

# Curriculum Guide

## Switzerland County High School

Vevay, Indiana



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# Switzerland County High School Office Personnel

Principal .....	Jason Cheek
Assistant Principal/Athletic Director .....	Brian Graham
Guidance Counselor .....	Marla Edwards
Attendance Secretary .....	JoKay Beatty
Athletic Secretary.....	Kodi McAlister
Guidance Secretary .....	Gloria Day
Secretary to the Principal .....	Brittany Thayer
Nurse .....	Debbie Lucas
Resource Officer .....	Roy Leap

## Vision Statement

An environment where academic, social, and ethical growth is expected and where students share in and accept responsibility for their learning.

## Mission Statement

To create a culture of confidence in which all students are empowered with the academic, social, and ethical knowledge and skills to become well-rounded citizens ready for life beyond high school.

## Graduation Requirements

To receive a diploma from the Switzerland County School Corporation, both local and state requirements must be met. A student must earn 40 or more credits for graduation in grades 9 through 12 and be in attendance full time at least 7 semesters.

The State Board of Education requires that the following credits be included in the 40 credits required for graduation.

### Indiana Core 40 Diploma Requirements

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

**Core 40 with Academic Honors Diploma Requirements**  
***Minimum 47 credits***

Students must:

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

**Core 40 with Technical Honors Diploma**  
***Minimum 47 credits***

Students must:

- Complete all requirements for Core 40
- Earn 6 credits in the college and career preparation courses in state-approved College & Career Pathway and one of the following
  - State approved, industry recognized certification or credential
  - Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits
- Earn a grade of “C” or better in courses that will count toward the diploma
- Have a grade point average of a “B” or better
- Complete **one** of the following:
  - Any one of the options (A-F) of the core 40 with academic honors
  - Earn the following scores or higher on WorkKeys; Reading for Information – Level 6, Applied Mathematics – Level 6, and Locating Information – Level 5
  - Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75
  - Earn the following minimum score(s) on Compass; Algebra 66, Writing 70, Reading 80

# Graduation Pathways

Class of 2023 & Beyond

Students must satisfy **all three** of the following Graduation Pathway Requirements by completing **at least one** of the options in **each** box.

	Graduation Requirement	Graduation Pathway Options/Descriptions
<b>1</b>	<b>High School Diploma</b>	Meet the state of Indiana requirements for a high school diploma: <input type="checkbox"/> General <input type="checkbox"/> Core 40 <input type="checkbox"/> Academic Honors <input type="checkbox"/> Technical Honors
<b>2</b>	<b>Learn and Demonstrate Employability Skills</b>  (Students must complete <u>at least one</u> )	Students must complete one of the following: <ul style="list-style-type: none"> <li>• <b>Project-Based Learning:</b> working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or another experience as approved by the SBOE.                Description: _____                Verification Product: _____</li> <li>• <b>Service-Based Learning:</b> Integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. This can include participation in a meaningful volunteer or civic engagement experience, engagement in a school-based activity, such as a co-curricular or extracurricular activity or sport for at least one academic year, or another as approved by the SBOE.                Description: _____                Verification Product: _____</li> <li>• <b>Work-Based Learning:</b> Reinforces academic, technical, and social skills learned in the classroom through collaborative activities with employer partners, allowing students to apply classroom theories to practical problems, explore career options, and pursue personal and professional goals. This can include completion of course capstone, completion of an internship, obtaining the Governor's Work Ethic Certificate, employment outside of the school day, or another experience as approved by the SBOE.                Description: _____                Verification Product: _____</li> </ul>
<b>3</b>	<b>Postsecondary-Ready Competencies</b>  (Students must complete <u>at least one</u> )	<input type="checkbox"/> Honors Diploma <input type="checkbox"/> AHD <input type="checkbox"/> THD <input type="checkbox"/> ACT College Ready Benchmarks (18 in English or 22 in Reading AND 22 in Math or 23 in Science) English _____ or Reading _____ and Math _____ or Science _____ <input type="checkbox"/> SAT College Ready Benchmarks (480 EBRW, 530 Math)    EBRW _____ Math _____ <input type="checkbox"/> ASVAB (minimum score of 31)    AFQT score _____ <input type="checkbox"/> State and Industry Recognized Credential or Certificate    Certification _____ <input type="checkbox"/> CTE Concentrator (earn "C" average in at least 6 high school credits in career sequence) CTE1 _____ CTE2 _____ CTE3 _____ CTE4 _____ CTE5 _____ CTE6 _____ <input type="checkbox"/> AP/Dual Credit (earn "C" average in at least three courses - at least one in core) AP/DC1 _____ AP/DC2 _____ AP/DC3 _____

## **SAT Test Dates**

August 28, 2021

October 2, 2020 – Test offered at SCHS

November 6, 2021

December 4, 2021 – Test offered at SCHS

March 12, 2022 – Test offered at SCHS

May 7, 2022

June 4, 2022

## **ACT Test Dates**

September 11, 2021

October 23, 2021

December 11, 2021

February 12, 2022

April 2, 2022

June 11, 2022

July 16, 2022

## **CTE Concentrator Designations**

### **Perkins IV – Class of 2022**

Students must complete 6 high school credits in a specific career sequence and maintain a C average.

### **Perkins V – Class of 2023 and Class of 2024**

A student must earn a C average in at least two non-duplicative advanced courses within a particular program or program of study.

### **Perkins V Next Level Programs of Study (NLPS) – Class of 2025 and beyond**

A student must complete 6 high school credits in a specific sequence and maintain a C average. The student will need to complete the principles class first, and then continue on to the career sequence classes.

## Courses Offered by Department

\* Indicates a Dual Credit Course

^Indicates a course not offered during the 2021-2022 School Year

### Fine Arts/Word Language Department

- Advanced 2D Art
- Applied Music^
- Band
- Ceramics
- Choir
- Digital Design
- Introduction to 2D Art
- Music History
- Music Theory
- Spanish I
- Spanish II
- Spanish III
- Spanish IV^
- Visual Communications

### English Department

- English 9
- Honors English 9
- English 10
- Pre AP Honors English 10
- English 11
- Advanced English: English 111/223\*
- English 12
- Honors English 12
- Advanced English: English 215/221\*
- College Entrance Prep/SAT Prep
- Genres of Literature
- Grammar
- Speech

### Social Studies Department

- Civics
- Criminal Justice\* (*CRIM 101*)
- Economics
- Economics DC\* (*ECON 101 & ECON 201*)
- Ethnic Studies
- Government
- Honors Government\* (*POLS 101*)
- Indiana Studies
- Psychology

- US History
- US History DC\* (*HIST 101 & HIST 102*)
- World History and Civilization
- World Politics\* (*POLS 102*)^

### **Science Department**

1. Advanced Biology (*BIO 101*)
2. Anatomy and Physiology
3. AP Environmental Science^
4. Biology
5. Honors Biology
6. Chemistry I
7. Honors Chemistry I
8. Chemistry II
9. Integrated Chemistry-Physics
10. Honors ICP
11. Medical Terminology
12. PLTW: Human Body Systems\*
13. PLTW: Medical Intervention\*
14. PLTW: Principles of Biomedical Sciences\*

### **Math Department**

- Algebra I
- Algebra I Lab
- Honors Algebra I
- Algebra II
- Algebra II Lab
- Honors Algebra II
- AP Statistics^
- Calculus\* (*MATH 211*)
- Geometry
- Honors Geometry
- Pre-Calculus\* (*MATH 136*)
- Trigonometry\* (*MATH 137*)

### **PE/Health Department**

- Health
- PE
- Advanced PE
- Weightlifting

### **Agriculture Department**

- Agribusiness Management\* (*AGRI 102*)
- Agriculture Power, Structure, & Technology (Ag Mechanization and Advanced Ag Mechanization)\* (*AGRI 106*)
- ALS: Animal

- ALS: Food
- ALS: Plant and Soils
- Animal Science\* (*AGRI 107*)
- Food Science\* (*AGRI 108*)
- Horticulture Science\* (*AGRI 116*)
- Introduction to Agriculture, Food and Natural Resources
- Landscape Management I\* (*AGRI 164*)
- Landscape Management II
- Natural Resources\* (*AGRI 115*)^
- Plant and Soil Science\* (*AGRI 109*)
- Principles of Agriculture (*AGRI 100*)
- Supervised Ag Experience
- Sustainable Energy Alternatives\* (*AGRI 119*)

### **Business Department**

- Administrative and Office Management\* (*BUSN 105*)
- Business Law and Ethics\* (*BUSN 201*)
- Business Math^
- Computer Science I
- Graphic Design & Layout
- Accounting Fundamentals^
- Introduction to Business^
- Introduction to Computer Science
- Personal Financial Responsibility
- Principles of Business Management\* (*BUSN 101 & CINS 101*)
- Marketing Fundamentals\* (*MKTG 101 & MKTG 102*)

### **Southeastern Career Center Courses**

- Architectural Drafting & Design I & II\*
- Automotive Service Technology I & II\*
- Building and Facilities Maintenance I & II
- Computer Technical Support\*
- Construction Technology I & II\*
- Construction Technology: Electrical I & II\*
- Construction Technology: Heavy Equipment I
- Cosmetology I & II\*
- Criminal Justice I\*
- Culinary Arts & Hospitality I & II\*
- Dental Careers I & II
- Diesel Service Technology I & II\*
- Fire and Rescue I
- Health Science I & II\*
- Interactive Media
- Networking Fundamentals\*
- Precision Machining Technology I & II
- Welding Technology I & II\*

## Ivy Tech

- STGEC
- Career Pathways

# Course Descriptions

## Fine Arts/World Language

### Advanced Two-Dimensional Art

#### **IDOE Course Code – 4004**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

### Applied Music

#### **IDOE Course Code– 4200**

Applied Music is based on the Indiana Academic Standards for High School Choral or Instrumental Music. Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music.

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

## **Beginning Band**

### **IDOE Course Code– 4160**

Beginning Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and 179 Indiana Department of Education High School Course Titles and Descriptions performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

## **Ceramics**

### **IDOE Course Code– 4040**

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

## **Beginning Chorus**

### **IDOE Course Code– 4182**

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

## **Digital Design**

### **IDOE Course Code– 4082**

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L) • Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

## **Introduction to Two-Dimensional Art**

### **IDOE Course Code– 4000**

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

- Recommended Grade Level: 9, 10, 11, or 12
- Recommended Prerequisites: none
- Credits: 1 semester course for 1 credit
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

## **Music History & Appreciation**

### **IDOE Course Code– 4206**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: none • Credits: 1 or 2 semester course, 1 credit per semester. The nature of this course allows for two successive semesters of instruction, provided that defined standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

## **Music Theory and Composition**

### **IDOE Course Code – 4208**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester. The nature of this course allows for two successive semesters of instruction, provided that defined standards are utilized.

- Counts as a Directed Elective or Elective for all diplomas
- Fulfills requirement for 1 to 2 Fine Arts credits for Core 40 with Academic Honors diploma
- Laboratory Course

### **Spanish I**

#### **IDOE Course Code – 2120**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

### **Spanish II**

#### **IDOE Course Code – 2122**

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

- Recommended Grade Level: 9, 10, 11, 12
- Required Prerequisites: Spanish I
- Credits: 2 semester course, 1 credit per semester

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

### **Spanish III**

#### **IDOE Course Code – 2124**

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

- Recommended Grade Level: 9, 10, 11, 12
- Required Prerequisites: Spanish I and II
- Credits: 2 semester course, 1 credit per semester
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors diploma

### **Spanish IV**

#### **IDOE Course Code – 2126**

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

- Recommended Grade Level: 9, 10, 11, 12
- Required Prerequisites: Spanish I, II and III

- Credits: 2 semester course, 1 credit per semester
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

### **Visual Communications**

#### **IDOE Course Code – 4086**

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

- Recommended Grade Level: 10, 11, or 12
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course for 1 credit. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

## **English Department**

### **English 9**

#### **IDOE Course Code – 1002**

English 9, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write, responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade Level: 9
- Recommended Prerequisites: none
- Credits: 2 semester course , 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

### **English 10**

#### **IDOE Course Code – 1004**

English 10, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9- 10, is a study of language, literature, composition, and oral communication, focusing on literature with an appropriate level of complexity for this grade

band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative/persuasive compositions, and sustained research assignments. . Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade Level: 10
- Recommended Prerequisites: English 9 or teacher recommendation
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

### **English 11**

#### **IDOE Course Code – 1006**

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

- Recommended Grade Level: 11
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

### **Advanced English: English 111 – English Composition**

#### **IDOE Course Code – 1006DC**

English Composition is designed to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. This course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison, analysis, persuasion, and argumentation. A research paper is required. Numerous in-class writing activities are required in addition to extended essays written outside of class.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites, English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts Requirement for all diplomas
- **Dual Credit: Ivy Tech ENGL 111**

## **Advanced English: English 221 – World Literature II**

### **IDOE Course Code – 1006DC**

World Literature II introduces students to influential world literature from the mid-17<sup>th</sup> century through present times. Included will be a discussion of the major historical, cultural, intellectual, and political events that shaped this literature. Students will not only analyze and evaluate classical world literature with respect to themselves but also analyze and evaluate world literature in relation to global problem-solving/decision-making.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites, English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts Requirement for all diplomas
- **Dual Credit: Ivy Tech ENGL 221**

## **English 12**

### **IDOE Course Code - 1008**

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

- Recommended Grade Level: 12
- Recommended Prerequisites: English 9, English 10, and English 11
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

## **Advanced English: English 215 – Rhetoric and Argument**

### **IDOE Course Code – 1124**

This advanced composition course emphasizes an inquiry-driven approach to research-based analytic and argumentative writing. Students will develop advanced analytical, researching, and writing skills by completing an extensive argumentative project.

- Recommended Grade Level:12
- Recommended Prerequisites, English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts Requirement for all diplomas
- **Dual Credit: Ivy Tech ENGL 215**

### **Advanced English: English 223 – American Literature After 1865**

#### **IDOE Course Code – 1124**

American Literature After 1865 surveys major American writers from the Civil War to the present. Included will be discussions of the major historical, cultural, intellectual, and political events that influenced the authors.

- Recommended Grade Level:12
- Recommended Prerequisites, English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts Requirement for all diplomas
- **Dual Credit: Ivy Tech ENGL 223**

### **College Entrance Preparation/SAT Prep**

#### **IDOE Course Code – 0532**

College-Entrance Preparation utilizes individual student score reports from the PSAT, PLAN, ACCUPLACER, or other formative assessments to prepare students for college readiness assessments. Based on individual student score reports, students should receive targeted instruction to strengthen their foundations in critical reading, writing, and mathematics. This course may also include college selection and application units, to better prepare students for overall college-readiness. Being “college ready” means being prepared for any post-secondary education or training experience, including readiness for study at two-year and four-year institutions leading to a post-secondary credential (i.e., a certificate, license, Associate’s or Bachelor’s degree). A college-ready student has the necessary English and mathematics skills to qualify for and succeed in entry-level, credit bearing college courses without the need for remedial coursework.

- Recommended Grade: Semester 1 – grade 11; Semester 2 – grade 10
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Analytical Algebra II (or concurrent enrollment in Algebra II)
- Credits: 1 semester course, 1 credit per semester, 4 credits maximum
- Counts as an elective credit for all diplomas.
- The nature of this course allows for successive semesters of instruction provided progressively advanced proficiencies and content standards are utilized.

### **Genres of Literature**

#### **IDOE Course Code – 1036**

Genres of Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of various literary genres, such as poetry, dramas, novels, short stories, biographies, journals, diaries, essays, and others. Students examine a set or sets of literary works written in different genres that address similar topics or themes. Students analyze how each genre shapes literary understanding or experiences differently, how different genres enable or constrain the expression of ideas, how certain genres have had a stronger impact on the culture than others in different historical time periods, and 72 Indiana Department of Education 2021-2022 High School Course Titles and Descriptions what the most influential genres are in contemporary times. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within the curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

## **Grammar**

### **IDOE Course Code – 1062**

Grammar, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the English language system. Students examine and apply the conventions of oral and written expression that include syntax, usage, punctuation, and spelling. Students learn grammatical terminology, study grammar in the context of reading and writing, and apply grammatical concepts in writing and speaking.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

## **Speech**

### **IDOE Course Code – 1076**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: None
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

## **Social Studies**

### **Citizenship and Civics**

#### **IDOE Course Code – 1508**

Citizenship and Civics is an overview of citizenship roles and responsibilities designed to help students become independent thinkers and conscientious citizens. This course deals with political trends and behavior which citizens consider to be relevant to the most pressing issues of the day. The course provides students with experiences that will develop attitudes of citizenship within a democratic society. Topics include: (1) the policymaking process, (2) public participation in policymaking, (3) citizenship rights and responsibilities in a changing society, and (4) the relationship between modern society and government. Study of the local government should be a component of this course.

- Recommended Grade: none
- Course Titles and Descriptions
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills social studies requirement for General Diploma

### **Criminal Justice**

#### **IDOE Course Code – 5822**

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Interpersonal Relationships
- 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
- **Dual Credit: Ivy Tech CRIM 101**

### **Economics**

#### **IDOE Course Code – 1514**

Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
- Fulfills a Social Studies requirement for the General Diploma only
- Qualifies as a quantitative reasoning course
- **DC Economics: Ivy Tech ECON 101**

## **Ethnic Studies**

### **IDOE Course Code – 1516**

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit
- Counts as an Elective for all diplomas
- Must be offered at least once per school year

## **US Government**

### **IDOE Course Code – 1540**

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills the Government requirement for all diplomas
- **Honors US Government Dual Credit: Ivy Tech POLS 101**

## **Indiana Studies**

### **IDOE Course Code – 1518**

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester

- Counts as an Elective for all diplomas

### **Psychology**

#### **IDOE Course Code – 1532**

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas

### **US History**

#### **IDOE Course Code – 1542**

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills the US History requirement for all diplomas
- **US History Dual Credit: Ivy Tech HIST 101 & HIST 102)**

## **World History & Civilization**

### **IDOE Course Code – 1548**

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

- Recommended Grade Level: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas

## **World Politics**

### **IDOE Course Code – 1541**

This course investigates the interaction of modern international political institutions, leaders, and events. Further discussion includes comparative analysis from a global perspective and the impact of international relations on individual lives.

- Recommended Grade Level: 12
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- **World Politics Dual Credit: Ivy Tech POLS 211**

## **Science Department**

## **Advanced Biology**

### **IDOE Course Code – 3026**

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.

- Recommended Grade Level: 10, 11
- Recommended Prerequisites: Biology I
- Credits: 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas

- Fulfills a science course requirement for all diplomas
- **Dual Credit: Ivy Tech BIOL 101**

### **Anatomy & Physiology**

#### **IDOE Course Code – 5276**

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Biology
- Credits: 1 semester course, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Core 40 science course requirement for all diplomas

### **AP Environmental Science**

#### **IDOE Course Code – 3012**

AP Environmental Science is a course based on content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. Students enrolled in AP Environmental Science investigate the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

- Recommended Grade Level: 12
- Recommended Prerequisite: Biology and Chemistry
- Credits: 2 semester course, 1 credit per semester
- Counts as a Science Course for all diplomas
- Qualifies as a quantitative reasoning course

### **Biology**

#### **IDOE Course Code – 3024**

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

- Recommended Grade Level: 10
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills the Biology requirement for all diplomas

## **Chemistry I**

### **IDOE Course Code – 3064**

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisite: Algebra II (can be taken concurrently)
- Credits: 2 semester course, 1 credit per semester
- Counts as an Elective for all diplomas
- Fulfills a Core 40 science (physical) course requirement for all diplomas
- Qualifies as a quantitative reasoning course

## **Chemistry II**

### **IDOE Course Code – 3066**

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

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Chemistry I & Algebra II
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

## **Integrated Chemistry-Physics**

### **IDOE Course Code – 3108**

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

- Recommended Grade Level: 9
- Recommended Prerequisite: Algebra I (may be taken concurrently with this course)
- Credits: A two credit course
- Counts as an Elective for all diplomas

- Fulfills a Core 40 science (physical) course requirement for all diplomas

### **Medical Terminology**

#### **IDOE Course Code – 5274**

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

- Recommended Grade Level: 11, 12
- 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

### **PLTW Human Body Systems**

#### **IDOE Course Code – 5216**

PLTW Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions.

- Recommended Grade Level: 10
- Recommended Prerequisites: Principles of the Biomedical Sciences
- 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 Core 40 Science requirement for all diplomas
- **Possible Dual Credit if Exam is passed and attending IUPUI**

### **PLTW Medical Interventions**

#### **IDOE Course Code – 5217**

PLTW Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments.

- Recommended Grade Level: 11
- Required Prerequisites: Principles of the Biomedical Sciences; Human Body Systems

- 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 Core 40 Science requirement for all diploma types

### **PLTW Principles of Biomedical Sciences**

#### **IDOE Course Code – 5218**

PLTW Principles of the Biomedical Sciences provides an introduction to this field through “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

- Recommended Grade Level: 9
- Required Prerequisites: Biology I or concurrent enrollment in Biology I is required
- 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 Core 40 Science requirement for all diplomas
- **Possible Dual Credit if Exam is passed and attending IUPUI**

## **Math Department**

### **Algebra I**

#### **IDOE Course Code – 2520**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas

- Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas
- Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

### **Algebra 1 Lab**

#### **IDOE Course Code – 2516**

Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently 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 the middle grades.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: None
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for the General Diploma only or as an elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Algebra I Lab is designed as a support course for Algebra I. As such, a student taking Algebra I Lab must also be enrolled in Algebra I during the same academic year

### **Algebra II**

#### **IDOE Course Code – 2522**

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Algebra II is made up of 5 strands: Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential & Logarithmic Equations and Functions; Polynomial, Rational, and Other Equations and Functions; and Data Analysis, Statistics, and Probability. 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.

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisite: Algebra I
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas • Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

## AP Statistics

### **IDOE Course Code – 2570**

AP Statistics is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

- Recommended Grade Level: 11, 12
- Recommended Prerequisite: Algebra II or Integrated Mathematics III
- Credits: 1 to 2 credit course, 1 credit per semester. Due to the level of rigor, it is recommended that AP Statistics be offered as a 2 semester, 2 credit course.
- Counts as a Mathematics Course for all diplomas
- Qualifies as a quantitative reasoning course

## Calculus

### **IDOE Course Code – 2527**

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 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.

- Recommended Grade Level: 11, 12
- Recommended Prerequisite: Pre-Calculus and Trigonometry
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas
- **Dual Credit: Ivy Tech MATH 211**

## Geometry

### **IDOE Course Code – 2532**

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

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: Algebra I
- Credits: 2 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas

- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### **Pre-Calculus**

#### **IDOE Course Code – 2564**

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: Polar Coordinates and Complex Numbers; Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Equations and Functions; and Parametric Equations. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: none • Recommended Prerequisite: Algebra II and Geometry or Integrated Mathematics III
- Credits: 1 semester course, 1 credit per semester
- Counts as a Mathematics Course for all diplomas
- **Dual Credit: Ivy Tech MATH 136**

### **Trigonometry**

#### **IDOE Course Code – 2566**

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Trigonometry consists of seven strands: Conics, Unit Circle, Geometry, Periodic Functions, Identities, Polar Coordinates, and Vectors. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- Credits: 1 semester course, 1 credit per semester
- Student should not receive credit for both Trigonometry and Pre-Calculus/Trigonometry since they cover the same course content during one semester
- Counts as a Mathematics course for all diplomas
- **Dual Credit: Ivy Tech MATH 137**

## PE/Health Department

### Health

#### **IDOE Course Code – 3506**

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.

- Recommended Grade Level: 9, 10, 11, 12
- Recommended Prerequisites: 8th grade health education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills the Health & Wellness requirement for all diploma types

### Physical Education I

#### **IDOE Course Code – 3542**

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

- Recommended Grade Level: 9, 10, 11, 12
- Required Prerequisites: Grade 8 Physical Education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.
- Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent in activity

\*SCHS also offers weightlifting to any interested freshman

### **Elective Physical Education**

#### **IDOE Course Code – 3560**

Elective Physical Education, a course based on selected standards from Indiana’s Academic Standards for 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: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11. 164 Indiana Department of Education 2021-2022 High School Course Titles and Descriptions

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Physical Education I and II
- Credits: 1 credit per semester, maximum of 8 credits
- Counts as an elective requirement for all diplomas
- The nature of this course allows for successive semesters of instruction provided defined proficiencies and content standards are utilized.
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.

## **Agriculture Department**

### **Agribusiness Management**

#### **IDOE Course Code – 5002**

Agribusiness Management provides foundational concepts in agribusiness. This course introduces students to the principles of business organization and management from a local and global perspective while incorporating technology. Concepts covered in the course include food and fiber, forms of business, finance, marketing, management, sales, leadership development, supervised agricultural experience career opportunities in the area of agribusiness management.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an Elective or Directed Elective for all diplomas

- Qualifies as a quantitative reasoning course
- **Dual Credit: Ivy Tech AGRI 102**

### **Agriculture Power, Structure, & Technology**

#### **IDOE Course Code – 5008**

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- **Dual Credit: Ivy Tech AGRI 106**

### **ALS: Animals**

#### **IDOE Course Code – 5070**

Advanced Life Science: Animals provides students with opportunities to participate in a variety of activities including laboratory work. Students investigate concepts that enable them to understand animal life and animal science as it pertains to agriculture. Through instruction, including laboratory, fieldwork, leadership development, supervised agricultural experience and the exploration of career opportunities, they will recognize concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, and ecology, as well as historical and current issues in animal agriculture in the area of advanced life science in animals.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Required Prerequisites: Biology, Chemistry or Integrated Chemistry Physics, Animal Science
- Credits: 2 semester course, 2 semesters required, 2 credits per semester, 2 credits maximum
- Counts as an Elective or Directed Elective for all diplomas
- Fulfills a Core 40 Science requirement for all diplomas
- Qualifies as a quantitative reasoning course

### **ALS: Foods**

#### **IDOE Course Code – 5072**

Advanced Life Science: Foods provides students with opportunities to participate in a variety of activities which includes laboratory work, leadership development, supervised agricultural experience and exploration of career opportunities. 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 in the area of advanced life science in foods. Participation in FFA or FCCLA encourages development of leadership, communication, community service and career related skills.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources, Advanced Nutrition and Wellness
- Required Prerequisites: Biology, Chemistry or Integrated Chemistry Physics, Food Science and/or Nutrition and Wellness
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an Directed Elective or Elective for all diplomas
- Fulfills a Core 40 Science requirement for all diplomas
- Qualifies as a quantitative reasoning course

### **ALS: Plants and Soils**

#### **IDOE Course Code – 5074**

Advanced Life Science: Plants and Soils provides students with opportunities to participate in a variety of activities which includes laboratory work. Students study concepts, principles and theories associated with plants and soils. Students recognize how plants are classified, grown, 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 laboratory and fieldwork, how plants functions and the influence of soil in plant life.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Required Prerequisites: Biology, Chemistry, Plant and Soil Science
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an Elective or Directed Elective for all diplomas
- Fulfills a Core 40 Science requirement for all diplomas

### **Animal Science**

#### **IDOE Course Code – 5008**

Animal Science provides students with an overview of the animal science field. 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 can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, social and political issues related to the industry and management practices for the care and maintenance of animals while incorporating leadership development, supervised agricultural experience and learning about career opportunities in the area of animal science.

- Recommended Grade Level: 10, 11
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources

- Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Life Science or Physical Science requirement for the General Diploma
- **Dual Credit: Ivy Tech AGRI 107**

### Food Science

#### **IDOE Course Code – 5102**

Food Science provides students with an overview of food science and its importance. Introduction to principles of 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 help students understand the role that food science plays in securing a safe, nutritious and adequate food supply. A project based approach is utilized along with laboratory, team building and problem solving activities to enhance student learning, leadership development, supervised agricultural experience and career opportunities in the area of food science.

- Recommended Grade Level: 10, 11
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- 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
- **Dual Credit: Ivy Tech AGRI 108**

### Horticulture Science

#### **IDOE Course Code – 5132**

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

- Recommended Grade Level: 10, 11
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a Life Science or Physical Science requirement for the General Diploma
- **Dual Credit: Ivy Tech AGRI 116**

## **Introduction to Agriculture, Food and Natural Resources**

### **IDOE Course Code – 5056**

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

- Recommended Grade Level: 9
- 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

## **Landscape Management I**

### **IDOE Course Code – 5136**

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

- Recommended Grade Level: 9
- 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
- **Dual Credit: Ivy Tech AGRI 164**

## **Landscape Management II**

### **IDOE Course Code – 5137**

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

- Recommended Grade Level: 12 • Required Prerequisites: Landscape Management I
- Recommended Prerequisites: Plant and Soil Science or Horticulture Science

- Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course
- **Dual Credit: Ivy Tech AGRI 164**

### **Natural Resources**

#### **IDOE Course Code – 5180**

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

- Recommended Grade Level: 10, 11
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- **Dual Credit: Ivy Tech AGRI 115**

### **Plant and Soil Science**

#### **IDOE Course Code – 5170**

Plant and Soil Science provides students with opportunities to participate in a variety of activities which includes laboratory work. The following topics are found in this course: plant taxonomy, components and their functions; plant growth, reproduction and propagation; photosynthesis and respiration; environmental factors effecting plant growth, management of plant diseases and pests; biotechnology; the basic components and 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; and harvesting. Leadership development, supervised agricultural experience and career exploration opportunities in the field of plant and soil science are also included.

- Recommended Grade Level: 10, 11
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- 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 only
- **Dual Credit: Ivy Tech AGRI 109**

### **Principles of Agriculture**

#### **IDOE Course Code – 7117**

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

- Recommended Grade Level: 9, 10, 11

- 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
- **Dual Credit: Ivy Tech AGRI 100**

### **Supervised Agriculture Experience**

#### **IDOE Course Code – 5228**

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards-based plan for learning. Students work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

- Recommended Grade Levels: 10, 11, 12
- Recommended Prerequisite: Introduction to Agriculture, Food and Natural Resources
- Credits: 1 semester course, 1 credit per semester, 8 credits maximum
- Curriculum content and standards-based plan for learning should not be duplicated when this course is taken for multiple semesters.

### **Sustainable Energy Alternatives**

#### **IDOE Course Code – 5229**

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.

- Recommended Grade Levels: 11, 12
- Required Prerequisite: Introduction to Agriculture, Food and Natural Resources or Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- **Dual Credit: Ivy Tech AGRI 119**

## Business Department

### Administrative and Office Management

#### **IDOE Course Code – 5268**

Administrative and Office Management prepares students to plan, organize, direct, and control the functions and processes of a firm or organization and be successful in a work environment. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance. Individual experiences will be based upon the student's career and educational goals.

- Recommended Grade Level: Grade 12
- Required Prerequisites: Principles of Business Management or Principles of Marketing
- Credits: 2 semester course, 2 semesters required, 1-2 credits per semester, 4 credits maximum
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- **Dual Credit: Ivy Tech BUSN 105**

### Business Law and Ethics

#### **IDOE Course Code – 4560**

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: None
- Credits: 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- **Dual Credit: Ivy Tech BUSN 201**

### Business Math

#### **IDOE Course Code – 4512**

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

- Recommended Grade Level: 10, 11
- Prerequisites: Algebra I • Credits: 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an Elective or Directed Elective for all diplomas
- Fulfills a Mathematics requirement for the General Diploma only
- Qualifies as a quantitative reasoning course

## **Computer Science I**

### **IDOE Course Code – 4801**

Computer Science I introduces the structured techniques necessary for the efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. The fundamental concepts of programming are provided through explanations and effects of commands and hands-on utilization of lab equipment to produce accurate outputs. Topics include program flow-charting, pseudo coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, control breaks, and offers students an opportunity to apply skills in a laboratory environment.

- Recommended Grade Level: 10, 11, 12
- Required Prerequisites: Introduction to Computer Science or teacher confirmation of student demonstration of mastery of the Intro to Computer Science standards
- Credits: 2 semester course, 2 semesters required, 1-3 credit per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

## **Graphic Design and Layout**

### **IDOE Course Code – 5550**

Graphic Design and Layout includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction might also include experiences in various printing processes as well as activities in designing product packaging and commercial displays or exhibits.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Computer Illustration and Graphics
- 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

## **Accounting Fundamentals**

### **IDOE Course Code – 4524**

Introduction to Accounting introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.

- Recommended Grade Level: 10, 11
- 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 the all diplomas

### **Introduction to Business**

#### **IDOE Course Code – 4518**

Introduction to Business introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments.

- Recommended Grade Level: 9, 10
- Recommended Prerequisites: None
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

### **Introduction to Computer Science**

#### **IDOE Course Code – 4803**

Introduction to Computer Science allows students to explore the world of computer science. Students will gain a broad understanding of the areas composing computer science. Additionally, there is a focus on the areas of computer programming, gaming/mobile development, and artificial intelligence/robotics.

- Recommended Grade Level: 9, 10
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

### **Personal Financial Responsibility**

#### **IDOE Course Code – 4540**

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

- Recommended Grade Level: 10, 11, 12
- Recommended Prerequisites: None
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

## **Principles of Business Management**

### **IDOE Course Code – 4562**

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

- Recommended Grade Level: 9, 10
- 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
- **Dual Credit: Ivy Tech BUSN 101 & CINS 101**

## **Marketing Fundamentals**

### **IDOE Course Code – 5914**

Principles of Marketing provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem-solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing information management, pricing, and product/service management.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: None
- Credits: 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- **Dual Credit: Ivy Tech MKTG 101 & MKTG 102**

## **Southeastern Career Center**

### **Architectural Drafting & Design**

- 2 Year Program
- Dual Credits
  - 10 Dual Credits through Vincennes University
- No Certifications

### **Auto Service Technology**

- 2 Year Program
- Dual Credits
  - o 6 Dual Credits through Vincennes University,
  - o 12 Dual Credits through University of Northwestern Ohio,
  - o Lincoln and UTI dual credits provided upon successful completion of testing
- Certifications
  - o ASE Brakes (1<sup>st</sup> year)

- ASE Electrical/Electronic Systems (1<sup>st</sup> year)
- ASE Engine Repair (1<sup>st</sup> year)
- ASE Maintenance and Light Repair (1<sup>st</sup> year)
- ASE Suspension and Steering (2<sup>nd</sup> year)
- ASE Engine Performance (2<sup>nd</sup> year)
- ASE Automatic Transmission and Transaxle (2<sup>nd</sup> year)
- ASE Heating and Air Conditioning (2<sup>nd</sup> year)
- ASE Automotive Service Technology (2<sup>nd</sup> year)

### **Building Facilities Maintenance**

- Multiple years program
- No Dual Credits
- No Certifications

### **Computer Tech Support**

- 1 Year Program
- Dual Credits
  - 3 Dual Credits through Vincennes University
- Certifications
  - Comp Tia, A+

### **Computer Networking**

- 1 Year Program
- Dual Credits
  - 3 Dual Credits through Vincennes University
- Certifications
  - Comp Tia, Net+

### **Construction Technology and Building Trades**

- 2 Year Program
- Dual Credits
  - 14 Dual Credits through Vincennes University
- Certifications
  - HBI Carpentry Basic Form A1 OSHA 10-hour
  - HBI Carpentry Basic Form A1 Candidate

### **Construction Technology Electrical**

- 2 Year Program
- Dual Credits
  - 6 Dual Credits through Ivy Tech
- Certifications
  - HBI Housing Wiring Basic Form C1
  - OSHA 10-hour

### **Construction Technology Heavy Equipment**

- 1 Year Program
- Dual Credits
  - o None
- Certifications
  - o OSHA 10-Hour
  - o American Heart Association First Aid CPR

### **Cosmetology**

- 2 Year Program
- Dual Credits
  - o 30 Dual Credits through Vincennes University
- Certifications
  - o Indiana Cosmetology License

### **Criminal Justice**

- 1 Year Program
- Dual Credits
  - o 9 Dual Credits Through Vincennes University
- Certifications
  - o FEMA
  - o NIMS
  - o American Heart Association Heartsaver SPR AED

### **Culinary Arts & Hospitality Program**

- 2 Year Program
- Dual Credits
  - o Offered through Vincennes University
- Certifications
  - o ServSafe
  - o ProStart Certification of Achievement

### **Dental Careers**

- 2 Year Program
- Dual Credits
  - o 6 Dual Credits through Ivy Tech – Columbus
- Certifications
  - o American Heart Association Heartsaver CPR AED
  - o NIMS 700a

### **Diesel Service Technology**

- 2 Year Program
- Dual Credits
  - o 13 Dual Credits through Vincennes University
- Certifications
  - o ASE Diesel Engines (1<sup>st</sup> year)

- ASE Brakes (2<sup>nd</sup> year)
- ASE Electric/Electronic Systems (2<sup>nd</sup> year)
- ASE Steering and Suspension (2<sup>nd</sup> year)

### **Interactive Media and Digital/Multimedia**

- 2 Year Program
- Dual Credits
  - None
- Certifications
  - Adobe Certified Associate or Expert

### **Fire and Rescue**

- 1 Year Program
- Dual Credits
  - 9 Dual Credits from Vincennes University
  - 9 Dual Credits from Ivy Tech
- Certifications
  - NIMS 100, NIMS 200, NIMS 700, NIMS 800
  - Indiana Mandatory Firefighter
  - Hazardous Materials Awareness
  - Hazardous Materials Operations
  - NFPA Firefighter I
  - NFPA Firefighter II
  - American Heart Association Basic Life Support CPR

### **Health Science Education/Medical Technology**

- 2 Year Program
- Dual Credits
  - Medical Technology – 5 Dual Credits from Ivy Tech
  - Health Science – 8 Dual Credits from Ivy Tech
- Certifications
  - Certified Nursing Assistant (2<sup>nd</sup> year)
  - Certified Home Health Aid American Heart Association (2<sup>nd</sup> year)
  - First Aid CPR AED (2<sup>nd</sup> year)
  - NIMS 700a (2<sup>nd</sup> year)
  - Dementia – 6 hrs (2<sup>nd</sup> year)

### **Precision Machining Technology**

- 2 Year Program
- Dual Credits
  - 12 Dual Credits from Vincennes University
- Certifications
  - National Institute of Metalworking Skills – CNC Milling Operator
  - National Institute of Metalworking Skills – Measurement, Material, & Safety

**Welding Technology**

- 2 Year Program
- Dual Credits
  - o 20 Dual Credits from Vincennes University
- Certifications
  - o American Welding Society 3 AWS
  - o OSHA 10-Hour

\*A Comprehensive description of each of these programs can be found in Appendix A.

## IVY TECH

### **Indiana College Core Competencies (Formerly known as STGEC)**

Ivy Tech Community College's Indiana College Core (formerly known as the STGEC) prepares students for transfer to the baccalaureate-degree granting state institution of their choice. If at least 30 credits are accumulated and the Indiana College Core requirements are met, it is state-mandated that the entire block of 30 college credits will transfer to any public university in Indiana. This 30-credit hour block of courses is equal to a full year of college coursework. Students who complete these requirements will have met the requirements for the Indiana College Core Certification and will have this noted on their transcript.

As stated by the Indiana Commission for Education (ICHE), the Indiana College Core was established in 2012 as SEA 182. It is a collection of courses that are based upon a set of competencies in the areas of Foundational Intellectual Skills and Ways of knowing.

\*For a detailed list of the classes that qualify for the Indiana College Core Competencies, please see Appendix B.

### **Ivy Tech Pathways**

In addition to the Indiana College Core Competencies, Ivy Tech also offers different career pathways to students that are interested. These pathways include:

**Informatics Pathway**

**Industrial Maintenance Pathway**

**CNA Pathway**

**Welding Pathway**

**Business Administration Pathway**

**Pre-Nursing Pathway**

**Medical-Assisting Pathway**

\*For detailed information about each of these different pathways, please refer to the handouts that are found in Appendix C.



**Appendix A:  
Career Center Programs Course  
Descriptions**

## **Architectural Drafting & Design Program**

### **Architectural Drafting & Design I**

#### **IDOE Course Code – 5640**

Architectural Drafting and Design I gives students a basic understanding of the detailing skills commonly used by drafting technicians. Areas of study include: lettering, sketching, and the proper use of equipment. This course includes the creation and interpretation of commonly used construction documents. Methods of geometric construction, three-dimensional drawing techniques, and sketching will be taught as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing. This course also provides students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands-on experience with Auto CAD. They will be expected to complete several projects relating to command topics.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Computers in Design and Production
- 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

### **Architectural Drafting and Design II**

#### **IDOE Course Code – 5652**

Architectural Drafting and Design II builds on the concepts of Architectural Drafting and Design I and presents a history and survey of architecture with a focus on the creative design of buildings in a studio environment. This course covers site analysis, facilities programming, space planning, conceptual design, and the proper use of materials. Students will develop presentation drawings, give oral presentations, and critique works. Generation of form and space is addressed through basic architectural theory, related architectural styles, design strategies, and a visual representation of the student's design process. This course will focus on advanced Computer Aided Design (CAD) techniques. It includes an overview of modeling, graphical manipulation, part structuring, and modeling strategies. Advanced CAD will enable students to make the transition from 2D drafting to 3D modeling. Various Architectural software packages and applications may be used.

- Recommended Grade Level: 12
- Required Prerequisites: Architectural Drafting and Design I
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Qualifies as a quantitative reasoning course

## **Auto Service Technology Program**

### **Automotive Service Technology I**

#### **IDOE Course Code – 5510**

Automotive Services Technology I is a one year course that encompasses the sub topics of the NATEF/ ASE identified areas of Steering & Suspension and Braking Systems. This one year course offering may be structured in a series of two topics per year offered in any combination of

instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one year offering must meet the NATEF program certifications for the two primary areas offered in this course. This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Mathematical skills will be reinforced through precision measuring activities as well as cost estimation and calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Transportation
- 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

### **Automotive Service Technology II**

#### **IDOE Course Code – 5546**

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

- Recommended Grade Level: 12
- Required Prerequisites: Automotive Services Technology I
- 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

### **Buildings Facilities Maintenance Program**

#### **Building and Facilities Maintenance I**

#### **IDOE Course Code – 5593**

Building and Facilities Maintenance I prepares students to perform routine care and maintenance activities in commercial and institutional buildings. Activities should include classroom and laboratory experiences in all phases of the care and cleaning of buildings. Emphasis should be placed on the selection and use of professional supplies needed for care and maintenance as well as OSHA safety standards and appropriate guidelines in working with various chemicals and processes.

- Recommended Grade Levels: 11
- Recommended Prerequisites: Introduction to Construction

- 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

## **Building and Facilities Maintenance II**

### **IDOE Course Code – 5594**

Building and Facilities Maintenance II builds on skills learned in Building and Facilities Maintenance I and encompasses instruction in basic upkeep and repair skills related to the mechanical systems within structures. Emphasis should be placed on the use of hand and power tools and the selection and use of appropriate supplies needed for care, repair and maintenance. Students will reinforce their mathematical skills through the practical study of measurement units, ratios, area, and volume calculations. Scientific knowledge will be enhanced through the emphasis on environmental concerns and chemical and electrical safety instruction. Language skills will be strengthened through oral and written work intended to improve students' abilities to communicate with supervisors, colleagues, and clients.

- Recommended Grade Levels: 12
- Required Prerequisites: Building and Facilities Maintenance I
- 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

## **Computer Tech Support Program**

### **Information Technology Support I**

#### **IDOE Course Code – 5230**

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

- Recommended Grade Level: 10,11
- Required Prerequisites: Digital Applications and Responsibility
- 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

## **Computer Networking Program**

### **Networking Fundamentals**

#### **IDOE Course Code – 5234**

Networking I introduces students to local and wide area networks, home networking, networking standards using the IEEE/OSI Model, network protocols, transmission media and network architecture/ topologies. Security and data integrity are introduced and emphasized throughout this course, which offers students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered will include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs, as well as creating a wireless LAN.

- Recommended Grade Level: 11, 12

- Recommended Prerequisites: Computer Tech Support
- 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

## **Construction Technology and Building Trades Program**

### **Construction Trades I**

#### **IDOE Course Code – 5580**

Construction Trades I classroom and laboratory experiences involve the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of construction, future trends and career options, reading technical drawings and transforming those drawings into physical structures are covered. The relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Students will examine the design and construction of floor and wall systems and develop layout and floor construction skills. Blueprints and other professional planning documents will also be covered. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration's Safety & Health Standards for the construction industry.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Construction
- 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

### **Construction Trades II**

#### **IDOE Course Code – 5578**

Construction Trades II builds on the formation, installation, maintenance, and repair skills learned in Construction Trades I. Information on materials, occupations, and professional organizations within the industry will be covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will also develop exterior finishing competencies. The course includes instruction on the installation of cornices, windows, doors and various types of sidings currently used in industry. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing.

- Recommended Grade Level: 12
- Required Prerequisites: Construction Trades I
- 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

## **Construction Trades: Electrical Program**

### **Construction Trades: Electrical I**

#### **IDOE Course Code – 4830**

Construction Trades: Electrical I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical structures. This course includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules and plot plans. This course covers both AC and DC circuits. Studies include electron theory, Ohm's Law, Watt's Law, Kirchhoff's Law, series circuits, series-parallel circuits, and other electrical concepts. Students will use the underlying scientific principles related to electricity, to complete construction projects. Mathematical principles will be used to solve electrical problems. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Construction
- 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

### **Construction Trades: Electrical II**

#### **IDOE Course Code – 4832**

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

- Recommended Grade Level: 12
- Required Prerequisites: Construction Technology: Electrical I
- 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
- Qualifies as a Quantitative Reasoning course

## **Construction Trades: Heavy Equipment Program**

### **Construction Trades: Heavy Equipment I**

#### **IDOE Course Code – 5497**

Construction Technology Heavy Equipment I introduces students to basic heavy equipment operations. Students will learn how to control various land-moving and construction equipment. Emphasis should be placed on appropriate OSHA equipment safety standards. Students will be

able to identify when to use specific equipment and know the appropriate operation and safety standards associated with it. Additional emphasis should be placed on performing simple operations with equipment such as basic excavation and debris movement.

- Recommended Grade Levels: 11, 12
- Recommended Prerequisites: Introduction to Construction
- 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

## **Cosmetology Program**

### **Cosmetology I**

#### **IDOE Course Code – 5802**

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisite: Interpersonal Relationships
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as Directed Elective or Elective for all diplomas

### **Cosmetology II**

#### **IDOE Course Code – 5806**

Cosmetology II builds on concepts learned in Cosmetology I with an emphasis on the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology.

- Recommended Grade Level: 12
- Required Prerequisites: Cosmetology I
- 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

## **Criminal Justice Program**

### **Criminal Justice I**

#### **IDOE Course Code – 5822**

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

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Interpersonal Relationships
- 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

## **Culinary Arts & Hospitality Management Program**

### **Culinary Arts and Hospitality I**

#### **IDOE Course Code – 5440**

Culinary Arts and Hospitality I prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; ; apply basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory experiences. Students are monitored in their laboratory experiences by the Culinary Arts and Hospitality teacher. Articulation with postsecondary programs is encouraged

- Recommended Grade Level: 11,12
- Recommended Prerequisites: Nutrition and Wellness, Introduction to Culinary Arts & Hospitality
- 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

### **Culinary Arts and Hospitality II: Culinary Arts**

#### **IDOE Course Code – 5346**

Culinary Arts and Hospitality II: Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-

job" or a combination of the two. Advanced Culinary Arts builds upon skills and techniques learned in Culinary Arts and Hospitality Management, which must be successfully completed before enrolling in this advanced course. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory and work-based experiences. Students are monitored in these experiences by the Advanced Culinary Arts teacher. Articulation with postsecondary programs is encouraged.

- Recommended Grade Level: 12
- Required Prerequisites: Culinary Arts and Hospitality I
- 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

## **Dental Careers Program**

### **Dental Careers I**

#### **IDOE Course Code – 5203**

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

- Recommended Grade Level: 11,12
- Recommended Prerequisites: Nutrition and Wellness
- Credits: 2 semester course, 2 semesters required, 3 credits per semester, maximum of 6 credits
- Counts as a Directed Elective or Elective for all diplomas

### **Dental Careers II**

#### **IDOE Course Code – 5204**

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

- Recommended Grade Level: 12
- Required Prerequisites: Dental Careers I
- Credits: 2 semester course, 2 semesters required, 3 credits per semester, maximum of 6 credits

- Counts as a Directed Elective or Elective for all diplomas

## **Diesel Service Technology Program**

### **Diesel Service Technology I**

#### **IDOE Course Code – 5620**

Diesel Services Technology I introduces students to engine operation principles and theories as well as diesel fuel systems and hands-on training related to modern diesel engines. The course covers inspection, troubleshooting, overhaul and engine replacement procedures. It includes classroom and laboratory experiences focused on diesel engine repair. Students will demonstrate performance of these tasks as defined by ASE/NATEF standards. Use of technical manuals, hand and power tools and of testing and diagnostic equipment are also studied in the course.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Intro to Transportation
- 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

### **Diesel Service Technology II**

#### **IDOE Course Code – 5624**

Diesel Service Technology II includes classroom and laboratory experiences concerned with all phases of repair work on diesel electrical systems. Instruction and practice is provided in the diagnostics and repair of electrical/electronic systems. Students will demonstrate performance of tasks as measured by ASE/NATEF standards. Use of technical manuals, hand and power tools and of testing and diagnostic equipment are covered. Instruction in personal and environmental safety practices as related to OSHA and other agencies that affect individuals working in the ground transportation technology areas is also covered. Utilization of analog and digital meters, wiring diagrams, and other diagnostic tools will be stressed in a hands-on environment.

- Recommended Grade Level: 12
- Required Prerequisites: Diesel Service Technology I
- 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

## **Interactive Media and Digital/Multimedia Program**

### **Interactive Media**

#### **IDOE Course Code – 5232**

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

- Recommended Grade Level: 11, 12
- Required Prerequisites: Digital Applications and Responsibility
- Recommended Prerequisites: Introduction to Communications

- 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

## **Fire and Rescue Program**

### **Fire and Rescue I**

#### **IDOE Course Code – 5820**

Fire and Rescue I; Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. The Fire and Rescue curriculum may include five Indiana state fire certifications: (1) Mandatory, (2) Firefighter I, (3) Firefighter II, (4) Hazardous Materials Awareness, and (5) Hazardous Materials Operations. An additional two industry certifications may be earned by adding (6) First Responder, and (7) Emergency Medical Technician-Basic to the curriculum.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Interpersonal Relationships
- 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

## **Health Science Education/Medical Technology Program**

### **Health Science I**

#### **IDOE Course Code – 5285**

Health Science Education I is a course designed to provide a foundation of skills development to specific health careers including; patient care, dental care, animal care, medical laboratory, and public health. Students will also receive an introduction to healthcare systems, anatomy, physiology, and medical terminology. Laboratory experiences with industry applications are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a postsecondary program of their choice are also included in this course. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade Level: 11
- Recommended Prerequisites: Introduction to Health Science Careers
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, maximum of 6 credits
- Counts as a Directed Elective or Elective for all diplomas

### **Health Science II**

#### **IDOE Course Code – 5284**

Health Science Education II: Nursing is an extended laboratory experience designed to provide students with the opportunity to assume the role of nurse assistant. Student have the opportunity to practice technical skills previously learned in the classroom; all while working at the student's

choice of clinical site and under the direction of licensed nurses. These sites may include extended care facilities, hospitals and home health agencies. Throughout the course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare delivery systems, healthcare teams and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in a variety of healthcare settings. Additionally, students will build their essential job related skills to record patient medical histories and symptoms; provide medication and treatments; consult with physicians and other healthcare providers; operate and monitor medical equipment; perform diagnostic tests; teach patients and families how to manage their illness or injury; and perform general health screenings. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade Level: 12
- Required Prerequisites: Health Science Education I
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, maximum of 6 credits.
- Counts as a Directed Elective or Elective for all diplomas

### **Medical Technology – Health Science Education Special Topics**

#### **IDOE Course Code – 5286**

Health Science Education II: Special Topics is an extended laboratory experience designed to address the advancement and specialization of healthcare careers through the provision of a specialized course for a specific healthcare workforce need in the school's region. Practicum is at a qualified clinical site, and is designed to give the student the opportunity to practice technical skills previously learned in the classroom; all while working under the direction of the appropriately licensed healthcare professional. Throughout the course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare delivery systems, healthcare teams, and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in a variety of healthcare settings. Additionally, students will build their essential job related skills for providing basic care appropriate for their healthcare setting and audience. Course standards and curriculum must be tailored to the specific healthcare profession, preparing students to advance in this career field, and where applicable, provide students with opportunities for certification or dual credit. This course also provides students with the knowledge, attitudes, and skills needed to 301 Indiana Department of Education 2021-2022 High School Course Titles and Descriptions make the transition from high school, to post- secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade: 12

- Required Prerequisites: none
- Recommended Prerequisites: Health Science Education I
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, maximum of 6 credits.
- Counts as a directed elective or elective for all diplomas
- This course code can be used for a Joint Program of CTE when the related training is being delivered by an employer and/or an eligible third-party training provider and an aligned course is not on the dual credit crosswalk

## **Precision Machining Program**

### **Precision Machining Technology I**

#### **IDOE Course Code – 5782**

Precision Machining I is designed to provide students with a basic understanding of the precision machining processes used in industry, manufacturing, maintenance, and repair. The course instructs the student in industrial safety, terminology, tools and machine tools, measurement and layout. Students will become familiar with the setup and operation of power saws, drill presses, lathes, milling machines, grinders and an introduction to CNC (computer controlled) machines.

- Recommended Grade Level: 11, 12
- Recommended Prerequisites: Introduction to Advanced Manufacturing
- 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
- Qualifies as a quantitative reasoning course

### **Precision Machining Technology II**

#### **IDOE Course Code – 5784**

Precision Machining II is a more in-depth study of skills learned in Precision Machining I, with a stronger focus in CNC setup/operation/programming. Classroom activities will concentrate on precision set-up and inspection work as well as machine shop calculations. Students will develop skills in advanced machining and measuring parts involving tighter tolerances and more complex geometry. A continued focus on safety will also be included.

- Recommended Grade Level: 12
- Required Prerequisites: Precision Machining I
- 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
- Qualifies as a quantitative reasoning course

## **Welding Technology Program**

### **Welding Technology I**

#### **IDOE Course Code – 5776**

Welding Technology I includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and Shielded Metal Arc welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Designer, Researcher or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of

metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

- Recommended Grade Level: 11, 12
- 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

### **Welding Technology II**

#### **IDOE Course Code – 5778**

Welding Technology II builds on the skills covered in Welding Technology I. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

- Recommended Grade Level: 12
- Required Prerequisites: Welding Technology I
- 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

# **Appendix B:** **Indiana College Core Competencies –** **Ivy Tech Community College**

Courses that are offered by SCHS are bolded and in orange font.





# Indiana College Core Competencies Ivy Tech Community College

## SWITZERLAND COUNTY HIGH SCHOOL

Ivy Tech Community College Courses

Fulfilling Indiana College Core Competencies (Effective 2021 - 2022)

All courses are appropriate for STEM programs unless otherwise noted.



Ivy Tech Community College's Indiana College Core (formerly known as the STGEC) prepares students for transfer to the baccalaureate-degree granting state institution of their choice. If at least 30 credits are accumulated and the Indiana College Core requirements are met, it is state-mandated that the entire block of 30 college credits will transfer to any public university in Indiana. This 30-credit hour block of courses is equal to a full year of college coursework. Students who complete these requirements will have met the requirements for the Indiana College Core Certificate and will have this noted on their transcript.

As stated by the Indiana Commission for Higher Education (ICHE), the Indiana College Core was established in 2012 as SEA 182. It is a collection of courses that are based upon a set of competencies in the areas of Foundational Intellectual Skills and Ways of Knowing.

For more information, please visit: [http://www.in.gov/che/files/STGEC\\_BW\\_Binder\\_Final\\_5.19.15.pdf](http://www.in.gov/che/files/STGEC_BW_Binder_Final_5.19.15.pdf)

### QUANTITATIVE REASONING

3-12 CREDITS

MATH 123 Quantitative Reasoning (not a STEM selection)	DOE# 2550 Quantitative Reasoning
MATH 135 Finite Math* (not a STEM selection)	DOE# 2530 Finite Mathematics
MATH 136 College Algebra*	DOE# 2564 Pre-Calculus
MATH 137 Trig with Analytic Geometry*	DOE# 2566 Trigonometry
MATH 201 Brief Calculus*	DOE# 2544 Advanced Math, College Credit
MATH 211 Calculus I*	DOE# 2562 Calculus AB, AP or DOE# 2527 Calculus
MATH 212 Calculus II*	DOE# 2544 Advanced Math, College Credit

### SOCIAL AND BEHAVIORAL WAYS OF KNOWING

3-12 CREDITS

ECON 101 Economics Fundamentals*	DOE# 1514 Economics Advanced/Honors
ECON 201 Principles of Economics*	DOE# 1574 Advanced Social Sciences, College credit or DOE# 1564 Macroeconomics, AP
HIST 101 Survey of American History I*	DOE# 1562 US History, AP or DOE# 1542 US History, Advanced/Honors
ECON 202 Principles of Microeconomics*	DOE# 1574 Advanced Social Science, College credit or DOE # 1566 Microeconomics, AP
HIST 102 Survey of American History II*	DOE# 1562 US History, AP or DOE# 1542 US History, Advanced/Honors
POLS 101 Intro to American Government & Politics*	DOE# 1560 US Government & Politics, AP or DOE# 1540 US Government Advanced/Honors
POLS 211 Introduction to World Politics*	DOE# 1552 Comparative Government and Politics, AP
PSYC 101 Introduction to Psychology*	DOE# 1558 Psychology, AP or DOE# 1532 Psychology Advanced Honors
PSYC 253 Intro to Social Psychology	DOE# 1534 Sociology
SOCI 111 Introduction to Sociology*	DOE# 1534 Sociology
SOCI 252 Social Problems*	DOE# 1574 Advanced Social Sciences

### HUMANISTIC AND ARTISTIC WAYS OF KNOWING

3-12 CREDITS

ARTH 101 Survey of Art & Culture*	DOE# 4025 Art History, AP
ARTH 102 Survey of Art and Culture II*	DOE# 4260 Advanced Fine Arts
ARTH 110 Art Appreciation*	DOE# 4024 Art History or DOE# 4020 Advanced Art History
ENGL 202 Creative Writing*	DOE# 1124 Advanced English/Language Arts
ENGL 206 Introduction to Literature*	DOE# 1124 Advanced English/Language Arts, College Credit
ENGL 220 Introduction to World Literature*	DOE# 1124 Advanced English/Language Arts
ENGL 221 Intro to World Lit After the Renaissance*	DOE# 1124 Advanced English/Language Arts
ENGL 222 American Literature to 1865*	DOE# 1124 Advanced English/Language Arts
ENGL 223 American Literature After 1865*	DOE# 1124 Advanced English/Language Arts

See Reverse ▶

# **Appendix C: Career Pathways Offered by Ivy Tech**



