

Tri-Township Jr/Sr High  
School  
Course Catalog  
2023-2024

## **Agriculture Department**

### **7177 Principles of Agriculture**

PRIN AG

Length of Course: 2 semester course, 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective for all diplomas.

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

## **Business Department**

### **4560 Business Law and Ethics**

BUS LAW ETH

Length of Course: 1 to 2 semester course

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective for all diplomas.

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 • Counts as a Directed Elective or Elective for all diplomas

### **4518 Introduction to Business**

INTO BUSS

Length of Course: 1 to 2 semester course

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas .

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.

#### **4540 Personal Financial Responsibility**

PRSFINRSP

Length of Course: 1 semester

Prerequisites: None

Credit: 1

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas and qualifies as a quantitative reasoning course.

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

#### **5394 Preparing for College and Careers**

PREP CC

Length of Course: 1 to 2 semester course

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning

and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project-based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

### **4562 Principles of Business Management**

PRIN BUS

Length of Course: 2 semester course; 2 semesters required

Prerequisites: None

Credit: 1 per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

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

### **7143 Management Fundamentals**

MGMT FUND

Length of Course: 2 semester course; 2 semesters required

Prerequisites: Principles of Business Management

Credits: 1 credit per semester, 2 credits maximum

Offered to Grades: 10,11,12

A directed elective or elective for all diplomas.

Management Fundamentals describes the functions of managers, including the management of activities and personnel. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.

### **4524 Accounting Fundamentals**

ACCT FUND

Length of Course: 2 semester course; 2 semesters required

Prerequisite: Principles of Business Management

Credit: 1 per semester, 2 credits maximum

Offered to Grades: 10, 11, 12

A directed elective or elective for all diplomas.

Accounting Fundamentals 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.

### **4522 Advanced Accounting**

ADV ACC

Length of Course: 2 semesters; 2 semesters required

Prerequisites: Beginning Accounting

Credit: 1 per semester, 2 credits maximum

Offered to Grades: 11, 12

A directed elective or elective for all diplomas and qualifies as a quantitative reasoning course.

This course is a continuation of Beginning Accounting with emphasis placed more on departmental and payroll accounting, partnership and corporate accounting, control systems and cost accounting. Advanced accounting will also expose the student to more career possibilities and additional computerized accounting opportunities. This course is also recommended for students who are planning a business major in college.

## **Education and Training Department**

### **7161 Principles of Teaching**

PRIN TEACH

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

A directed elective or elective for all diplomas.

This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A minimum 20 hour classroom observation experience is required for successful completion of this course.

## **English Department**

### **1002 English 9**

ENG 9

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9

Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of grammar, usage, composition, and literature. The basic principles of grammar and usage are reviewed, including parts of speech, parts of a sentence, and structure. Composition instruction includes prewriting, drafting, revising, and editing skills as well as paragraph development. Narrative, expository, and persuasive writing are explored. Instruction in literature includes the short story, drama, poetry, and the epic.

### **1004 English 10**

ENG 10

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 10

Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of speech, composition, grammar and usage, and literature. Speech instruction focuses on voice training, language and presentation, as well as the preparation of speeches to inform, demonstrate, persuade, introduce, and critique. Grammar instruction includes frequent mini-lessons in traditional grammar and usage. Instruction in composition centers on the writing process and effective revision strategies and includes the study of persuasive, narrative, and critical writing techniques. The study of literature includes the short story, drama, poem, and novel, with special emphasis on contemporary novels. Vocabulary development through the study of etymology is stressed.

### **1006 English 11 – Applied**

ENG 11

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 4 units maximum

Offered to Grades: 11

Fulfills and English/Language Arts requirement for the certificate of completion.

Applied English 11, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study

of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access online information.

### **1006 English 11**

ENG 11

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 11

Fulfills and English/Language Arts requirement for all diplomas.

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.

### **1006 English 11 – College**

ENG 11

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 11

Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of composition, grammar and usage, and literature, emphasizing those skills needed to prepare for college work. Composition instruction centers on essay writing, especially persuasive essays and researched essays using the basics of MLA style. Literature instruction consists of a survey of American literature from the colonial period to the present. Special emphasis is placed on the study of classic and contemporary American novels, biography, and drama.

### **1008 English 12 – Applied**

ENG 12

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 4 units maximum

Offered to Grades: 12

Fulfills and English/Language Arts requirement for the Certificate of Completion.

Applied English 12, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare, and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access online information.

### **1008 English 12**

ENG 12

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 12

Fulfills and English/Language Arts requirement for all diplomas.

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.

### **English 12 – College**

ENG 12

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum



Offered to Grades: 12

Fulfills and English/Language Arts requirement for all diplomas.

This course includes the study of composition, grammar and usage, and literature, emphasizing those skills needed to prepare for college work. Composition instruction centers on writing expository essays of various types, composing a lengthy research paper, and responding to literature. Clear, concise style and Standard English usage are emphasized. Readings in literature include a study of classics. Critical thinking skills in reading and writing are emphasized.

### **1086 Student Media**

STDNT MEDIA

Length of Course: 1 to 2 semester course

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills the Fine Arts requirement for the Core 40 with Academic Honors diploma.

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

### **120 Developmental Reading**

DEV READING

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as an elective for all diplomas.

Developmental Reading is a supplemental course that provides students with individualized instruction designed to support success in completing coursework aligned with the Indiana Academic Standards for English/Language Arts focusing on the Reading Standards for Literature and Nonfiction. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards. This course allows for successive semesters of instruction for students who need additional support in vocabulary development and reading comprehension.

### **1034 Film Literature**

FILM LIT

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills an English/Language Arts requirement for all diplomas.

Film Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present. Courses 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.

### **1076 Speech**

SPEECH

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Fulfills an English/Language Arts requirement for all diplomas.

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 multimedia presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same standard English conventions for oral speech that they use in their writing.

## **Fine Arts Department**

### **4182 Beginning Chorus**

BEG CHOR

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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.

### **4160 Beginning Concert Band**

BEG BAND

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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

### **4186 Intermediate Chorus**

INT CHOR

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

*Intermediate Chorus* is based on the Indiana Academic Standards for High School Choral Music. Students taking Intermediate 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.

#### **4168 Intermediate Concert Band**

INT BAND

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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

#### **4188 Advanced Chorus**

ADV CHOR

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Advanced Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Advanced 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.

### **4170 Advanced Concert Band**

ADV BAND

Length of Course: 1 semester; can be taken for successive semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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

### **4206 Music History and Appreciation**

MUS HIST

Length of Course: 1 or 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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.

#### **4000 Introduction to Two-Dimensional Art**

2D ART

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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.

#### **4004 Advanced Two-Dimensional Art**

ADV 2D ART

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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.

#### **4024 Art History**

ART HIST

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

Art History is a course based on the Indiana Academic Standards for Visual Art. Students taking Art History engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Students study works of art and artifacts from world cultures, engage in historically relevant studio activities; utilize research skills to discover social, political, economic, technological, environmental, and historical trends and connections; analyze, interpret, theorize, and make informed 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.

#### **4020 Advanced Art History**

ADV ART HIST

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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

## **4002 Introduction to Three-Dimensional Art**

3D ART

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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

## **4006 Advanced to Three-Dimensional Art**

ADV 3D ART

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a Fine Arts requirement for the Core 40 with Academic Honors diploma.

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



## **Foreign Language Department**

### **2120 Spanish I**

SPAN I

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a World Language requirement for the Core 40 with Academic Honors diploma.

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.

### **2122 Spanish II**

SPAN II

Length of Course: 2 semesters

Prerequisites: Spanish I

Credit: 1 per semester

Offered to Grades: 10, 11, 12

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, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending

longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

### **Spanish III**

SPAN III

Length of Course: 2 semesters

Prerequisites: Spanish I and II

Credit: 1 per semester

Offered to Grades: 11, 12

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, 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.

### **Spanish IV**

SPAN IV

Length of Course: 2 semesters

Prerequisites: Spanish I, II, and III

Credit: 1 per semester

Offered to Grades: 12

Counts as a directed elective or elective for all diplomas.

Fulfills a World Language requirement for the Core 40 with Academic Honors diploma.

Spanish V, a course based on Indiana's Academic Standards for World Languages, provides opportunities for students to interact and exchange information in culturally and socially authentic and/or simulated situations to demonstrate integration of language skills with understanding of Spanish-speaking culture. This course emphasizes the use of appropriate formats, varied vocabulary and complex language structures within student communication, both oral and written, as well as the opportunity to produce and present creative material using the language. Additionally, students will continue to develop understanding of Spanish-speaking culture through investigating the origin and impact of significant events and contributions unique to the target culture, comparing and contrasting elements that shape cultural identity in the target culture and the student's own culture, and explaining how the target language and culture have impacted other communities. This course further emphasizes the integration of concepts and skills from other content areas with the target language and cultural understanding, as well as the exploration of community resources intended for native Spanish speakers.

## **Health and Physical Education Department**

### **3542 Physical Education I**

PHYS ED I

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester; maximum 1 credit

Offered to Grades: 9, 10, 11, 12

Fulfills part of the Physical Education requirement for all diplomas.

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which 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 of which are within the framework of the skills, knowledge, and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

### **3544 Physical Education II**

PHYS ED II

Length of Course: 1 semester

Prerequisites: Physical Education I

Credit: 1 per semester; maximum 1 credit

Offered to Grades: 9, 10, 11, 12

Fulfills part of the Physical Education requirement for all diplomas.

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to

actively participate in four of the following areas that were not included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation.

### **3560 Elective Physical Education**

ELECT PE

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester; maximum of 8 credits

Offered to Grades: 10, 11, 12

Counts as an elective for all diplomas.

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.

### **3508 Current Health Issues**

CHI

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester; 1 credit maximum

Offered to Grades: 9, 10, 11, 12

Counts as an elective requirement for all diplomas.

Current Health Issues, an elective course that can be aligned to Indiana's Academic Standards for Health & Wellness, focuses on specific health issues and/or emerging trends in health and wellness, but not limited to: personal health and wellness; non-communicable and communicable diseases; nutrition; mental and emotional health; tobacco-prevention; alcohol and other drug-prevention; human development and family health; health care and/or medical

treatments; and national and/or international health issues. 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.

### **3506 Health and Wellness Education**

HLTH & WELL

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester; 1 credit maximum

Offered to Grades: 9, 10, 11, 12

Fulfills the Health and Wellness requirement for all diploma types.

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.

## **Health Science Department**

### **5218 Principles of Biomedical Science**

PRIN BIOMED

Length of Course: 2 semesters

Prerequisites: Biology I or concurrent enrollment in Biology I

Credit: 1 per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

Fulfills a science requirement for all diplomas

Counts as a directive elective or elective for all diplomas

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.

## **Math Department**

### **2516 Algebra I Lab**

ALG I LAB

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

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 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. ***Algebra I Lab is designed as a support course for Algebra. As such, a student taking Algebra I Lab must also be enrolled in Algebra 1 during the same academic year.***

### **2520 Algebra I**

ALG I

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Fulfills a Mathematics course requirement for all diplomas.

Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas.

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of six 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. Students will also 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.

## **2532 Geometry**

GEOM

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 10, 11, 12

Fulfills a Mathematics course requirement 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 diploma.

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. Seven 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.

## **2522 Algebra II**

ALG II

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills a Mathematics course requirement for all diplomas.

Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas.

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 seven 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.

### **2564 Pre-Calculus: Algebra**

#### **PRECAL AL**

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 12

Fulfills a Mathematics course requirement for all diplomas.

Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. 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.

### **2566 Pre-Calculus: Trigonometry**

#### **PRECAL TRIG**

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 12

Fulfills a Mathematics course requirement for all diplomas.

Pre-Calculus: 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 in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry



consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The 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.

### **2527 Calculus**

CALC

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills a Mathematics course requirement for all diplomas.

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.

### **2546 Probability and Statistics**

PROB/STAT

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills a Mathematics course requirement for all diplomas.

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Probability and Statistics are made up of three strands: Data Analysis; Experimental Design; and Probability. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing technology and computer programs is encouraged. 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.

### **2550 Quantitative Reasoning**

## QUANT REAS

Length of Course: 1 or 2 semester course

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills a Mathematics course requirement for all diplomas.

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

## Multidisciplinary

### 0500 Basic Skills Development

BAS SKLS

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester; maximum of 8 credits

Offered to Grades: 9, 10, 11, 12

Counts as an elective for all diplomas.

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

## **0502 Cadet Teaching Experience**

CADET TCHG

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester; 4 credits maximum

Offered to Grades: 9, 10, 11, 12

Counts as a directed elective or elective for all diplomas.

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

## **Science Department**

### **3024 Biology I**

BIO I

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Fulfills the Biology requirement for all diplomas.

Biology I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Biology topics. Disciplinary Core Ideas for this course include From Molecules to Organisms, Ecosystems, Heredity and Biological Evolution. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

### **3108 Integrated Chemistry-Physics**

ICP

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as an elective for all diplomas.

Fulfills a science (physical) course requirement for all diplomas.

Qualifies as a Quantitative Reasoning course.

Integrated Chemistry and Physics incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three-dimensional understanding of Chemistry and Physics topics. Disciplinary Core Ideas for this course include Matter and its Interactions, Forces, Energy, and Waves and their Applications in Technologies for Information Transfer. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

### **3026 Biology II**

BIO II

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 10, 11, 12

Counts as an elective for all diplomas.

Fulfills a science course requirement for all diplomas.

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.

### **5276 Anatomy and Physiology**

**A & P**

Length of Course: 1 to 2 semester course

Prerequisites: None

Credit: 1 per semester; 2 credits maximum

Offered to Grades: 11, 12

Counts as a directed elective or elective for all diplomas.

Fulfills a science course requirement for all diplomas.

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, integumentary, skeletal, 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.

### **3064 Chemistry I**

CHEM I

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 10, 11, 12

Fulfills a science (physical) course requirement for all diplomas.

Qualifies as a quantitative reasoning course.

Chemistry I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Chemistry topics. Disciplinary Core Ideas for this course include Matter and its Interactions and Energy. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

### **3066 Chemistry II**

CHEM II

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 10, 11, 12

Counts as an elective for all diplomas.

Fulfills a science course requirement for all diplomas.

Qualifies as a quantitative reasoning course.

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.

### **3084 Physics I**

PHYS I

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills a science (physical) course requirement for all diplomas.  
Qualifies as a Quantitative Reasoning course.  
Counts as an elective for all diplomas.

Physics I incorporates high school Disciplinary Core Ideas, Science and Engineering Practices, and Crosscutting Concepts to help students gain a three dimensional understanding of Physics topics. Disciplinary Core Ideas for this course include Forces and Interactions, Energy, Wave Properties, and Electromagnetic Radiation. Instruction focuses on the observation of phenomena to develop an understanding of how scientific knowledge is acquired.

### **3010 Environmental Science**

ENVSCI

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Counts as an elective for all diplomas.

Fulfills a science (life) course requirement for all diplomas.

Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students enrolled in this course integrate Science and Engineering Practices and Crosscutting Concepts to conduct in-depth scientific studies of environmental systems, flow of matter and energy, natural disasters, environmental policies, biodiversity, population, pollution, and natural and anthropogenic resource cycles. Students formulate, design, and carry out laboratory and field investigations as an essential course component. Students completing Environmental Science acquire the essential tools for understanding the complexities of national and global environmental systems.

## **Science, Technology, Engineering, and Mathematics (STEM) Department**

### **Computer Science Department**

#### **7351 Topics in Computer Science**

TOP COMP SCI

Length of Course: 2 semesters; 2 semesters required

Prerequisites: Principles of Computing

Credit: 1 per semester, 2 credits maximum

Offered to Grades: 10,11, 12

Counts as a directed elective or elective for all diplomas.

Counts as a quantitative reasoning course.

Counts as a science credit.

Topics in Computer Science is designed for students to investigate emerging disciplines within the field of computer science. Students will use foundational knowledge from 7183 Principles of Computing to study the areas of data science, artificial intelligence, app/game development, and security. Students will utilize knowledge related to these areas and programming skills to develop solutions to authentic problems.

### **7352 Computer Science**

COMP SCI

Length of Course: 2 semesters; 2 semesters required

Prerequisites: Principles of Computing

Credit: 1 per semester, 2 credits maximum

Offered to Grades: 10,11, 12

A directed elective or elective for all diplomas.

Counts as a quantitative reasoning course.

Computer Science introduces the fundamental concepts of procedural programming. Topics include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. The course also offers an introduction to the historical and social context of computing and an overview of computer science as a discipline.

### **7353 Computer Science Capstone**

COMP SCI CAP

Length of Course: 2 semesters; 2 semesters required

Prerequisites: Principles of Computing

Credit: 1-3 credits per semester, 6 credits maximum

Offered to Grades: 12

A directed elective or elective for all diplomas.

Computer Science Capstone provides a working understanding of the fundamentals of procedural and object-oriented program development using structured, modular concepts and modern object-oriented programming languages. Reviews control structures, functions, data types, variables, arrays, and data file access methods. The course is a second level computer science course introducing object oriented computer programming, using a language such as Java or C++. Object-oriented concepts studied include classes, objects, inheritance, polymorphism, operator overloading, exception handling, recursion, abstract data types, streams and file I/O. Students will explore programming concepts such as software reuse, data abstraction and event-driven programming.

## **Engineering Department**

## **4802 Introduction to Engineering Design**

INT ENG DES

Length of Course: 2 semesters; 2 semesters required

Prerequisites: None

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 9, 10, 11, 12

A directed elective or elective for all diplomas.

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

## **5644 Principles of Engineering**

PRNC ENG

Length of Course: 2 semesters; 2 semesters required

Prerequisites: Introduction to Engineering Design

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 10, 11, 12

A directed elective or elective for all diplomas.

Fulfills a science course requirement for all diplomas.

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



### **5534 Computer Integrated Manufacturing**

COMP INT MFG

Length of Course: 2 semesters; 2 semesters required

Prerequisites: Introduction to Engineering Design

Credit: 1 credit per semester, 2 credits maximum

Offered to Grades: 10, 11, 12

A directed elective or elective for all diplomas.

Counts as a quantitative reasoning course.

## **Social Studies Department**

### **1570 Geography and History of the World**

GEO-HST WLD

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as a Social Studies requirement for the General Diploma.

Counts as an elective for all diplomas.

Fulfills the Geography History of the World/World History and Civilization graduation requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

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

### **1548 World History**

WLD HST/CVL

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as an elective for all diplomas.

Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas.

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.

### **1512 Current Problems, Issues and Events**

CPIE

Length of Course: 1 semester; course may be repeated for credit if the content of the course changes.

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as an elective for all diplomas.

Fulfills social studies requirement for General Diploma.

Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems or issues selected will have contemporary historical significance and will be studied from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

### **1542 United States History**

US HIST

Length of Course: 2 semesters

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 10, 11, 12

Fulfills the US History requirement for all diplomas.

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.

### **1532 Psychology**

PSYCH

Length of Course: 1 to 2 semester course

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 10, 11, 12

Counts as an elective for all diplomas.

Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas: History and Scientific Method, Biological Basis for Behavior, Development, Cognition, Personality and Assessment, Abnormal Psychology, Socio-Cultural Dimensions of Behavior, and Psychological Thinking. History and 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 analyzes the changes through one's life including the physical, cognitive, emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment explains 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.

### **1534 Sociology**

SOCIOLOGY

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Counts as an elective for all diplomas.

Fulfills course requirement for General Diploma.

Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. Students describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry students examine society, group behavior, and social structures. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. The impact of social groups and institutions on group and individual behavior and the changing nature of society will be examined. Influences on group behavior and social problems are included in the course. Students also analyze the role of individuals in the community and social problems in today's world.

### **1540 United States Government**

US GOVT

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Fulfills Government requirements for all diplomas.

The 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. Analysis of how the United States interacts with other nations and the government's role in world affairs is included in this course. 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.

### **1514 Economics**

ECON

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 11, 12

Counts as an elective for all diplomas.

Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diplomas.

Fulfills a Social Studies requirement for the General Diploma only.

Qualifies as a quantitative reasoning course.

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.

### **1516 Ethnic Studies**

#### **ETH STUDIES**

Length of Course: 1 semester

Prerequisites: None

Credit: 1 per semester

Offered to Grades: 9, 10, 11, 12

Counts as an elective for all diplomas.

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.

### **Dual Credit Courses**

Some advanced level courses are taught as dual credits at Tri-Township High School. Through an articulation agreement with Ivy Tech, students may take the class for college and high school credit. Any advanced level courses not offered at LaCrosse High School may be taken at Purdue Northwest and Ivy Tech for college and high school credit. Inquire with the school counselor for further details.

### **Vocational Courses**

A variety of vocational courses are offered through the A.K. Smith Career Center in Michigan City. These courses are available to Tri-Township Juniors and Seniors. Here is a list of the following programs offered:

- Automotive Technology
- Career Skills
- Construction Technology
- Cosmetology
- Criminal Justice
- Culinary Academy
- Energy Academy
- Fire Science
- Health Academy
- Modern Machine Technology
- Welding Technology
- Education Professions
- Emergency Medical Technician (EMT)

### **On-Line Courses (Edmentum)**

Some courses not offered in the daily schedule at Tri-Township High School may be offered through Edmentum, an on-line program. This program enables the students to take courses not offered in the daily schedule or repeat a class the individual was not successful in the first time around.