  ICP/Earth & Space/Animal |   |   |
| Science\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |   |   | Science\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |   |   |   |   |   |
| **Social Studies (6 cr)** | **Social Studies (6 cr)** | **Social Studies (4 cr)** |
|  World Hist/Civilization |   |   |  World Hist/Civilization |   |   | World Hist/Civilization (1 cr) |   |   |
|  U. S. History |   |   |  U. S. History |   |   |  U. S. History |   |   |
|  U.S. Government |   |   |  U.S. Government |   |   |  U.S. Government |   |   |
|  Economics |   |   |  Economics |   |   |   |   |   |
| **Physical Education (2 cr)** |  |  | **Physical Education (2 cr)** |  |  | **Physical Education (2 cr)** |  |  |
| **Health (1 cr)** |  |  | **Health (1 cr)** |  |  | **Health (1 cr)** |  |  |
| **Directed Electives (9 cr)** | **Directed Electives (6 cr)** | **Directed Electives (6 cr)** |
|  College/Careers (PCC) |   |   |  College/Careers (PCC) |   |   |  College/Careers (PCC) |   |   |
|  Fine Arts |   |   |   |   |   |   |   |   |
|  Spanish I |   |   |  |   |   |   |   |   |
|  Spanish II |   |   |  |   |   |   |   |   |
|  Spanish III |   |   |   |   |   |   |   |   |
| **Pathway (6 cr)** | **Pathway (6 cr)** | **Pathway (6 cr)** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|   |   |   | **\*\*Core 40-Technical Honors** |   |   |   |   |   |
|   |   |   | **Diploma (College) 54 Credits** |   |   |   |   |   |
|   |   |   | Core 40 requirements + |   |   |   |   |   |
|   |   |   | additional 7 credits |   |   |   |   |   |
|  |  |  |  |  |  |  |  |  |
| **\*\*To earn a Core 40 with Academic and/or Technical Honor Diploma, a student must have a minimum of 54 credits, a grade point average of 3.0 or higher, and no grade lower than a C.** |

**GRADING POLICIES**

Nine-Week’s Grades

Grades are issued at the end of each nine-week period.

Semester Grades

Semester grades are the averages of 1st and 2nd 9-week grades and the 3rd and 4th 9-week grades for each course. Only semester grades are posted to permanent records and used to determine the cumulative grade point average (GPA) and class rank.

Grading Scales

Grades are determined using the following scale:

A+ = 100% B+ = 87% - 89% C+ = 77% - 79% D+ = 67% - 69% F = 59%

A = 93% - 99% B = 83% - 86% C = 73% - 76% D = 63% - 66% and below
A- = 90% - 92% B- = 80% - 82% C- = 70% - 72% D- = 60% - 62%

For the purpose of calculating the GPA, semester letter grades are converted to points on a 4.0 scale. The point values assigned to each letter grade are as follows:

A+ = 4.00 B+ = 3.33 C+ = 2.33 D+ = 1.33 F = 0.00

A = 4.00 B = 3.00 C = 2.00 D = 1.00
A- = 3.67 B- = 2.67 C- = 1.67 D- = .67

The GPA is calculated by dividing a student’s total number of points by the number of credits that student has attempted.

**Weighted Courses and Grading Scale**

 The following courses are “weighted” because of difficulty:

Chemistry I Chemistry II

Physics Anatomy/Physiology

ACP English ACP Speech

Pre-Calculus Quantitative Reasoning

ACP Spanish III

Only grades of B- or better will be awarded the additional weight.

|  |  |  |
| --- | --- | --- |
| *Grade* | *Regular Points*  | *Points with Weight* |
| A+/A | 4.0 | 5.0 |
| A- | 3.67 | 4.67 |
| B+ | 3.33 | 4.33 |
| B | 3.00 | 4.00 |
| B- | 2.67 | 3.67 |
| C+ | 2.33  | 2.33 |
| C | 2.00 | 2.00 |
| C- | 1.67 | 1.67 |
| D+ | 1.33 | 1.33 |
| D | 1.00 | 1.00 |
| D- | .67 | .67 |
| F | .00  | .00 |

# **Valedictorian/Salutatorian Qualifications:**

The Valedictorian and Salutatorian will be based on the highest-grade point average. If the top two students in a class have a GPA that is 4.0 or higher, then two valedictorians will be awarded, and the student with the third highest GPA will be named salutatorian. The following criteria are required to be eligible for the valedictorian or salutatorian award:

1)     A student must have attended Frontier Jr./Sr. High School for their entire senior year and a total of six of their eight high school semesters.

2)     A student must carry a full semester load every semester for four years.

* A student will be enrolled full-time in credited classes for the entire school day.

3)     A student will earn both an Academic Honors and a Technical Honors Diploma.

4)     A student will earn 30 core dual credits during their 4 years of high school.

# **Class Rank Determination:**

Class rank is determined by Grade Point Average. Beginning with the class of 2027.

#

# Students are eligible to take all classes offered by Frontier plus one class that is offered by an

# educational partner. Therefore, a student may take up to 9 credits per semester. During summer time, a

# student may take any class offered by Frontier and 1 class offered by an educational partner. No more

# than two classes may be taken during summer school. Outside courses must be approved by the

# guidance department.

**SPECIAL EDUCATION PROGRAM**

The Special Education Program provides services to Frontier students with disabilities. The services provided to these students in the Resource Room include study and test taking assistance, direct instruction in academic subject areas, life social skills, accommodations, support for behavior and academic goals, and consultation for general education teachers in mainstream classes. Eligibility for special education services is normally based on the evaluations of teachers and a licensed school psychologist. Placement into the special education program is then determined by a case conference committee made up of parents, teachers, administrators, counselors, the psychologist, and a representative from Cooperative School Services. The committee decides on the least restrictive environment for the student’s placement and an Individual Transition Plan (ITP) and Individualized Education Program (IEP) are written based on this. The IEP is a legal document and contains specific goals and objectives for the student’s education. After initial placement into the special education program, and the student’s progress is monitored for progress and continued eligibility is determined annually. The conference committee meets yearly to review each student’s progress and revise the IEP for the next school year.

**ENGLISH**

**ENGLISH 9 \*1002**

Grade Level: 9

Prerequisites: None

Credits: 2 Semester Course, 2 semesters required, 1 credit per semester

Counts as a General, Core 40, Academic Honors and Technical Honors Diploma Requirement

Description:  English 9, an integrated English course based on Indiana’s Academic Core State Standards for English/Language Arts, is a study of language, vocabulary, 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.

**ENGLISH 10 \*1004**

Grade Level: 10

Prerequisites: English 9

Credits: 2 Semester Course, 2 semesters required, 1 credit per semester

Counts as a General, Core 40, Academic Honors and Technical Honors Diploma Requirement

Description: English 10, an integrated English course based on Indiana’s Academic Core State Standards for English/Language Arts, is a study of language, vocabulary, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres.  Students use literary interpretation, analysis, informational text, 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 appropriate oral presentations and access, analyze, and evaluate online information.

**ENGLISH 11 \*1006**

Grade Level: 11

Prerequisites: English 9 & 10

Credits: 2 Semester Course, 2 semesters required, 1 credit per semester

Counts as a General, Core 40, Academic Honors and Technical Honors Diploma Requirement

Description: English 11, an integrated English course based on Indiana’s Academic Core State Standards for English/Language Arts, is a study of language, vocabulary, literature, composition, and oral communication with a focus on exploring characterization across universal themes and a wide variety of genres.  Student use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction.  Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports and research essays.  Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.  This class will focus on American Literature from the 18th century to present in the form of novel, short story, poetry, and informational text.

**ENGLISH 11 (LITERATURE FOR LIFE) \*1006**

Grade Level: 11

Prerequisites: English 9 & 10

Credits: 2 Semester Course, 2 semesters required, 1 credit per semester

Counts as a General diploma course may **not** be used for a Core 40, Academic Honors and Technical Honors Diploma

Description:  English 11 Literature for Life is slower paced for students needing extra time comprehending information.  Through the study of theme related elements, American literature will be studied tying in life and job related skills to the theme.  The use of worksheets, projects, spelling, and vocabulary will reinforce the topic.  Writing elements will focus on 1st person material stressing proper sentence structure, grammar, and spelling.  Speech elements will include discussion, recitation, and presentation.  Participation in this class will be limited to students who are continuing to work toward successful completion of the English section of the End of Course Assessment (ECA), or those who qualify for educational adaptations as documented in an IEP.  Students who wish to pursue a four-year post-secondary degree are strongly encouraged to enroll in English 11.

**ENGLISH 12 (LITERATURE FOR LIFE) \*1008**

Grade Level: 12

Prerequisites: English 9, 10, 11, or Lit for Life 11

Credits: 2 Semester Course, 2 semesters required, 1 credit per semester

Counts as a General diploma course may **not** be used for a Core 40, Academic Honors and Technical Honors Diploma

Description: English 12 Literature for Life is a two-semester course that is designed to improve a student’s written communication skills and to continue a student’s exploration of literature.  Writing assignments will focus on business, personal and technical writing.  A formal research paper will be written in the second semester.  Students must receive teacher and guidance counselor approval before enrolling in this course. Enrollment in this course is limited to those students who have attempted and not yet passed the English section of the End of Course Assessment (ECA), or those who qualify for educational adaptations as documented in an IEP.  Students who wish to pursue a four-year post secondary degree need to enroll in English 12 or AP English.

**ENGLISH 12 \* 1008**

Grade Level: 12

Prerequisites: English 9, 10, & 11

Credits: 2 Semester Course, 2 semesters required, 1 credit per semester

Counts as a General, Core 40, Academic Honors and Technical Honors Diploma Requirement

Description: English 12, an integrated English Course based on Indiana’s Academic Standards for English/Language Arts for Grade 12 and the Common Core State Standards for English/Language Arts, is a study of language, British Literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres.  Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance for Grade 12 in classic and contemporary literature balanced with nonfiction.  Students write fictional narratives, short stories, responses to literature, reflective comparisons, 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.

**ACP ENGLISH 12**

**OPTION 1 (W131-IU & L202-IU) Introduction to Literary Interpretation**

Grade Level: 12

Prerequisites: English 9, 10, & 11

Credits: 2 semester course, 2 semesters required, 1 high school credit per semester

Indiana dual credit: W131 – 3 college credits - L202 – 3 college credits – for a total of 6

Must have a GPA of 2.7 or higher to receive dual credit

ACP English 12 is a weighted class for students who receive a B- or better.

Descriptions:

W131: Reading, Writing, & Inquiry I is a one-semester 3 credit hour Indiana University course that offers instruction and practice in the critical reading and writing skills required for college-level work, with an emphasis on written assignments that call for summary, critique, analysis, and arguments based on sources.  This is an Indiana University course. The purpose of this course is to prepare students for the rigor of writing throughout college. The focus is on scholarly investigation of sources, critical thinking and reading, learning how to recognize and utilize specific writing strategies, skills and fluency. Each unit will include preliminary work and assignments leading to a major essay to conclude. Points will be accumulated from homework, in-class assignments, participation, and final written assignments. Since much work and discussion will be carried on in class, impeccable attendance and assignment submission is imperative.

L202: Literary Interpretation is a one semester 3 credit Indiana University course designed to help students learn how to read, think, and write critically and cogently about literature. Students will study genres to understand how the various elements of a work of imaginative literature cohere to impart meaning. A large portion of the course will focus on how to write; students will learn how to translate close reading skills into strong critical essays, writing three peer-reviewed major papers, as well as short assignments (microthemes) and quizzes. The class will be heavily discussion-based, and vigorous and insightful explorations of the poetry and fiction studied is expected.

**ACP ENGLISH 12**

**OPTION 2 (W131-IU & ENGL202-Ivy Tech) Creative Writing**

Grade Level: 12

Prerequisites: English 9, 10, 11

Credits: 2 semester course, 2 semesters required, 1 high school credit per semester

Indiana dual credit: W131 – 3 college credits – Ivy Tech dual credit ENGL202 – 3 college credits –
for a total of 6

Must have a GPA of 2.7 or higher to receive dual credit

Core 40, Academic Honors and Technical Honors Diploma course elective.

ACP English 12 is a weighted class for students who receive a B- or better.

Descriptions:

W131: Reading, Writing, & Inquiry I is a one-semester 3 credit hour Indiana University course that offers instruction and practice in the critical reading and writing skills required for college-level work, with an emphasis on written assignments that call for summary, critique, analysis, and arguments based on sources.  This is an Indiana University course. The purpose of this course is to prepare students for the rigor of writing throughout college. The focus is on scholarly investigation of sources, critical thinking and reading, learning how to recognize and utilize specific writing strategies, skills and fluency. Each unit will include preliminary work and assignments leading to a major essay to conclude. Points will be accumulated from homework, in-class assignments, participation, and final written assignments. Since much work and discussion will be carried on in class, impeccable attendance and assignment submission is imperative.

ENGL202: Illustrate an understanding and practice of creativity in the medium of language through the development of texts. Develop an aesthetic appreciation for creative writing in one or more literary genres – fiction, poetry, drama, and nonfiction through reading and discussing literary works. Demonstrate greater expressive proficiency through a better understanding of such literary conventions as plot, setting, characterization, point of view, meter, imagery, symbolism, figurative language, dialogue, and other such matters of style. Demonstrate a high degree of competency in adhering to conventions of Standard English. Develop revision skills as a part of the writing process. Distinguish among the creative opportunities and constraints of different literary genres.

This course introduces students to opportunities for self-expression in one or more literary genres - fiction, poetry, drama, and the creative essay.

**SPEECH \*1076**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 1 semester course, 1 credit

Course Length: 1 Semester , 1 credit

Counts as A General, Core 40, Academic Honors and Technical Honors Diploma course elective

Description:  Speech, a course based on Indiana’s Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts Standards, 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 multimedia presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu.  Students use the same Standard English conventions for oral speech that they use in their writing.

**ACP SPEECH \*1078**

**S121 Public Speaking—Indiana University Kokomo**

Grade Level: 11, 12

Prerequisites: Successful completion of Speech

Credits: 1 semester course, 1 high school credit

Indiana dual credit: S121 – 3 college credits

Must have a GPA of 2.7 or higher to receive dual credit

Core 40, Academic Honors and Technical Honors Diploma course elective.

ACP Speech is a weighted class for students who receive a B- or better.

Description: ACP Speech is a dual credit course through Indiana University -- SPCH S121 Public Speaking. The course introduces you to the close interrelation of the theory and practice of rhetoric. It does not resemble the simple skills-only versions of "basic public speaking" that you may be familiar with. Although you will be rigorously trained in all the formal skills and techniques, oral communication is not merely technique; it is a human art of the highest distinction. This class is not training in strategic manipulation, but in how to use the spoken word for good. We will look closely at why speech is capable of manipulating, deceiving, and seducing, and how to spot, avoid, and combat these uses. This class is a core class in most colleges and universities; it is also a part of Indiana's core transfer library under the name "Fundamentals of Public Speaking" and should transfer to any public university in Indiana..

**BASIC SKILLS DEVELOPMENT \*0500**

Grade Level: 9, 10,11,12

Prerequisites: None

Credits: 1 credit per semester up to 8 credits

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

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

**ENGLISH LAB-DEVELOPMENTAL READING \* 1120**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 1 credit per semester up to 8 credits

Description: Developmental Reading is a supplemental course that provides students with individualized instruction designed to support success in completing work aligned with the Indiana Academic Standards of English/Language Arts focusing on the Reading Standards for Literature and Nonfiction.  All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.  This is a PASS or FAIL class.  No grade will be given.

**FINE ARTS**

**CHORUS/ADVANCED CHORUS \*4188**

Grade Level: 9,10, 11, 12

Prerequisites: None

Credits: 1 credit per semester up to 8 credits

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description:  Beginning Chorus includes students in grades 9 through 12 and performs choral works from the 16th through 21st centuries, focusing on secular and sacred choral music with limited performance of pop styles. The concert choir performs locally at a winter and a Spring Concert. Additional performances will be at the discretion of the director.  Emphasis is placed on developing proper vocal technique, music reading, tempo & rhythmic accuracy, intonation, and the study of diverse musical styles. Students will also learn the importance of teamwork and discipline through participating in a group of their peers. Small groups and solos may participate in the ISSMA Solo & Ensemble contest held in January or February of each year.  Performance attendance and active participation in class are required. The purchase of performance attire may be expected.

**CONCERT BAND \*4170**

Grade Level: 9, 10, 11, 12

Prerequisites: Band in junior high or permission from the band director

Credits: 1 credit per semester up to 8 credits

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Beginning Concert Band includes students in grades 9 through 12 that were in a school band the previous school year. The band performs locally at a winter and a spring Concert, and also performs at the Indiana State School Music Association (ISSMA) Concert Band Festival. At most home football and basketball games, the high school band becomes the Frontier Pep Band to provide spirit and entertainment. Additional performances will be at the discretion of the director.  Emphasis is placed on developing basic musical skills such as tone production, tempo & rhythmic accuracy, intonation, and the study of diverse musical styles. Students will also learn the importance of teamwork and discipline through participating in a group of their peers. Students in high school band will have the opportunity to participate in district and state honor bands and are encouraged to participate in the ISSMA Solo & Ensemble contest.  Performance attendance and active participation in class are required. The purchase of performance attire may be expected. Each student must have access to an instrument in good working condition to participate in the class.

**THEATRE Advanced Theater Arts\*4240**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semester, 1 credit per semester

Counts as a directed elective or elective for all diplomas

Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

Description: Advanced Theater Arts is based on the Indiana Academic Standards for Theater. Students enrolled in Advanced Theater Arts read and analyze plays and apply criteria to make informed judgments. They draw on events and experiences to create scripted monologues and scenes, create scenic designs for existing plays, and build characters through observation, improvisation and script analysis. These activities should incorporate elements of theater history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore careers in theater arts and begin to develop a portfolio of their work. They also attend and critique theater productions and identify ways to support the theater in their community. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

**INTRODUCTION TO 2D ART \*4000** (Offered 1st semester only)

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

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

**INTRODUCTION TO 3D ART \*4002** (Offered 2nd semester only)

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

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

**DRAWING I \*4060**

Grade Level: 10, 11, 12

Prerequisites: Introduction to 2D Art

Credits: 1 semester , 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Students will increase their perceptual skills while using a variety of drawing tools and techniques. The primary focus of this course is drawing from life; learning how to look at spatial relationships in order to transfer knowledge onto a 2-dimensional plane.  Types of drawings will include contour, gesture, still life, linear perspective, and portrait.  Media will include graphite, charcoal, conté and ink.  Outside of class sketchbook assignments are part of this course.

**DRAWING II/III \*4060**

Grade Level: 10, 11, 12

Prerequisites: Drawing I

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Building upon skills learned in Drawing I, students will further study compositional elements while working both realistically and abstractly.  Increased figurative work will provide opportunities for content considerations and greater technical skills.  Historic, modern, and non-traditional approaches to drawing will be explored.  Students’ media choices will expand to mixed media, pastels, and colored pencils in addition to those used in Drawing I.  Assignments will be aimed at producing portfolio-worthy work.  Outside of class sketchbooks assignments are part of this course.

**PAINTING I \*4064**

Grade Level: 10, 11, 12

Prerequisites: Introduction to 2D Art

Credits: 1 semester , 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Students will gain experience using a variety of media to paint from observation.  Emphasis is on the use of design elements and principles and experimentation with different painting media to produce a strong composition, and on the continued development of the student’s perceptual skills.  The painting experience will be enhanced through exposure to historic precedents and modern approaches to painting.  Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements.  Sketchbook and research assignments are a part of this course.

**PAINTING II/III \*4064**

Grade Level: 11, 12

Prerequisites: Painting I

Credits: 1 semester , 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Students will continue to develop perceptual and technical skills using acrylic, watercolor, and/or oil paints.  Further exploration of painting styles and art movements will be included. Subject matter will be through observation and material derived from sketchbook research beyond the classroom. Students will have a strong choice in the subject matter and media they choose to paint.  Students will work more independently on different projects of their choice to build a strong composition to be stressed toward portfolio-worthy artwork. Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements.  Sketchbook and research assignments are a part of this course.

**ART HISTORY \*4025**

Grade Level: 10, 11, 12

Prerequisites: None

Credits: 1 semester ,1 credit

Ivy Tech dual credit ARTH101 – 3 college credits

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description:  Art History is a course based on the Indiana Academic Standards for Visual Art, Students taking Art History engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production.  Students study works of art and artifacts from world cultures, engage in historically relevant studio activities; utilize research skills to discover social political, economic, technological, environmental, and historical trends and connections; analyze, interpret, theorize, and make informed judgements about artwork and the nature of art; relate  art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills.  Students utilize the resources of art museums, galleries, and studios, and identify art related careers.

**SCULPTURE I \*4044**

Grade Level: 10, 11, 12

Prerequisites: Introduction to 3D Art

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

This course involves exploration beyond the media and techniques used in Intro to 3D Art and will expand upon the skills and experiences. Students will create realistic and abstract sculptures with more advanced media such as, metal, sculptamold, plaster, stone, and various casting materials.  Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements.  Sketchbook and research assignments are a part of this course.

**CERAMICS I \*4040**

Grade Level: 10, 11, 12

Prerequisites: Introduction to 3D Art

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Students will experience the designing, forming, and finishing processes of clay.  This will include basic hand building methods (not potter’s wheel), glaze and slip application, and firing procedures.  Design fundamentals will be stressed as well as exposure to ceramic traditions and trends worldwide, both past and present.  Problem solving and creative thinking skills are also emphasized.  Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements.  Sketchbook and research assignments are a part of this course.  Completion of this course serves as a prerequisite for Ceramics II.

**CERAMICS II \*4040**

Grade Level: 11,12

Prerequisites: Ceramics I

Credits: 1 Semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Students will approach more complex challenges both in clay techniques and in communicating ideas through the clay medium.  Hand building methods are continued and wheel throwing is introduced.  Emphasis is on the use of design principles, historic ceramic traditions from around the world, and creative problem solving skills.  Reading, writing, and research are involved. Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements.  Sketchbook and research assignments are a part  of this course.

**CERAMICS III\*4040**

Grade Level: 11, 12

Prerequisites: Ceramics II

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: This course is designed for students who are very serious and interested in Ceramics.  It will expand upon the skills and experiences from the previous courses and focus on more individual exploration goals in the medium of clay and explore more hand building and wheel throwing techniques.  There is a strong emphasis on the development of portfolio quality work and artist statements.  Reading, writing and research are involved.  Students will be responsible for developing an online portfolio to showcase their work and will be accompanied with written artist statements.  Sketchbook and research assignments are a part of this course.

**FIBER ARTSI/II \*4046**

Grade Level: 10, 11, 12

Prerequisites: Intro to 2D or Intro to 3D Art

Credits: 1 semester, 1 credit

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Using fiber and textile media and techniques, students will create works that focus on the transition between two and three-dimensional artworks.  Fiber and textile processes may include: weaving, fabric printing, papermaking, basketry, batik, and mixed media.  Cultural, historic, and aesthetic aspects of these processes will be incorporated, as well as experiences in art criticism.

**FOREIGN LANGUAGE**

**SPANISH I \*2120**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semesters, 1 credit per semester

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

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

**SPANISH II \*2122**

Grade Level: 10, 11, 12

Prerequisites: Spanish I

Credits: 2 semesters, 1 credit per semester

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

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

**SPANISH III \*2124**

Grade Level: 11, 12

Prerequisites: Spanish I & II

Credits: 2 semesters , 1 credit per semester

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Course Length: Full Year – 1 credit per semester

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

**ACP SPANISH III \*2124**

**HISP S150: Elementary Spanish II**

Grade Level: 11, 12

Prerequisites: Spanish I & II

Credits: 2 semesters, 1 credit per semester

Indiana Dual credit – 4 credits for the full year (no partial credit)

Counts as an elective course for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: The second course in the first year (S100-S150 sequence), follows a communicative approach which springs from the idea that languages are best learned when real-world information becomes the focus of student activities.  From the first day of class, students will interact in Spanish with the instructor and with classmates.  Therefore, by the end of this course, students should be able to successfully handle in Spanish a significant number of basic communicative tasks.

**MATHEMATICS**

**ALGEBRA I LAB \*2516**

Grade Level: 9, 10, 11, 12

Prerequisites: Successful completion of 8th grade math; must be enrolled in Algebra I

Credits: 1 credit per semester

Counts as a math credit for a General diploma, counts as an elective credit for Core 40, Academic Honors and Technical Honors Diploma

Description: Algebra I Lab is a mathematics support course for Algebra I.  Algebra I Lab is taken while students are currently enrolled in Algebra I.  This 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 middle grades.

**ALGEBRA I \*2520**

Grade Level: 9, 10, 11, 12

Prerequisites: Successful completion of 8th grade math

Credits: 2 semester class, 1 credit per semester

Counts as a math credit for a General, Core 40, Academic Honors and Technical Honors Diploma

Description: Algebra I is made up of six strands: Number Systems and Expressions; Functions; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. 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 Process Standards for Mathematics 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.

**ALGEBRA II \*2522**

Grade Level: 9, 10, 11, 12

Prerequisites: Successful completion of Algebra I

Credits:2 semester class, 1 credit per semester

Counts as a math credit for all diplomas and is a requirement for Core 40, Academic Honors and Technical Honors Diploma

Description:  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 properties of logarithms.  Algebra II is made up of seven strands: Data Analysis, Statistics, and Probability; Arithmetic and Structure of Expressions; Functions; Systems of Equations and Inequalities; Quadratic Equations and Functions; Exponential and Logarithmic Equations and Functions; and Polynomial, Rational, and Other Equations and Functions.  The eight Process Standards for Mathematics 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.

**GEOMETRY \*2532**

Grade Level: 9, 10, 11, 12

Prerequisites: Successful completion of Algebra I

Credits: 2 semester class, 1 credit per semester

Counts as a math credit for all diplomas and is a requirement for Core 40, Academic Honors and Technical Honors Diploma

Description: Geometry formalizes and extends students’ geometric experiences from the middle grades.  Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments.  Geometry consists of seven (7) strands: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three-Dimensional Solids.  The eight Process Standards for Mathematics apply throughout 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.

**PRE-CALCULUS \*2564 /TRIGONOMETRY \*2566**

**MATH136 & MATH137 – IVY TECH**

Grade Level: 11, 12

Prerequisites: Concurrent enrollment or successful completion of Pre-Calculus

Credits: 2 semester class, 1 credit per semester

Ivy Tech dual credit MATH136 – 3 college credits, MATH137 – 3 college credits

Counts as a math credit for Core 40, Academic Honors and Technical Honors Diploma

Pre-Calculus is a weighted class for students who receive a B- or higher

Description: This course is one semester of Pre-Calculus and one semester of Trigonometry.

Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series.  The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement.  Pre-Calculus is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines.  Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming.  The course is designed for students who expect math to be a major component for their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses.  The Process Standards for Mathematics apply throughout each course and, together with the content standards, prescribe that students experience mathematics as coherent, useful, and make sense of problem situations.

**ACP CALCULUS \*2527**

**M215 - IU**

Grade Level: 11, 12

Prerequisites:  Concurrent enrollment or successful completion of Pre-Calculus

Credits: 2 semester class, 1 credit per semester

IU Kokomo dual credit M215 – 5 college credits

Counts as a math credit for the General diploma, Core 40, Academic Honors and Technical Honors Diploma ACP Calculus is a weighted class for students who receive a B- or higher

Description: Calculus expands a student’s knowledge of topics like functions, graphs, limits, derivatives, and integrals. Additionally, students will review algebra and functions, modeling, trigonometry, etc. Calculus is made up of five strands: Limits and Continuity; Differentiation; Applications of High School Course Titles and Descriptions 2022-2023 138 Derivatives; Integrals; and Applications of Integrals. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**QUANTITATIVE REASONING \*2550**

**MATH123 – IVY TECH**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

Ivy Tech dual credit – 3 college credits

Counts as a math credit for the General diploma, Core 40, Academic Honors and Technical Honors Diploma

Description: Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real-world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students High School Course Titles and Descriptions 2022-2023 144 experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**INTEGRATED MATHEMATICS I \*2554**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

Counts as a math credit for the general diploma or as an elective credit for Core 40, Academic and Technical Honors.

Description: Integrated Mathematics I formalizes and extends the mathematics students learned in the middle grades. The critical areas deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Integrated Mathematics I uses properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from prior grades. The final unit in the course ties together the algebraic and geometric ideas studied. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**INTEGRATED MATHEMATICS II  \*2556**

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

Counts as a math credit for the general diploma or as an elective credit for Core 40, Academic and Technical Honors.

Description: Integrated Mathematics II focuses on quadratic expressions, equations, and functions by comparing their characteristics and behavior to those of linear and exponential relationships from Integrated Mathematics I. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, round out the course. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**BUSINESS MATH I/II \*4512**

Grade Level: 10, 11

Prerequisites: Algebra I

Credits: 2 semester class, 1 credit per semester

Counts as a math credit for the general diploma or as an elective credit for Core 40, Academic and Technical Honors.

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

**PHYSICAL EDUCATION AND HEALTH**

**HEALTH AND WELLNESS  \*3506**

Grade Level: 8, 9, 10, 11, 12

Prerequisites: None

Credits: 1 semester class, 1 credit

Health is a required course for all diplomas

Description:  Health & Wellness, a course based on Indiana’s Academic Standards for Health & Wellness and 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, and 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.

**PHYSICAL EDUCATION I & II \*3542 & \*3544**

Grade Level: 9

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

Physical Education is a required course for all diplomas

Description: Physical Education 1 emphasizes health-related fitness and developing the skills and habits necessary for a lifetime of physical activity. Skill development, applying rules and strategies are a continuous part of the classes’ program. Activities for this class will be various indoor and outdoor sports, recreational team and individual based games, learning functional exercise movements, and class workouts. A proper base of strength and endurance will be established in Physical Education 1 to be prepared for Physical Education 2.

Description: Physical Education 2 emphasizes enjoyment for lifetime fitness and activity. Workouts will be more organized and challenging and students will begin to learn a larger variety of lifts using free weights. Students will work on developing their own exercise routine and class workouts will be more focused on teamwork. In addition to playing sports and games there will be more work done with free weights, gymnastics and plyometrics.

**ELECTIVE PHYSICAL EDUCATION (WEIGHTLIFTING) \*3560**

Grade Level: 10, 11, 12

Prerequisites: PE 9

Credits: 2 semester class, 1 credit per semester up to 6 credits

Counts as an elective requirement for all diplomas

Description: Elective Physical Education, a course based on selected standards from Indiana’s Academic Standards of Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program.  The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life.  Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas.  A minimum of two of the following activities should be included:  weightlifting; individual and group physical activities; total; flexibility; endurance building; total body fitness.  Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness.  Ongoing assessment includes both written and performance-based skill evaluation.  Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11

**SCIENCE**

**BIOLOGY I \*3024**

Grade Level: 9, 10

Prerequisites: None

Credits: 2 semester class, 1credit per semester

Biology is a requirement for all diplomas

Description:  Biology I is a course based on the following core topics:  cellular chemistry, structure and reproduction; matter cycles and energy transfer; interdependence of organisms; molecular basis of heredity; genetics and evolution.  Instruction 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.

**BIOLOGY II \*3026** Offered in even graduation years

Grade Level: 10, 11, 12

Prerequisites: Successful completion of Biology I with C or better

Credits: 2 semester class, 1 credit per semester

Biology II is a science credit that counts for all diploma types.

Description:  Biology II is an advanced laboratory, field, and literature investigations-based course. Students enrolled in Biology II examine in greater depth the structures, functions, and processes of living organisms.  Students also analyze and describe the relationship of Earth‘s living organisms to each other and to the environment in which they live.  In this course, students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of the unifying themes of biology to biological questions and problems related to personal and community issues in the life sciences, stressing a more in-depth investigation of one or more specialized biological disciplines, such as ecology, comparative anatomy and physiology, genetics, botany, and zoology for an in-depth study of the application of biological concepts and principles to specific environmental issues.

**CHEMISTRY I \*3064**

**CHEM101 – IVY TECH**

Grade Level: 10, 11, 12

Prerequisites: Successful completion of Algebra I – “C” or better.  Completion of or concurrent enrollment in Algebra II

Credits: 2 semester class, 1 credit per semester

Ivy Tech dual credit – 3 college credits

Chemistry I is a science credit that counts for all diploma types.

This course is a weighted class for students who receive a B- or better.

Description:  Chemistry I may be taken for dual credit through Ivy Tech.  It is the equivalent of CHEM 101 and Elementary General Chemistry with a lab in the Core Transfer Library.  Chemistry I is a course based on the following core topics: properties and states of matter; measurement and calculations; atomic structure and the periodic table; bonding and molecular structure; reactions and stoichiometry; behavior of gasses; thermochemistry; solutions; acids and bases. 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 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.

**CHEMISTRY II \*3066** Offered on odd graduation years

**CHEM105 & CHEM106 – IVY TECH**

Grade Level: 11, 12

Prerequisites: Successful completion of Chemistry I – “C” or better.

Credits: 2 semester class, 1 credit per semester

Ivy Tech dual credit – CHEM105 – 3 college credits, CHEM106 – 3 college credits

Chemistry II is a science credit that counts for all diploma types.

This course is a weighted class for students who receive a B- or better.

Description:  Chemistry II may be taken for dual credit through Ivy Tech.  It is the equivalent of CHEM 105 and CHEM 106 and General Chemistry 1 and 2 with labs in the Core Transfer Library.  Chemistry II covers the essential principles of chemistry, atomic and molecular structure, bonding, properties and reactions of elements and compounds, stoichiometry, solutions, and acids and bases.  Additionally, chemical equilibrium, thermochemistry, thermodynamics, nuclear chemistry, kinetics, and oxidation and reduction are covered.  The lab portion provides an introduction and reasoning of experimental chemistry.  Chemistry II requires a higher degree of student responsibility than Chemistry I.

**EARTH AND SPACE SCIENCE \*3044** Offered in even graduation years

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

This course is a science credit that counts for all diploma types.

Description:  Earth and Space Science I is a course focused on the following core topics: the universe; the solar system; Earth cycles and systems; the atmosphere and hydrosphere; the solid Earth; Earth processes. Students analyze and describe earth’s interconnected systems and examine how earth’s materials, landforms, and continents are modified across geological time. Instruction 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.

**INTEGRATED CHEMISTRY-PHYSICS (ICP) \*3108** Offered on odd graduation years

Grade Level: 9, 10, 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

This course is a science credit that counts for all diploma types.

Description:   Integrated Chemistry-Physics is a course focused on the following core topics: constant velocity; uniform acceleration; Newton’s laws of motion; energy; particle theory of matter; describing substances; representing chemical change; electricity and magnetism; waves; nuclear energy. 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.

**PHYSICS \*3084** Offered on even graduation years

Grade Level: 11, 12

Prerequisites: Successful completion of Algebra II and Chemistry I

Credits: 2 semester class, 1 credit per semester

This course is a science credit that counts for all diploma types.

Physics is a weighted class for students who receive a B- or better.

Physics

3 is a course focused on the following core topics: constant velocity; constant acceleration; forces; energy; linear momentum in one dimension; simple harmonic oscillating systems; mechanical waves and sound; simple circuit analysis. 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.

**ANATOMY AND PHYSIOLOGY \*5276**

Grade Level: 11, 12

Prerequisites: Chemistry, Introduction to Health Care Systems, First-Year course of same discipline (Biology)

Credits: 2 semester class, 1 credit per semester

This course is a science credit that counts for all diploma types.

This course is a weighted class for students who receive a B- or better.

Ivy Tech: APHY 101/ APHY 102

Description:  Anatomy & Physiology is a course in which students explore scientific knowledge that 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. In the science classroom, student work includes: the process of homeostasis and the essentials of human function at the level of genes, cells, tissues, and organ systems. At the conclusion of this course, students should be able to understand the structure, organization, and function of the various components of the healthy human body in order to apply this knowledge in all health-related fields. This course includes ample laboratory experiences that illustrate the application of the standards to the appropriate cells, tissues, organs, and organ systems. Students should be able to use basic laboratory equipment such as microscopes, balances, and pipettes.

**SOCIAL STUDIES**

**WORLD HISTORY AND CIVILIZATION \*1548**

Grade Level: 10, 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

This course is a social studies credit that counts for all diploma types.

Description:  World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas of the earth and that significantly influenced people and places in subsequent eras.  Some key events and developments pertain primarily to particular peoples and places; others, by contrast, involve transcultural interactions and exchanges between various peoples and places in different parts of the world.  Students are expected to practice skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, analysis and interpretation, research, issues-analysis, and decision-making.  They are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world.  Students are expected to examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present.  Finally, students are expected to apply content knowledge to the practice of thinking and inquiry skills and processes.  There should be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

**U.S. HISTORY \*1542**

Grade Level: 11, 12

Prerequisites: None

Credits: 2 semester class, 1 credit per semester

This course is a social studies credit that counts for all diploma types.

Description:  U.S. History is a requirement for graduation from high school in the state of Indiana.  U.S. History allows the student to study the exploration, settlement, and growth of the United States.  This course will also include a study of political, social, and economic progress to the present time.  The student will also study the Constitution of the United States.  This course will cover both the 19th and 20th centuries.

**ACP U.S. HISTORY \*1542**

**H105 & H106 - IU**

Grade Level: 11, 12

Prerequisites: Must have a GPA for a 2.70 or higher to receive Dual Credits

Credits: 2 semester class, 1 credit per semester

This course is a social studies credit that counts for all diploma types.

Indiana University Dual Credit: H105/106 – 3 college credits per semester

Dual Credit course fee may be required.

Description:  U.S. History is a requirement for graduation from high school in the state of Indiana.  U.S. History allows the student to study the exploration, settlement, and growth of the United States.  This course will also include a study of political, social, and economic progress to the present time.  The student will also study the Constitution of the United States.  This course will cover both the 19th and 20th centuries.

**UNITED STATES GOVERNMENT \*1540**

Grade Level: 11, 12

Prerequisites: None

Credits: 1 semester class, 1 credit

This course is a social studies credit that is required for all diploma types.

Description:  United States Government course provides a framework for understanding the purpose, principles and practices of the American government as established by the United States Constitution.  Students are expected to understand their rights and responsibilities as citizens and how to exercise these rights and responsibilities in local, state, and national government.  The guiding themes of this course are outlined by the Indiana Standards for the United States Government.  Key subjects students will examine include the nature of politics and government, foundations of U.S. Government, purposes, principles, and institutions of the U.S. Government, relationships with other nations, and the roles of citizens.

**ECONOMICS \*1514**

Grade Level: 11, 12

Prerequisites: None

Credits: 1 semester class, 1 credit

This course is a social studies credit that is required for Core 40, Academic and Technical Honors diplomas

Description:  Economics examines the allocation of scarce resources and the economic reasoning used by people as consumers, producers, savers, investors, workers, citizens, and agents of the government.  The guiding themes of this course are outlined by the Indiana Standards for Economics.  Key elements students will examine include scarcity, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economic stabilization, and trade.

**COMMUNITY SERVICE \*0524 (COMM SERV)**

Grade Level: 12

Prerequisites: Runs concurrently with Government

Credits: 1 semester class, 1 credit

This course counts as a directed elective or elective for all diplomas

Description: Community Service is a course created by public law IC 20-30-14. Community service allows students in grades nine through twelve (HEA 1629) the opportunity to earn up to two high school credits for completion of approved community service projects or volunteer service that “relates to a course in which the student is enrolled or intends to enroll.” For each student who wishes to earn credit for community service or volunteer service under this law, the student, a teacher of the student, or a community or volunteer service organization must submit an application to the high school    principal including: 1) name of the community service organization or volunteer service organization the student intends to assist; 2) name, address, and telephone number of the director or supervisor of the community service organization or volunteer service organization and, if different from the director or supervisor, the name, address, and telephone number of the individual assigned by the community or volunteer service organization to supervise the student at the activity site; 3) nature of the community service or volunteer service performed by the student with a certification that the service performed by the student is voluntary; 4) total number of hours the student intends to serve the community service organization or volunteer service organization during the school year; 5) written statement by the director or the supervisor of the community service organization or volunteer service organization certifying that the information included in the application is an accurate reflection of: (a) the student's expectations with regard to the number of hours of service contemplated to be performed; and (b) the community service organization's or the volunteer service organization's need to acquire the student's service; 6) description of: (a) the educational or career exploration benefits the student and the school should expect to gain, including the student learning standards to be achieved, from the student's community or volunteer service participation; and (b) the service and benefit the community service organization or volunteer service organization expects to gain from the student's participation; 7) the description of how the community or volunteer service activity relates to a course in which the student is enrolled or intends to enroll; 8) manner and frequency in which the student and the community or volunteer service activity will be evaluated; 9) the name of the certificated school employee who will be responsible for monitoring and evaluating the student's activity and performance and assigning the student a grade for participation under this section; and 10) any other information required by the principal.

**QUANTITATIVE REASONING (QR) COURSES**

The State Board created a new category of courses called “Quantitative Reasoning” courses. These are existing courses that help advance a student’s ability to apply mathematics in real-world situations and contexts. General diploma students will be required to earn two (2) credits in a Mathematics course or a Quantitative Reasoning course during their junior or senior year. Core 40, Academic Honors, and Technical Honors students will be required to be enrolled in a Mathematics course or a Quantitative Reasoning course each year they are in high school. QR courses DO NOT count as a math credit.

Current Frontier courses considered to be Quantitative Reasoning courses include the following:

* Advanced Life Sciences Animals
* Advanced Life Sciences Food
* Agricultural Research Capstone
* Agriculture Structures Fabrication and Design
* Agriculture Mechanization and Technology Capstone
* Landscape Management Capstone
* Construction Trades Capstone
* Chemistry I
* Chemistry II
* Economics
* Integrated Chemistry Physics
* Personal Finance
* Physics

New courses eligible for QR, will be available through the Guidance Counselor.

**NEXT LEVEL PROGRAMS OF STUDY**

*Pathways offered at Frontier*

****

**Next Level Programs of Study - Agriculture**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-Agriculture** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Food & Natural Resources | Ag Mechanical and Engineering | Principles of Agriculture | Agriculture Power, Structures & Technology | Agri. Structures Fabrication and Design | Agri. Mechanization and Technology Capstone |
| Food & Natural Resources | Agriscience - Animals | Principles of Agriculture | Animal Science | Adv. Life Science, Animals | Agricultural Research Capstone |
| Food & Natural Resources | Landscaping | Principles of Agriculture | Horticulture Science | Landscape and Turf Management | Landscape Management Capstone |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

**PRINCIPLES OF AGRICULTURE \*7117**

Grade Level: 9, 10, 11, 12

Prerequisites: None, however, students must take this class before taking any other ag classes (may be taken concurrently with another ag course)

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective credits for all diplomas

Ivy Tech Dual Credit: AGRI 100 Intro to Ag

Description: Principles of Agriculture is a two-semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety, and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.

**AGRICULTURAL POWER, STRUCTURE AND TECHNOLOGY  \*5088**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Agriculture

Credit: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas

Ivy Tech Dual Credit: AGRI 106 Agricultural Mechanization

Description: Agriculture Power, Structure and Technology is a two semester, up to six credits, lab intensive course in which students develop an understanding of basic principles of tool selection, operation, maintenance, and management of agricultural equipment in concert with the utilization of technology. Topics covered include: safety, problem solving/troubleshooting, 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

**AGRICULTURE STRUCTURES, FABRICATIONS AND DESIGN \*7112**

Grade Level: 10, 11, 12

Prerequisites: Principles of Agriculture

Required Prerequisites: Principles of Agriculture

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective credits for all diplomas, Counts as a quantitative reasoning course

Ivy Tech Dual Credit: AGRI TBD

Agricultural Structures Fabrication and Design is a two-semester course that focuses on metal work and agricultural structures. This course will allow students to develop skills in welding and metalworking such as metal identification and properties, metal preparation, use of oxy-acetylene torch, plasma cutting and cutting operations, arc welding, MIG welding, TIG welding. This course will also allow students to develop skills in construction in regard to the ag industry such as carpentry, masonry, etc.

**ANIMAL SCIENCE \*5008**

Grade Level: 9, 10, 11, 12

Prerequisites:  Principles of Agriculture

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas, Fulfills a science course requirement for all diplomas, Fulfills a physical science requirement for general diploma

Ivy Tech Dual Credit: AGRI 103 ANIMAL SCIENCE

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

**ADVANCED LIFE SCIENCE ANIMALS** \***5070**

Grade Level: 11, 12

Prerequisites: Principles of Agriculture, Chemistry and Biology.

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Fulfills a science requirement for all diplomas, Counts as a quantitative reasoning course, Counts as an elective or directed elective for all diplomas

Ivy Tech Dual Credits:  AGRI 107

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

**HORTICULTURE SCIENCE \*5132 (Offered every other year 2024-2025, 2026-2027)**

Grade Level: 10, 11 -12

Prerequisites:      Principles of Agriculture

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas, Fulfills a Life Science or Physical Science requirement for the General Diploma

Ivy Tech Dual Credits: AGRI 116  SURVEY OF HORTICULTURE

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

**LANDSCAPE AND TURF MANAGEMENT \*7115 (Offered every other year, 2023-2024, 2025-2026…)**

Grade Level: 10, 11,12

Prerequisites: Principles of Agriculture

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective credits for all diplomas

Ivy Tech Dual Credits:  AGRI 164 Landscape Design

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

**AGRICULTURE MECHANIZATION AND TECHNOLOGY CAPSTONE \*7228**

Grade Level: 11, 12

Required Prerequisites: Ag Power, Structures and Technology; Ag Structures Fabrication and Design

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits max

Counts as a directed elective or elective credits for all diplomas, Counts as a quantitative reasoning course

The Agriculture Mechanization and Technology Capstone builds upon the knowledge and skills developed in the Principles, Ag Power, Structures and Technology, Agricultural Structures Fabrication and Design courses by developing advanced skills that students can apply to the field. Students enrolled in this course will participate in lab activities involving agricultural equipment such as fueled power engines, electrical motors, pneumatic and hydraulic systems, etc. Students will be instructed on the operation, maintenance, repair, engineering and design of the agricultural mechanics and technology systems. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience.

**LANDSCAPE MANAGEMENT CAPSTONE \*7234**

Grade Level: 11, 12

Required Prerequisites: Principles of Agriculture; Horticultural Science; Landscape and Turf Management

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits max

Counts as a directed elective or elective credits for all diplomas, Counts as a quantitative reasoning course

The Landscape Capstone course builds upon the knowledge and skills developed in the Principles, Horticultural Science and Landscape and Turf Management courses by developing advanced skills that students can apply to the field. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive work-based learning experience.

**AGRICULTURAL RESEARCH CAPSTONE \*7262**

Grade Level: 11, 12

Required Prerequisites: Any Agriculture Concentrator Sequence

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits max

Counts as a directed elective or elective credits for all diplomas, Counts as a quantitative reasoning course

The Agricultural Research Capstone includes extended laboratory, field, and literature investigations in one or more specialized agricultural science disciplines, such as animal, plant, food, natural resources, biotechnology, engineering, etc. Students enrolled in this course will apply scientific applications, concepts, principles, and design processes to solve complex, real-world issues in agriculture. Students will become familiar with laboratory procedures used in an educational, research, or industrial setting. Students will complete an end-of-course project and presentation, such as a scientific research paper, agriscience fair project, or some other suitable presentation of their findings. This course can be used as a capstone experience for any agriculture pathway.

**Next Level Programs of Study – Family Consumer Science**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-FACS** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Human Services | Human and Social Services | Principles of Human Services | Understanding Diversity | Relationships and Emotions | Human and Social Services Capstone |
| Hospitality and Tourism | Culinary Arts | Principles of Culinary and Hospitality  | Nutrition | Culinary Arts | Culinary Capstone/ Pastry and Baking Capstone |
| Education and Training | Education Professions | Principles of Teaching  | Child Development | Teaching and Learning | Education Professions Capstone |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

**PRINCIPLES OF HUMAN SERVICES \*7176**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Description:  Principles of Human Services explores the history of human services, career opportunities, and the role of the human service worker. Focuses on target populations and community agencies designed to meet the needs of various populations. The course includes a required job shadowing project in a Human Services setting (a suggested four-hour minimum to meet Ivy Tech requirements). This course will also encourage cultural awareness and appreciation of diversity. Focuses on cultural variations in attitudes, values, language, gestures, and customs. Includes information about major racial and ethnic groups in the United States.

**ADVANCED HUMAN SERVICES \*7174**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Human Services
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Description: Relationship & Emotions examines the key elements of healthy relationships. Explores the main problems that damage relationships. Presents research findings on successful and unsuccessful relationships, and emotional connections. Explores the impact of one’s emotional and relationship history on current and future romantic relationships. Presents practical, scientific-based skills for improving relationships. Additionally, this course offers practical and useful information for people who have experienced loss. Students have the opportunity to evaluate their own experiences and attitudes toward loss and grief.

**RELATIONSHIPS AND EMOTIONS \*7177**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Human Services

Recommended Prerequisites: none

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Relationship & Emotions examines the key elements of healthy relationships. Explores the main problems that damage relationships. Presents research findings on successful and unsuccessful relationships, and emotional connections. Explores the impact of one’s emotional and relationship history on current and future romantic relationships. Presents practical, scientific-based skills for improving relationships. Additionally, this course offers practical and useful information for people who have experienced loss. Students have the opportunity to evaluate their own experiences and attitudes toward loss and grief.

**HUMAN AND SOCIAL SERVICES CAPSTONE \*7241**

Grade Level: 11, 12
Required Prerequisites: Relationships & Emotions; Understanding Diversity
Recommended Prerequisites: none
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

Description: This course provides opportunities to increase effectiveness in helping people. Examines the helping process in terms of skills, helping stages, and issues involved in a helping relationship. This course also introduces and develops basic interviewing skills. Includes assessment strategies and treatment planning. This course provides basic information about the problems of alcohol and other drug abuse. Explores symptoms and effects of abuse and dependence on individuals, families, and society Additionally, this course studies group dynamics, issues and behavior. Includes group functioning and leadership, guidelines on working effectively with a co-leader, and practical ways of evaluating the group processes. It provides an overview of legal and ethical aspects in the field of human services with implications for the human service worker. Includes topics such as confidentiality, rights of clients, client records, equal protection for staff and clients, and discrimination. The Human Service Ethical Code and related codes are covered with an overview of ethical dimensions of practice.

**PRINCIPLES OF CULINARY AND HOSPITALITY \*7173**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: HOSP 101 Sanitation and First Aid, HOSP 102 Basic Food Theory & Safety

Description: Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment.

**NUTRITION \*7171**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Culinary and Hospitality
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: HOSP 104 Nutrition

Description:  Nutrition students will learn the characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient dense meals or examining nutritional needs of student athletes.

**CULINARY ARTS \*7169**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Culinary and Hospitality
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: HOSP 105 Introduction to Baking, HOSP 103 Soups, Stocks, & Sauces

Description:  Culinary Arts teaches students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

**CULINARY ARTS CAPSTONE \*7233**

Grade Level: 11, 12
Required Prerequisites: Principles of Culinary and Hospitality; Nutrition; Culinary Arts
Recommended Prerequisites: none
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

Description: This course covers the techniques and skills needed in breakfast cookery as well as insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes and appetizers. This course also covers the necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

**BAKERY AND PASTRY CAPSTONE \*7235**

Grade Level: 11, 12
Required Prerequisites: Principles of Culinary and Hospitality; Nutrition; Culinary Arts
Recommended Prerequisites: none
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

Description: The objective of this course is to help students understand the science of baking and the different reactions that take place based on the ingredients, temperatures, and equipment in relation to the final product. The course requires students to produce and finish a variety of cakes. The course emphasizes application techniques, color coordination, and the flavor and texture of fillings. Students will practice the techniques of basic cake decorating.This course will also address classical French and European desserts, including the preparation of goods such as Napoleons, Gateau St. Honoré, petit fours and petit fours sec, ganaches, pastry creams and fillings, sauces, flans and tarts, and European sponges. The course also includes instruction in tempering of chocolates, molding, and chocolate plastique, preparation of truffles, pastillage and marzipan, short doughs, and meringues. The student will be instructed in the latest preparation methods, innovative ideas for impressive plate presentations, and techniques that utilize specialized equipment and tools to make high-tech, novel creations

**Next Level Programs of Study - Business**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-Business** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Arts, AV Tech and Communications | Digital Design | Principles of Digital Design | Digital Design Graphics | Graphic Design and Layout -or-Interactive Media Design | Digital Design Capstone |
| Marketing | Marketing and Sales | Principles of Business Mgnt. | Marketing Fundamentals | Digital Marketing | Business Management Capstone |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

 **PRINCIPLES OF BUSINESS MANAGEMENT \*4562**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: Digital Applications and Responsibility
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: BUSN 101 Intro to Business, BOAT 207 Integrated Microsoft Application

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

**MARKETING FUNDAMENTALS \*5914**

Grade Level: 11,12
Required Prerequisites: Principles of Business Management
Recommended Prerequisites: none • Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Marketing Fundamentals provides a basic introduction to the scope and importance of marketing in the global economy. Course topics include the seven functions of marketing: promotion, channel management, pricing, product/service management, market planning, marketing information management, and professional selling skills. Emphasis is marketing content but will involve use of oral and written communications, mathematical applications, problem-solving, and critical thinking skills through the development of an integrated marketing plan and other projects.

**DIGITAL MARKETING \*7145**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Business Management; Marketing Fundamentals

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas

Description: Digital Marketing provides an introduction to the world of e-commerce and digital marketing media. The course covers how to integrate digital media and e-commerce into organizational and marketing strategy. Students will explore e-commerce applications and the most popular digital marketing tactics and tools. Emphasizes familiarity with executing digital media, understanding the marketing objectives that digital media can help organizations achieve, and establishing and enhancing an organization’s digital marketing presence

**BUSINESS MANAGEMENT CAPSTONE \*7201**

Grade Level: 11, 12
Required Prerequisites: Any CTE Business Concentrator Sequence except Business Administration
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas
Recommended Capstone course for Marketing Programs of Study

The Business Management Capstone is designed to provide any student with the Business Management skills necessary to run their own business or to serve in upper level management. Students will explore Management Theory, Accounting, and Business Law. The Business Management Capstone can be used with any career pathway except Business Administration. Completion of the course may allow students the opportunity to earn a CT or TC through ITCC.

**PRINCIPLES OF DIGITAL DESIGN \*7140**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas

Ivy Tech: VISC 101 Design Fundamentals

Principles of Digital Design introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. Students will have the opportunity to apply the design theory through an understanding of basic photographic theory and technique. Topics will include image capture, processing, various output methods, and light.

**DIGITAL DESIGN GRAPHICS \*7141**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Digital Design
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: VISC 115 Vector Graphics Des. Pub.

Digital Design Graphics will help students to understand and create the most common types of computer graphics used in visual communications. Skills are developed through work with professional vector-based and page layout software used in the industry. Additionally, students will be introduced to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices.

**GRAPHIC DESIGN AND LAYOUT \*5550**

Recommended Grade(s): 11, 12
Required Prerequisites: Principles of Digital Design; Digital Design Graphics
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: VISC 102/ VISC 115 Graphic Design

Graphic Design and Layout teaches design process and the proper and creative use of type as a means to develop effective communications for global, corporate and social application. Students will create samples for a portfolio, which may include elements or comprehensive projects in logo, stationery, posters, newspaper, magazine, billboard, and interface design

**DIGITAL DESIGN CAPSTONE \*7246**

Recommended Grade(s): 11, 12
Required Prerequisites: Digital Design Concentrator Sequence
Recommended Prerequisites: none CCredits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

The Digital Design Capstone course provides students the opportunity to dive deeper into advanced concepts of Visual Communication including user experience/user interface design, video production editing, animation and/or web design. Depending on the length of the course, students may focus their efforts on one area or explore multiple aspects.

**Next Level Programs of Study – Health Science**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-Nursing** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Health Sciences | Pre-Nursing / Healthcare Specialist | Principles of Healthcare | Medical Terminology | Healthcare Specialist: CNA(Held at TL/BC) | Healthcare Specialist Capstone(Held at TL/BC) |
| Health Sciences | Exercise Science | Principles of Exercise Science | Kinesiology | Human Performance | Physical Therapy Capstone |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

**PRINCIPLES OF HEALTHCARE \*7168**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Ivy Tech: HLHS 100 Intro to Healthcare

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student’s career objectives. • Recommended Grade(s): 9, 10, 11 • Required Prerequisites: none • Recommended Prerequisites: none • Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas

**MEDICAL TERMINOLOGY \*5274**

Grade Level: 11, 12
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
Counts as a directed elective or elective for all diplomas

Ivy Tech: HLHS 101 Medicatl Terminology

Description: Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

**HEALTHCARE SPECIALIST \*7166**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Healthcare
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

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

**HEALTHCARE SPECIALIST CAPSTONE \*7255**

 Grade Level: 11, 12
Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
Recommended Prerequisites: none
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

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

**PRINCIPLES OF EXERCISE SCIENCE \*7320**

Recommended Grade Level: 9, 10, 11

Prerequisites: None

Credits: 2 semester course, 2 semesters required, 1 credit per semester

Counts as a Directed Elective or Elective for all diplomas

Description: Principles of Exercise Science provides an introduction to the science of exercise and human movement. Special topics include exercise physiology, sport biomechanics, sports medicine, and motor integration. Additionally, the course will examine career options in sport, health and wellness, education, and the medical fields like personal trainer, athletic training and physical therapy.

**KINESIOLOGY \*7321**

Recommended Grade Level: 10, 11, 12

Prerequisites: Principles of Exercise Science

Credits: 2 semester course, 2 semesters required, 1 credit per semester

Counts as a directed elective or elective for all diploma types, fulfills a science requirement for all diploma types

Description: Kinesiology students will study fundamental concepts concerning the interaction of biological and mechanical aspects of the musculoskeletal and neuromuscular structures. An emphasis on practical applications of the concepts will be accomplished through an introduction to fitness training methods and modalities for developing specific conditioning effects in individuals. Laboratory sessions focus on anatomy and physiology of the musculoskeletal and cardiovascular systems, theories on fitness programming, and injury avoidance in fitness environments.

**HUMAN PERFORMANCE \*7322**

Recommended Grade Level: 10, 11, 12

Prerequisites: Principles of Exercise Science

Credits: 2 semester course, 2 semesters required, 1 credit per semester

Counts as a directed elective or elective for all diplomas

Description: Students in Human Performance will learn basic human physiology relating to exercise and how the body adapts to acute and chronic physical activity. Systems covered include cellular metabolic processes, energy systems, and the effects of exercise on the respiratory, nervous, cardiovascular, endocrine, skeletal, and muscular systems. The course will also study the basic nutritional principles needed for optimal athletic and human performance.

**PHYSICAL THERAPY CAPSTONE \*7323**

Recommended Grade Level: 11, 12

Prerequisites: Principles of Exercise Science; Kinesiology; Human Performance

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester

Counts as a directed elective or elective for all diplomas

Description: The Physical Therapy Capstone course is designed to provide students the opportunity to explore the role of a physical therapy assistant and to practice technical skills previously learned in the classroom. It prepares students with the knowledge, skills, and attitudes essential for providing basic care in extended care facilities, hospitals, and home health agencies under the direction of licensed physical therapists. In addition, students will learn skills specific to physical therapy including observing patients’ progress, helping patients do specific exercises, using massage and stretching for treatment, aiding patients with devises for movement, educating patients and families, and basic assisting in cleaning treatment areas and clerical work.

**Next Level Programs of Study – Automotive Services**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-Auto Service** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Transportation, Distribution & Logistics | Automotive Services | Principles of Automotive Services(Held at BC) | Brake Systems(Held at BC) | Steering and Suspensions(Held at BC) | Automotive Service Capstone(Held at BC) |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

**PRINCIPLES OF AUTOMOTIVE SERVICES \*7213**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.

**BRAKE SYSTEMS \*7205**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Automotive Services
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas
Schools partnering with Vincennes University must offer the program of study as part of a 2-3 period block.

This course gives students an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in various automotive systems. Additionally, it teaches theory, service and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today’s automobiles. This course will emphasize professional diagnosis and repair methods for brake systems

**STEERING AND SUSPENSIONS \*7212**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Automotive Services
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas
Schools partnering with Vincennes University must offer the program of study as part of a 2-3 period block.

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

**AUTOMOTIVE SERVICE CAPSTONE \*7375**

Grad Level: 11, 12
Required Prerequisites: Principles of Automotive Services; Brake Systems; Steering and Suspensions
Recommended Prerequisites: none
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

This course further explores important skills and competencies within the Automotive Service Technology Pathway. Topics such as Steering & Suspension, Engine Repair, Climate Control, and Driveline Service. Additionally, Co-Op and Internship opportunities will be available for students.

**Next Level Programs of Study – Law Enforcement**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-Law Enforcement** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Law, Public Safety, Corrections, and Security | Criminal Justice | Principles of Criminal Justice(Held at Delphi) | Law Enforcement Fundamentals(Held at Delphi) | Corrections and Cultural Awareness(Held at Delphi) | Criminal Justice Capstone(Held at Delphi) |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

**PRINCIPLES OF CRIMINAL JUSTICE \*7193**

Grade Level: 9, 10, 11
Required Prerequisites: none
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

**LAW ENFORCEMENT FUNDAMENTALS \*7191**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Criminal Justice

Recommended Prerequisites: none

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas

Law Enforcement Fundamentals Critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis. Additionally, this course will introduce fundamental law enforcement operations and organization. This includes the evolution of law enforcement at federal, state, and local levels.

**CORRECTIONS AND CULTURAL AWARENESS \*7188**

Grade Level: 10, 11, 12
Required Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
Counts as a directed elective or elective for all diplomas

Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are stressed. Additionally, this course takes a further examination of the American correctional system; the study of administration of local, state, and federal correctional agencies. The examination also includes the history and development of correctional policies and practices, criminal sentencing, jails, prisons, alternative sentencing, prisoner rights, rehabilitation, and community corrections including probation and parole. Current philosophies of corrections and the debates surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments, and special populations are discussed.

**CRIMINAL JUSTICE CAPSTONE \*7231**

Grade Level: 11, 12

Required Prerequisites: Principles of Criminal Justice; Law Enforcement Fundamentals, Corrections and Cultural Awareness

Recommended Prerequisites: none
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

The Criminal Justice Capstone course allows students to complete additional instruction to earn a postsecondary certificate and should include a work-based learning component such as job shadowing, internship, etc. once the core content is completed. Note that there may be age restrictions on work based learning components.

**Next Level Programs of Study – Construction Trades**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cluster-Law Enforcement** | **Career Pathway** | **Principles-Level 1** | **CTE Concentrator A-Level I** | **CTE Concentrator B-Level I** | **Pathway Capstone Level II** |
| Architecture and Construction | Construction Trades - Carpentry | Principles of Construction Trades(Held at BC) | Construction Trades: General Carpentry(Held at BC) | Construction Trades: Framing and Finishing(Held at BC) | Construction Trades Capstone(Held at BC) |

\*Capstone Level II classes are senior level work-based learning classes approved by instructor.

**PRINCIPLES OF CONSTRUCTION TRADES \*7130**

Grade Level: 9, 10, 11

Required Prerequisites: None

Credits: 2 semester course, 2 semesters required, 1 credit per semester

Counts as a directed elective or elective for all diplomas

Principles of Construction Trades provides students with the basic skills needed to continue in a construction trade field. Covered topics include an introduction to the types and uses for common hand and power tools, learning the types and basic terminology associated with construction drawings, and basic worksite safety. Additionally, students study the roles of individuals and companies within the construction industry. Emphasis is placed on the importance of mathematical and communication skills within the construction industry.

**CONSTRUCTION TRADES \*7123**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Construction Trades

Credits: 2 semester course, 2 semesters required, 1 credit per semester

Counts as a directed elective or elective for all diplomas

General Carpentry CON TRD GC Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. Students learn the procedures for laying out and constructing floor systems, wall systems, and ceiling joists. Students also spend time learning the 226 Indiana Department of Education High School Course Titles and Descriptions: 2024-2025 principles of roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.

**CONSTRUCTION TRADES: FRAMING AND FINISHING \*7122**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry

Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Counts as a directed elective or elective for all diplomas

Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Covered topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

**CONSTRUCTION TRADES CAPSTONE** \***7242**

Grade Level: 11, 12

Required Prerequisites: Principles of Construction Trades; Construction Trades: General Carpentry; and Construction Trades: Framing and Finishing

Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum

Counts as a directed elective or elective for all diplomas, Counts as a quantitative reasoning course

The Construction Trades Capstone covers the basics of electricity and working with concrete. Electrical topics include the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. Students may also gain an understanding of concrete properties, foundations, slab-on-grades, and vertical and horizontal formwork. The course prepares students for the NCCER Carpentry Forms Level 3 and Electrical Level 1 Certificates. 227 Indiana Department of Education High School Course Titles and Descriptions: 2024-2025

**CAREER TECHNICAL EDUCATION CLASSES OFFERED AS ELECTIVES AND/OR INDEPENDENT STUDY**

**AGRICULTURE SPECIAL TOPICS \*6150 (Upon instructor approval, independent study only)**

Grade Level: 11,12

Required Prerequisites: None

Recommended Prerequisites: Into to Ag Food and Natural Resources
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 12 credits max
Counts as a Directed Elective or Elective for all diplomas

Description:  Agriculture: Special Topics is an extended learning experience designed to address the advancement and specialization of careers within the career cluster through the provision of a specialized course for a specific workforce needed in the school’s region. The learning experience is at a qualified site, and is designed to give the student the opportunity to learn and practice technical skills while working under the direction of the appropriately licensed professional. Throughout the course, students will focus on learning about employment opportunities and obtaining the knowledge, skills and attitudes essential for success in specific occupations. Course standards and curriculum must be tailored to the specific profession, preparing students to advance in this career field, and where applicable, provide students with opportunities for certification or dual credit. Participation in a related CTSO encourages the development of leadership, communication and career related skills, and opportunities for community service.

**ADVANCED CAREER AND TECHNICAL EDUCATION** **\*6130 (Upon instructor approval, independent study only)**

Grade Level: 11,12

Required Prerequisites: None

Recommended Prerequisites: None
Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 12 credits max
Counts as a Directed Elective or Elective for all diplomas

Description: Advanced Career and Technical Education, College Credit is a course title covering any CTE advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school. The intent of this course is to allow students to earn college credit for courses with content that goes beyond that currently approved for high school credit. This course may be used for any dual enrollment course, including a joint program of study involving a postsecondary partnership, 74 Indiana Department of Education High School Course Titles and Descriptions Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination of the two; and taught by higher education faculty. This course should be used when an aligned secondary course is not available on the CTE Dual Credit Crosswalk. .One secondary credit should equal at least three post-secondary credits

 **LEADERSHIP DEVELOPMENT IN ACTION \*5237** **(AVAILABLE FOR STUDENTS IN FFA, BPA, FCCLA)**

Grade Level: 10, 11, 12

Required Prerequisites: Preparing for College and Careers and a sequence of coureses relevant to the students pathway

Recommended Prerequisites: None
Credits: 2 semester course, 2 semester required, 1 credit per semester, 6 credits max
Counts as a Directed Elective or Elective for all diplomas

Description: Leadership Development in Action is a project-based course in which students integrate higher order thinking, communication, leadership, and management processes to conduct Career and Technical Student Organization (CTSO) leadership projects at the local, state, or national level. Each student will create a vision statement, establish standards and goals, design and implement an action plan and timeline, reflect on their accomplishments, and evaluate results. Authentic, independent application through CTSO student-directed programs or projects, internship, community based study, or in-depth laboratory experience is required. Research and development, interdisciplinary projects, and/or collaboration with postsecondary faculty, community agencies or organizations are appropriate approaches. Membership in an Indiana recognized CTSO is required. Service learning experiences are highly recommended. Achievement of applicable Career and Technical Education (CTE), academic, and employability competencies will be documented through a required student portfolio.

Career and Technical Student Organizations (CTSOs) Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students enrolled in Leadership Development in Action are required to be a member of an Indiana Recognized Career and Technical Student Organization.

**PLANT AND SOIL SCIENCE \*5170 (Currently not offered, may take independently with teacher approval)**

**IVY TECH AGRI 105 PLANT SCIENCE**

Grade Level: 10, 11, 12

Required Prerequisites: Principles of Ag

Recommended Prerequisites: Intro to Ag Food and Natural Resources
Credits: 2 semester course, 2 semester required, 1 credit per semester, 2 credits max
Counts as a Directed Elective or Elective for all diplomas. Fulfills a science course requirement for all
 diplomas.

Description: Plant and Soil Science is a two semester course that provides students with opportunities to participate in a variety of activities including laboratory work.  Topics covered include: the taxonomy of plants, the various plant components and their functions, plant growth, plant reproduction and propagation, photosynthesis and respiration, environmental factors affecting plant growth, diseases and pests of plants and their management, biotechnology, the basic components of types of soil, calculation of fertilizer application rates and procedures for application, soil tillage and conservation, irrigation and drainage, land measurement, cropping systems, precision agriculture, principles and benefits of  global positioning systems, harvesting, and career opportunities in the field of plant and soil science.

**ADVANCED LIFE SCIENCE PLANT and SOILS\*5074 (Offered with instructor approval only, independent study)
IVY TECH AGRI 109 ADVANCED PLANT AND SOIL SCIENCE**

Grade Level: 11, 12

Required Prerequisites: Principles of Ag

Recommended Prerequisites: Into to Ag Food and Natural Resources, Plant and Soil Science, Biology and Chemisty
Credits: 2 semester course, 2 semester required, 1 credit per semester, 2 credits max
Counts as a Directed Elective or Elective for all diplomas. Fulfills a science course requirement for all
 diplomas.

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

**FOOD SCIENCE \*5102 Independent Study Only**

**IVYTECH AGRI 104 FOOD SCIENCE**

Grade Level: 9, 10, 11, 12

Required Prerequisites: Principles of Ag

Recommended Prerequisites: Intro to Ag Food and Natural Resources
Credits: 2 semester course, 2 semester required, 1 credit per semester, 2 credits max
Counts as a Directed Elective or Elective for all diplomas.

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

**ADVANCED LIFE SCIENCES FOODS**\***5072 (Offered with instructor approval only, independent study)
IVYTECH AGRI 108 ADVANCED LIFE SCIENCE FOODS**

 Grade Level: 11, 12

Required Prerequisites: Principles of Ag

Recommended Prerequisites: Intro to Ag Food and Natural Resources, Plant and Soil Science, Biology and Chemisty, Food Science
Credits: 2 semester course, 2 semester required, 1 credit per semester, 2 credits max
Counts as a Directed Elective or Elective for all diplomas. Fulfills a science course requirement for all
diplomas.

Description: Advanced Life Science: Foods is a course that provides students with opportunities to participate in a variety of activities including laboratory work. This is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in the context of foods and the global food industry. Students enrolled in this course formulate, design, and carry out food-base laboratory and field investigations as an essential course component. Students understand how biology, chemistry, and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging, and food storage. Students completing this course will be able to apply the principles of scientific inquiry to solve problems related to biology, physics, and chemistry in the context of highly advanced industry applications of foods.

**SUSTAINABLE ENERGY ALTERNATIVES \*5229
(Currently not offered, may take independently with teacher approval)**

**IVY TECH SUST 100 INTRO TO RENEWABLE ENERGIES**

Grade Level: 11, 12

Required Prerequisites: Principles of Ag

Recommended Prerequisites: Intro to Ag Food and Natural Resources,

Credits: 2 semester course, 2 semester required, 1 credit per semester, 2 credits max
Counts as a Directed Elective or Elective for all diplomas. Fulfills a science course requirement for all
diplomas.

Description: Sustainable Energy Alternatives broadens a student’s understanding of environmentally friendly energies.  In this course, students will use a combination of classroom, laboratory, and field experiences to analyze, critique, and design alternative energy systems.  Class content and activities center on renewability and sustainability for our planet.  Topics covered in this course include the following types of alternative energies: solar, wind, geothermal, biomass and emerging technologies.  Leadership development, supervised agricultural experience and career exploration opportunities in the field sustainable energy are also included.

**SUPERVISED AGRICULTURAL EXPERIENCE (SAE)\*5228 (Offered during summer)**

Grade Level: 9, 10, 11, 12

Required Prerequisites: None

Recommended Prerequisites: Intro to Ag Food and Natural Resources,

Credits: 1 semester course, 4 credits max (Course holds a .5 value)
Counts as a Directed Elective or Elective for all diplomas. Fulfills a science course requirement for all
diplomas.

Description: Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students should experience and apply what is learned in the classroom, laboratory, and training site to real-life situations. Students work closely with their agricultural science and business teacher(s), parents, and/or employers to get the most out of their SAE program. This course should be offered each semester as well as during the summer session. SAE may be offered as a Cooperative Education Program. Curriculum content and competencies should be varied so that school year and summer session experiences are not duplicated. The course may be offered on an independent study basis.

**PREPARING FOR COLLEGE AND CAREERS (PCC) \*5394**

Grade Level: 8, 9
Required Prerequisites: None
Recommended Prerequisites: None
Credits: 1 semester course, 1 credit max
Counts as a Directed Elective or Elective for all diplomas

Description: Preparing for College and Careers (PCC) addresses the knowledge and skills, and behaviors all students need to be successful in college, career, and life. The focus of the course is the impact of today’s choice on tomorrow’s possibilities. Topics to be address include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interest, 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 career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations and real life experiences.

**ARTICULATED COURSES FOR FRONTIER JR/SR HIGH SCHOOL AND
IVY TECH STATE COLLEGE ARTICULATED/DUAL CREDITS**

Business/Graphics: Principles of Business Mngt BUSN 101/BOAT207 Intro to Business
 Intgregrated Microsoft Application

Graphic Design & Layout VISC 102 Raster Graphics I

Principles of Digital Design VISC 101/PHOT 104 Design Fundamentals Basic Photograhy

Digital Design Graphics VISC 115 Vector Graphics Des. Pub.

Marketing Fundamentals MKTG 101 Principles of Marketing

Sciences: Chemisty I CHEM 101 Into to Chemistry

 Chemisty II CHEM 105/CHEM 106 Chemisty

 Anatomy & Physiology APHY 101/102 Anatomy & Physiology

Agriculture: Priciples of Ag AGRI 100 Intro to Ag

 Animal Science AGRI 103 Animal Science
 Ag Power, Structure, & Technology AGRI 106 Agricultural Mechanization
 Horticulture AGRI 116 Survey of Horticulture

 Advanced Life Science Animal AGRI 107 Advanced Life Science

 Landscape & Turf Management AGRI 164 Landscape Design

Family Consumer Principles of Culinary & Hospitality HOSP 101 Sanitation and First Aid
Science: HOSP102 Basic Food Theory & Safety

 Nutrition HOSP104 Nutrition

 Culinary Arts HOSP 105 Introduction to Baking

 HOSP 103 Soups, Stocks & Sauces

Health Science: Principles of Healthcare HLHS 100 Into to Healthcare

 Medical Terminolgy HLHS 101 Medical Terminology

English: CreativeWriting ENGL 202 Creative Writing

Math: Quantitative Reasoning MATH 123 Quantitative Reasoning

 Pre-Calculus MATH 136 Pre-Calculus

 MATH 137 Trigonometry with Analytic Geometry

**ARTICULATED COURSES FOR FRONTIER JR/SR HIGH SCHOOL AND
INDIANA UNIVERSITY KOKOMO ARTICULATED/DUAL CREDITS**

English: ACP English 12 W131 Reading, Writing & Inquiry

ACP English L202 Literature

ACP Speech S121 Public Speaking

History: ACP US History H105/H106 American History

Mathematics: ACP Calculus M215 Calculus

Spanish: ACP Spanish III S150 Elementary Spanish

**DUAL ENROLL COURSES**

Students have the option of attending Ivy Tech Community College under the Dual Enroll Program. This program allows students to attend Ivy Tech and receive both high school and college credits during high school. Students must talk to the guidance department before applying to Ivy Tech. The guidance department will connect the student with the Ivy Tech designee. Students who attend classes taught by an Ivy Tech instructor may be eligible for 50% tuition reimbursement from the Frontier School Corporation. The student must receive a grade of "C” or better, provide an Ivy Tech transcript, and proof of tuition payment to receive reimbursement.



INDIANA COLLEGE CORE

The Indiana College Core consists of 30 semester hours of credit, the completion of which at one public institution means it can transfer as a block and count as satisfying the Indiana College Core equivalent at the receiving institution.

The Indiana College Core is based on competencies and learning outcomes in six areas:

**Foundational Intellectual Skills**

~ Quantitative Reasoning

~ Speaking and Listening

~ Written Communication

**Ways of Knowing**

~ Human and Artistic

~ Scientific

~ Social and Behavioral

**Indiana College Core Classes offered at Frontier Jr. Sr. High School**

Chemistry I—CHEM 101 (Ivy Tech) - 3 college credit hours

Chemistry II—CHEM 105 and CHEM 106 (Ivy Tech) - 10 college credit hours

Pre-Calculus—MATH 136 and MATH 137 (Ivy Tech) – 6 college credit hours

ACP Calculus—M215 (IUK) – 5 college credit hours

Quantitative Reasoning—MATH 123 (Ivy Tech) – 3 college credit hours

ACP Speech—S121 (IUK) – 3 college credit hours

ACP English—W131 and L202 (IUK)- 6 college credit hours

Creative Writing—ENGL 202 (Ivy Tech) – 3 college credit hours

ACP US History- H105 and H106 (IUK) – 6 college credit hours

ACP Spanish III- S150 (IUK) – 3 college credit hours

**Sophomore year:**

Chemistry I

ACP Spanish III

**Junior year:**

ACP US History

Pre-Calculus

**Junior/Senior year:**

ACP Speech

Chemistry II

**Senior year:**

ACP Calculus

Quantitative Reasoning

ACP English 12

Creative Writing

|  |  |
| --- | --- |
| C:\Users\cmcmindes\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\99C8789A.tmp |  |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Written Communication- 3 credit hours minimum - no more than 6 |  |
| ENGL W131 Reading, Writing, and Inquiry IUK (3) |  |
| \*ENGL 111 English Composition ITCC (3) |  |
|  |  |
| Speaking & Listening- 3 credit hours minimum - no more than 6 |  |
| SI21 Public Speaking IUK (3) |  |
| \*COMM 101 Fundamentals of Public Speaking ITCC (3) |  |
|  |  |
| Quantitative Reasoning-3 credit hours minimum - no more than 15 |  |
| MATH 123 Quantitative Reasoning ITCC (3) |  |
| MATH 136 College Algebra ITCC (3) |  |
| MATH 137 Trig with Analytic Geometry ITCC (3) |  |
| MATH 215 Calculus I IUK (5) |  |
|  |  |
| Scientific Ways of Knowledge-3 credit hours minimum - no more than 15 |  |
| CHEM101 Introduction to Chemistry ITCC (3) |  |
| CHEM 105 General Chemistry I ITCC (5) |  |
| CHEM 106 General Chemistry II ITCC (5) |  |
| \*ASTR 101 Solar System Astronomy ITCC (3) |  |
|  |  |
| Social & Behavioral Ways of Knowing-3 credit hours minimum - no more than 15) |  |
| HIST105 American History I IUK (3) |  |
| HIST 106 American History II IUK (3) |  |
| \*PSYC 101 Intro to Psychology ITCC (3) |  |
| \*SOCI 111 Intro to Sociology ITCC (3) |  |
| \*POLS 101Intro to American Government & Politics ITCC (3) |  |
| \*ECON 101 Economics Fundamentals ITCC (3) |  |
|  |  |
| Humanistic Ways of Knowing- 3 credit hours minimum - no more than 15 |  |
| HISP S150 Elementary Spanish II IUK (4) |  |
| ENGL 202 Creative Writing ITCC (3) |  |
| ENGL 206 ITCC (3) or L202-IUK (3) |  |
| \*ARTH 110 Art Appreciation ITCC (3) |  |
| \*PHIL 101 Introduction to Philosophy (3) |  |
| \*PHIL 102 Introduction to Ethics (3) |  |
|  |  |
| **TOTAL CREDITS** | 0 |
| \* denotes classes offered only at Ivy Tech |  |