## Southmont High School Curriculum Guide 2022-2023

Course Descriptions

Policies and Procedures

# SOUTHMONT

EST. 1971

#### **Mission Statement:**

"To empower students to think critically, act responsibly, and pursue excellence."

### **Vision Statement**:

"Creating an environment of student learning and achievement"

## SOUTHMONT HIGH SCHOOL COURSE DESCRIPTIONS

#### Table of Contents

| Academic Overview / Diploma Types    | 3  |
|--------------------------------------|----|
| Agricultural Science                 | 7  |
| Art                                  | 9  |
| Business                             | 13 |
| English                              | 16 |
| Family and Consumer Science          | 18 |
| Health and Wellness                  | 19 |
| Industrial Technology                | 20 |
| Math                                 | 22 |
| Music                                | 23 |
| Science                              | 24 |
| Social Studies                       | 27 |
| World Languages                      | 28 |
| Career and Technical Education (CTE) | 31 |
| Special Services                     | 35 |
|                                      |    |

#### REMINDERS

Students must be enrolled in and passing five (5) full credit courses to participate in sports, co curricular activities, and to receive and keep a work permit. All student schedule changes must be finalized by the end of the school year.

Students are reclassified when they fail to maintain the number of credits necessary for them to graduate in four years.

#### **GRADING SYSTEM**

(4 point scale)

Only full credit subjects are used in computing G.P.A. The G.P.A. is determined by dividing the total number of points earned by the number of credits attempted.

#### WEIGHTED CLASSES

Certain academic courses are weighted by adding an additional 1 point for the 4 point system.

Weighted courses are:

Trigonometry
Pre-Calculus
AP Calculus A/B
Dual Credit Chemistry
Dual Credit Biology I and II
AP U.S. History
AP English Language

The following courses are excluded from G.P.A.: SAE classes and Summer Band

#### HONOR ROLL POLICY

Only full credit subjects will be used in computing class standing for honor roll. The honor roll shall be computed on the point system above. When the point total is determined it shall be divided by the number of credits attempted to arrive at the total.

The following courses are excluded from the grade point G.P.A.: SAE classes and Summer Band

Any person with a "B" or above on a 4 point scale shall be on the honor roll for that grading period or that trimester. If a student has below a "C" in any subject, he/she shall not be on the honor roll. A student must be a full-time student to be eligible for the honor roll.

The weighted courses previously listed receive an additional weight of 1 point on the four point scale when the honor roll and rank in class is computed



| Core 40 Designation | Core 40 w/ Academic Honors<br>Designation | Core 40 with Technical Honors<br>Designation |
|---------------------|---|--|
| 46                  | 47  | 47   |

| Core 40 Diploma     |   |  |  |  |
|---------------------|---|--|--|--|
| English/            | 8 credits   |  |  |  |
| Language<br>Arts    | Including a balance of literature, composition and speech.  |  |  |  |
| Mathematics         | 6 credits   |  |  |  |
|                     | 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II Or complete Integrated Math I, II, and III for 6 credits. Students must take a math course or quantitative reasoning course each year in high school |  |  |  |
| Science             | 6 credits   |  |  |  |
| gnī                 | 2 credits: Biology I 2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 credits: any Core 40 science course  |  |  |  |
| Social Studies      | 6 credits   |  |  |  |
| EST                 | 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World   |  |  |  |
| Directed Electives  | 7 credits   |  |  |  |
|                     | World Languages Fine Arts Career and Technical Education Digital Apps or Personal Finance Preparing for College and Careers   |  |  |  |
| Physical Education  | 2 credits   |  |  |  |
| Health and Wellness | 1 credit  |  |  |  |
| Electives           | 8 credits (College and Career Pathway courses)  |  |  |  |

#### **CORE40 with Academic Honors** (minimum 47 credits)

For the **Core 40 with Academic Honors** designation, students must: · Complete all requirements for Core 40.

- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits
  - o (6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of a "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following:
  - A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
  - B. Earn 6 verifiable transcripted college credits in dual credit courses from the approved dual credit list.
- Earn two of the following:
  - A. A minimum of 3 verifiable transcripted college credits from the approved dual credit list,
  - B. 2 credits in AP courses and corresponding AP exams,
  - C. 2 credits in IB standard level courses and corresponding IB exams.
  - D. Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence based reading and writing section.
  - E. Earn an ACT composite score of 26 or higher and complete written section
  - F. Earn 4 credits in IB courses and take corresponding IB exams.

#### CORE40 with Technical Honors (minimum 47 credits)

For the **Core 40 with Technical Honors** designation, students must: · Complete all requirements for Core 40.

- Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
  - Pathway designated industry-based certification or credential, or
  - Pathway dual credits from the approved dual credit list resulting in 6 transcripted college credits
- Earn a grade of "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following,
  - A. Any one of the options (A F) of the Core 40 with Academic Honors
  - B. Earn the following minimum scores on WorkKeys: Workplace Documents, Level 6; Applied Math, Level 6; and Graphic Literacy, Level 5.
  - C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.
  - D. Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80

#### AGRICULTURAL SCIENCE

5102 FOOD SCIENCE **Dual Credit** Ivy Tech

Term – 2 trimesters

Credits – 1 per trimester (maximum 2)

Grade 10-12

Food Science is a two semester course that 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 the securing of 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.

Recommended Prerequisites: Principles of Agriculture

#### 5072 ADVANCED LIFE SCIENCE FOODS **Dual Credit Ivy Tech**

Term – 2 trimesters

Credits – 1 per trimester (2 maximum)

Grade 11-12

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

Required Prerequisites: Food Science, Chemistry, & Biology

#### 5170 PLANT AND SOIL SCIENCE - Dual Credit Ivy Tech

Term - 2 trimesters

Credit – 1 per trimester (2 maximum)

Grade 9-12

Plant and Soil Science is a two semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Topics covered include: the taxonomy of plants, the various plant components and their functions, plant growth, plant reproduction and propagation, photosynthesis respiration, environmental factors affecting plant growth, diseases and pests of plants and their management, 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, harvesting, and career opportunities in the field of plant and soil science.

Recommended Prerequisites: Principles of Agriculture

#### 5088 AGRICULTURE, POWER, STRUCTURE, AND TECHNOLOGY - Dual Credit Ivy Tech

**Term** - 3 trimesters

Credit - 3

Grade 10 recommended; 11-12 allowed

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

Recommended Prerequisites: Principles of Agriculture

#### 7112 AGRICULTURE STRUCTURES FABRICATION & DESIGN (Welding)

Term – 2 Trimesters

Credit - 2

Grade 10-12

Agricultural Structures Fabrication and Design is a two-semester course that focuses on metal work, and agricultural structures. This course will allow students to develop skills in welding and metalworking, construction, fabrication, machine components and design while incorporating the engineering design process. Students will also cover safety topics for each area while demonstrating appropriate health and safety standards

Recommended Prerequisites: Principles of Agriculture

### 5132 HORTICULTURAL SCIENCE – Dual Credit – Ivy Tech

Term - 2 trimesters

Credit - 2

Grade 9-12

This course provides an overview of biology and technology involving the production of horticultural commodities. The first trimester will include an introduction to greenhouse plants and equipment. Class projects include plant identification, dish gardens, plant propagation, pruning, pinching, and poinsettia production.

The second trimester will include a first-hand application of the science of bedding plants, plant sales and marketing, and greenhouse operation and management.

Ivy Tech credit offered through this class in AGRI 116.

Recommended Prerequisites: Principles of Agriculture

#### 5008 ANIMAL SCIENCE - Dual Credit - Ivy Tech

Term – 2 trimesters

Credit – 2

Grade 10-11-12

This course provides students with an overview of animal science applied to both large and small animals. During the first trimester, students will explore the career opportunities, social and environmental concerns, anatomy, physiology, genetics, reproduction and nutrition of animals. Second trimester will focus on the specific management, care and maintenance of the various livestock industries (beef, dairy, swine, poultry, equine, aquaculture and specialty animals), balancing diets for each animal and common parasite and disease problems found in livestock operations.

Recommended Prerequisites: Principles of Agriculture

### 5070 ADVANCED LIFE SCIENCE/ANIMALS (L) – Dual Credit – Ivy Tech

Term - 2 trimesters

Credit - 2

Grade 11-12

This course incorporates biology, chemistry, and microbiology as it pertains to Agriculture and Animal

Science. Students will formulate, design, and carry out animal-based laboratory and field investigations. Students will study animal growth, development and physiology as it pertains to agricultural science. Using biology and chemistry, the students will work with concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, ecology, and historical and current issues in animal agriculture. Students will apply scientific concepts to solve problems related to highly advanced applications of animal production.

Required Prerequisites: Chemistry & Biology

### **7238** AGRIBUSINESS MANAGEMENT – Dual Credit – Ivy Tech

Term – 2 trimesters

Credit – 2

Grade 11-12

Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

This course focuses on the management of agricultural related business. Students will explore the different career areas available in Agribusiness management. Focuses will also include planning, organizing and managing a personal business, economic principles of Agribusiness, record keeping, budgeting, taxation, government and economic principles, purchasing, marketing, technology, human resource management, employer-employee relations, and safety management.

#### Recommended Prerequisites:

Introduction to Agriculture, Food and Natural Resources. This course is aligned with postsecondary courses for Dual Credit with Ivy Tech – AGRI 102 Agriculture Business and Farm Management.

### 5074 ADVANCED LIFE SCIENCE/PLANT AND SOILS – Dual Credit – Ivy Tech

Term – 2 trimester

Credit – 2

Grade 11-12

This course incorporates advanced biology, chemistry, and earth sciences as it pertains to Agricultural Production. Students will formulate, design, and carry out crop production based laboratory and field investigations. Students will study the internal and external structures of plants, organ functions, genetics, and the process of living plants. Using biology and chemistry, the students will work with concepts associated with plant production, soil structures, diseases and pest problems, soil improvement, plant genetic improvement, plant breeding, and biotechnology. Students will apply scientific principles to

solve problems related to highly advanced applications of plant production and soil science.

Required Prerequisites: Chemistry, & Biology

### **5228 SUPERVISED AGRICULTURAL EXPERIENCE** (SAE)

695 - Summer 697 - Winter

696 – Fall 698 – Spring

Term – Spring, Summer, Fall and Winter Sessions

Credit – 1/session

Grade 9-12

Students will gain experience in a field(s) of Agriculture they are interested in. Students will apply what they learn in the agriculture classroom to real-life situations. Students will work closely with the agricultural science and business teachers to keep records involving their agricultural experience hours. These hours are obtained through agricultural related work (paid or unpaid). Students will also participate in FFA sponsored leadership activities to encourage personal growth. Instructor approval is required for enrollment.

Requirements:

- 1. 80 hours of coursework: 60% related to SAE 40% FFA Leadership Activities
- 2. Develop and document three new skills.
- 3. Document and solve three problems.
- 4. Complete three improvement projects.
- 5. Actively participate in six FFA sponsored leadership projects (list will be provided).
- 6. Complete Greenhand requirements the first time the student is enrolled in SAE.

#### Recommended Prerequisites:

Have established a satisfactory SAE (approved by instructor) before the course begins.

### 7117 PRINCIPLES OF AGRICULTURE - Dual Credit - Ivy Tech

Term - 2 Trimester

Credit - 2

Grade: 9-11

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.

### 7114 Greenhouse & Soilless Production - Dual Credit - Ivy Tech

Term - 2 Trimester

Credit - 2

Grade: 10-12

Greenhouse and Soilless Production is a two-semester course that provides an overview of structural designs and uses of enclosed structures (greenhouses) to grow various plants and food. The course will focus on discussing different types of enclosed structures, management systems, and growing systems used to produce plants and food. The course will also present an overview of soilless growing systems such as hydroponics, aquaponics, aeroponics and fogponics. Students will utilize the school greenhouse as part of this course.

#### **ART**

### 4000 ART I--INTRO TO TWO-DIMENSIONAL ART (Lab)

Term - 1 trimester

Credit – 1

Grade 9-12

In the area of: production, students search for meaning, significance, and direction in their own work by producing works of art in a variety of two-dimensional materials. At this level, students produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. Additionally, students (1) create works of art, (2) reflect upon the outcomes of those experiences, (3) explore historical connections, (4) write about the process, (5) make presentations about their progress at regular intervals, (6) work individually and in groups, (7) find direct correlation to other disciplines, and (8) explore career options in visual art. Lab fee charged.

### 4002 ART I--INTRO TO THREE-DIMENSIONAL ART (Lab)

Term - 1 trimester

Credit – 1

Grade 9-12

In the area of production, students search for meaning, significance, and direction in their own work by producing works of art in a variety of three dimensional materials. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems.

Within this context students: (1) create works of art, (2) reflect upon the outcome of those experiences, (3) explore historical connections, (4) write about the process, (5) make presentations about their progress at regular intervals, (6) work individually and in groups, (7) find a direct correlation to other disciplines, and (8) explore career options in visual art. Students utilize art museums, galleries, studios, and/or community resources in their studies. Lab fee charged.

#### 5550 Graphic Design & Layout

GRAPHIC DESIGN AND LAYOUT – Non-Dual Credit GRAPHIC DESIGN AND LAYOUT – Dual Credit Grade – 10-12 Honors, and Technical Honors diplomas. Term - 2 Credit –(High School) 2 Trimesters Required 3 (College – Vincennes University) (Graph Design LT)

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.

#### 4000 ADV TWO DIMENSIONAL A

#### 4000 ADV. TWO-DIMENSIONAL ART (Lab) (Art II)

Term - 2 trimester Credit – 2

Grade 10-12

In the area of: production, students search for meaning, significance, and direction in their own work by producing works of art in a variety of two-dimensional materials. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. Students also utilize art museums, galleries, studios, and community resources in their studies. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. Lab fee charged.

Recommended Prerequisites: Introduction to Two-Dimensional Art and Digital Art

#### 4060 DRAWING (Lab) (Art III)

Term - 2 trimester Credit -2 Grade 10-12

Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing. Additionally, students: (1) reflect upon the outcome of these experiences, (2) explore historical connections, (3) write about the process, (4) make presentations about their progress at regular intervals, (5) work individually and in groups, (6) find a direct correlation to other disciplines, and (7) explore career options related to drawing. Art museums, galleries, studios and community resources are utilized. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. Lab fee charged.

Recommendation: Advance 2D Art (Art II)

#### 4064 PAINTING (Lab) (Art IV)

Term - 2 trimester Credit – 2

Grade 11-12

Within this context, students: (1) create abstract and realistic painting using a variety of styles and materials, (2) reflect upon the outcome of these experiences, (3) explore historical connections, (4) write about the process, (5) make presentations about their progress at regular intervals, (6) work individually and in groups, and (7) find direct correlations to other disciplines, and (8) explore career options related to painting. Art museums, galleries, studios and/or community resources are utilized. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. Lab fee charged.

Recommended Prerequisites: Drawing (Art III)

#### 4044 SCULP<mark>TURE</mark> I (Lab)

Term - 1 trimester

Credit - 1

Grade 10-12

Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students in sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials such as plaster, clay, metal, paper, wax, and plastic, students create portfolio quality work. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret,

theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers. Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art.

Recommended Prerequisites: Intro to 3D.

#### 4044 SCULPTURE II (Lab

Term - 1 trimester Credit – 1 Grade 10 - 12

Advanced sculpture students are familiar with materials and methods of working with three-dimensional forms. This course gives a review of sculpture and covers various aspects of 3-dimensional works, such as the production of simple and complex forms, subtractive work, contextual considerations, installations, and found objects. Mediums and methods include plaster, clay, stone, metal, wood, casting techniques, and wire forms. Students build on prior class experience to create higher quality in both critical thinking skills and project production. Students at this level produce works for their portfolios, which demonstrate a sincere desire to explore a variety of ideas and problems. Regular assessment promotes a solid theoretical and practical/technical understanding of the process of making sculptural forms. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. Lab fee charged.

Recommended Prerequisites: Sculpture I.

#### 4062 PHOTOGRAPHY I (Lab)

Term - 1 trimester Credit – 1 Grade 10-12

This course is based on the Indiana Academic Standards for Visual Art. Students in photography engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works, creating film photographs and a variety of dark room processes. 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. Students must provide their own 35mm camera, film, and photo paper. Lab fee charged. The nature of this course allows for

successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized

Recommended Prerequisites: Introduction to Two Dimensional Art I (1 credit)

#### 4062 PHOTOGRAPHY II (Lab )

Term - 1 trimester Credit – 1 Grade 10 - 12

This course is based on the Indiana Academic Standards for Visual Art. Students in photography engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works, creating photographs, films, and videos utilizing a variety of digital tools and darkroom processes. 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. Lab fee charged. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Recommended Prerequisites: Introduction to Two Dimensional Art (1 credit) or Introduction to Three Dimensional Art (1 credit).

#### 5570 COMMERCIAL PHOTOGRAPHY Part A

Term - 1 Trimester
Credit - 1
Grade 10 - 12
Non-dual Credit
Dual Credit Ivy Tech- 3 college credits
Core 40 and AHD course.

Commercial Photography is an organized learning experience that includes theory, laboratory, and studio work as each relates to all phases of camera use, photographic processing, and electronic photographic editing. Instruction covers the topics of composition and color dynamics; lighting techniques and meters; large and medium format cameras and other current photographic equipment used for portrait, commercial, and industrial photography. Focus is placed on camera operation and composition related to traditional photographic principles and also tools and creative effects for editing and/or enhancing photographs. Instruction emphasizes the planning, development, and

production of materials that visually communicate ideas and information.

Recommended Prerequisites: Photography I (1 credit) with A/B grade work.

#### 5570 COMMERCIAL PHOTOGRAPHY Part B

Term – 1 Trimester Credit

Commercial Photography is an organized learning experience that includes theory, laboratory, and studio work as each relates to all phases of camera use, photographic processing, and electronic photographic editing. Instruction covers the topics of composition and color dynamics; lighting techniques and meters; large and medium format cameras and other current photographic equipment used for portrait, commercial, and industrial photography. Focus is placed on camera operation and composition related to traditional photographic principles and also tools and creative effects for editing and/or enhancing photographs. Instruction emphasizes the planning, development, and production of materials that visually communicate ideas and information.

Recommended Prerequisites: Successful completion of Commercial Photography Part A.

#### 4082 DIGITAL DESIGN - Part A and Part B (Lab)

Term - 2 trimester

Credit -2

Grade 9-12

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, multimedia, 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 Prerequisites: Introduction to Two-Dimensional Art

### 4086 VISUAL COMMUNICATION (ADVANCED COMPUTER GRAPHICS)

Term - 2 trimesters Credit – 2 Grade 10-12 ICATION (ADVANCED

In the area of production, students search for meaning, significance, and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork. In addition, students: (1) choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork,

- (2) using organizational principles and functions to solve specific visual problems,
- (3) applying media, techniques, and processes with sufficient skill to communicate intended meaning,
- (4) developing experience in desktop publishing, multimedia communication, computer animation. Students at this level produce works for their portfolios which demonstrate a sincere desire to explore a variety of ideas and problems. Students create computer graphics incorporating desktop publishing, multimedia, digitized imagery, computer animation, Application Development, Game Development Creation and Web page design. Additionally, students:
- (a) reflect upon the outcome of these experiences,
- (b) explore historical connections,
- (c) write about the process,
- (d) make presentations about their progress at regular intervals,
- (e) work individually and in groups,
- (f) find direct correlations to other disciplines, and
- (g) explore career options related to computer generated imagery, APPS for an APP Store, Game Design and Creation.

Art museums, galleries, studios, and community resources are utilized. Lab fee is charged. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.

Recommended Prerequisites: Completion of two trimesters of Digital Design with at least A/B work and recommendation of the instructor.

#### 4260 STUDIO ART 2D DESIGN PORTFOLIO (AP)\*

Term - 3 trimesters

Credit - 3

Grade - 11-12

This is an advanced placement course with emphasis on development of a presentation portfolio. The portfolio will include five actual works illustrating *quality*, 12 digital images illustrating *depth* in any media, and 12 digital images of 12 different works related in a specific artistic concern or visual idea – a *concentration*. This presentation material may include fine art and/or commercial art in a variety of media: painting, drawing, animation, multimedia, CD's, DVD's, or video tapes, printmaking, digital art or photography. Any work that makes use of artists' works (including photographs) and /or published images must

show substantial and significant development beyond duplication. This interdisciplinary course examines visual art in relation to cultures throughout history: their politics, economics, music, math, science, physical feats, communications, philosophy, and comparative religions. This course will enlighten students as to how these subjects occur as a "statement of the times" hand-in-hand through the history of a cultural time period. Course content will include concepts of how art starts movements — not just how art records history. This course incorporates research, extensive reading, and analytical writing. Students who apply for advanced placement college credit will be required to complete three trimesters of this course and submit a presentation portfolio. Lab and AP fee will be charged.

Recommended Prerequisites: Four trimesters (4 credits) of sequential art courses with at least A/B work, and recommendation of the instructor.

#### 4260 STUDIO ART 3D DESIGN PORTFOLIO (AP)\*

Term – 3 trimesters

Credit - 3

Grade 11-12

This is an advanced placement course with an emphasis on development of a presentation portfolio intended to address sculptural issues as related to depth and space. Design involves purposeful decision making about how to use the elements and principles of art in an integrative way. For this portfolio, students are asked to demonstrate proficiency in 3-D design through architectural models, metal work, ceramics, and three-dimensional fiber arts.

Any work that makes use of (appropriates) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication. This course incorporates research, extensive reading, and analytical writing. Advanced Placement (AP) courses are intended to be the equivalent to the comparable college level course. Students who apply for advanced placement college credit will be required to complete three trimesters of this course and submit a presentation portfolio. Lab and AP fee will be charged.

Recommended Prerequisites: Four trimesters (4 credits) of sequential art courses, with at least A/B work, and recommendation of the instructor.

### 4260 STUDIO ART (DRAWING PORTFOLIO), ADVANCED PLACEMENT (ART, DRP AP)\*

Term – 3 trimesters

Credits - 3

Grade 11-12

Studio Art, Advanced Placement – Drawing Portfolio is designed to address a very broad interpretation of drawing

issues and media. Light and shade, line quality, rendering of form, composition. surface manipulation, and illusion of depth are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational, and inventive works may demonstrate drawing competence. Any work that makes use of (appropriate) other artists' works (including photographs) and/or published images must show substantial and significant development beyond duplication. This is demonstrated through manipulation of the formal qualities, design, and/or concept of the source. Lab and AP fee will be charged.

Recommended Prerequisites: Four trimesters (4 credits) of sequential art courses with at least A/B work and recommendation of the instructor.

#### **BUSINESS**

#### **5232 INTERACTIVE MEDIA (YEARBOOK)**

Term: 3 trimesters

Credit: 1-3 Grades: 10-12

Interactive Media prepares students for careers in business and industry working with interactive media products and services. 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." The course includes a focus on basic computer terminology and use, mastering desktop publishing skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive, and page layout software. The course includes organized learning experiences that incorporate a variety of visual techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and publications. Communication skills will be emphasized through the study of effective methods used to design a product that imparts information, ideas, and themes. Course work will also include the study of and practice in gathering and analyzing information, interviewing, and photography for the purpose of: writing, (2) editing, (3) publishing for print, and (4) desktop publishing for the school yearbook. Included in Computer Illustration and Graphics 1 are the strategies of planning, marketing (including and sales) and distribution of the This class will allow for advanced school vearbook. application of Online Design, Photoshop, and digital photography. Students will assist in designing the yearbook and will be responsible for yearbook sales. *This course counts as a Directed Elective or Elective for all diplomas.* 

Recommended Prerequisites: Digital Applications and Responsibility I. Also, sophomores should have a "B" average in English. Juniors and Seniors should have at least a "C" average in English.

#### **5232 INTERACTIVE MEDIA II (YEARBOOK II)**

Term: 3 trimesters

Credit: 1-3 Grades: 10-12

This course is designed for seniors who will apply experience from Interactive Media I. Students will learn proofing strategies, color layout, and work independently with photographers and publishing industry representatives. Communication skills will be emphasized through the study of effective methods used to design a product that imparts information, ideas, and themes. This course is designed exclusively for those students who can train other students as part of the Interactive Media (Yearbook) program. Students will work with school committees and publishing company advisors to plan and publish school portraits of clubs, sports, staff, and special events such as Prom and Graduation. This class will emphasize deadlines and responsibilities that are attributed to the final production of a medium.

Recommended Prerequisites: At least a "C" in Interactive Media I.

#### 4803 INTRODUCTION TO COMPUTER SCIENCE

Term: 2 trimesters

Credits: 2 Grades: 9-12

This introductory course allows students to explore the world of Computer Science. Students will gain a broad understanding of the areas composing Computer Science. Units of instruction will include computer programming, gaming/mobile development, and artificial intelligence/robotics. *This course is a directed elective or elective for all diplomas*.

#### 4801 COMPUTER SCIENCE I

Term: 2 trimesters

Credits: 2 Grades: 10-12

This course introduces essential ideas of computer science and shows how computing and technology can influence the world around you. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. Topics

include program flowcharting, 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, and control breaks and offers students an opportunity to apply skills in a laboratory environment.

Recommended Prerequisites: Introduction to Computer Science.

#### **5236 COMPUTER SCIENCE II**

Term: 2 trimesters

Credits: 2 Grades: 10-12

This course explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers and data file access methods. An emphasis on logical program design using a modular approach, which involves task oriented program functions. This course qualifies as a Quantitative Reasoning course and counts as an elective or Directed Elective for all diplomas.

Required Prerequisite: Computer Science I

#### **5250 COMPUT**ER SCIENCE III: DATABASES

Term: 2 trimesters Credits: 2

Grades: 11-12

Computer Science III – Databases introduces students to the basic concepts of databases including types of databases, general database environments, and the importance of data to the business world. Discussion with hands-on activities will include database design, normalization of tables, and development of tables, queries, reports, and applications. Course content will include database administration and data maintenance. Students will be introduced to data concepts such as data warehousing, data mining, and BIG Data. Microsoft Access will be utilized to develop/simulate business applications. Students will be required to demonstrate skills such as team building, work ethic, communications, documentation, and adaptability.

Required Prerequisites Computer Science I and Computer Science II

#### **4512 BUSINESS MATH**

Term—2 trimesters

Credits: 2 Grades: 10-12

This course prepares students for roles as entrepreneurs, business managers, as well as workers and consumers. Topics of instruction include mathematical operations related to accounting, banking and finance, marketing, and management. This course qualifies as a Quantitative Reasoning course.

#### 4560 BUSINESS LAW and ETHICS I

Term—1 trimester

Credit: 1 Grades: 11-12

Business Law and Ethics I provides an overview of the legal system. Topics covered include basics of law and the judicial process. Other topics include employment law, personal injury law, property law, and contract law. Criminal and civil trial procedures will be addressed. Case studies and mock trials will be a part of the course instructional strategies.

#### 4524 ACCOUNTING FUNDAMENTALS

Term—2 trimesters

Credits: 2 Grades: 10-12

Accounting Fundamentals is a business course that introduces the principles of double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. Topics of instruction include analyzing/journalizing business transactions, preparation and analysis of financial statements, payroll accounting, and accounting for a merchandising corporation as well as a sole proprietorship service business. This course is an in-class, project-based curriculum.

Required Prerequisite: Principles of Business Management

#### 4522 ADVANCED ACCOUNTING

Term - 2 trimesters

Credit – 2

Grade 11-12

This course expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in Introduction to Accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and

interpreting financial reports as a basis for decision-making. This course qualifies as a Quantitative Reasoning course.

Required Prerequisites: Accounting Fundamentals and Principles of Business Management

### 4528 DIGITAL APPLICATIONS AND RESPONSIBILITY I

Term—1 trimester

Credit: 1 Grade: 9

This course is an introduction to the physical components and operation of computers. It provides instruction in the design and development of documents using complex features of word processing, spreadsheet, database, and presentation software. This course is an in-class, project-based curriculum. A lab fee is charged.

## 4528 DIGITAL APPLICATIONS AND RESPONSIBILITY II 295 DIGITAL APPLICATIONS AND RESPONSIBILITY II – Non-Dual Credit

Term—1 trimester

Credit: 1 Grades: 9-12

This course is an advanced business course that builds on DAR I. Advanced applications and integration of more complex features of word processing, spreadsheet, database, and presentation software are topics of instruction for this course. Functions of technology and assessment of technology as it relates to the business world and the communication process will also be addressed.

Required Prerequisite: Digital Applications and Responsibility I

### 5914 MARKETING FUNDAMENTALS – Non-Dual Credit

Term—1 trimester

Credit: 1 Grades: 9-12

This course provides a basic introduction to the scope and importance of marketing in the global economy. Topics include marketing mix, advertising, promotion, selling, distribution, financing, marketing-information management, pricing, and product/service management.

\*Required Prerequisite: Principles of Business Management \*(Principles course is not required until 2024-25 school year)

### 5974 WORK-BASED LEARNING CAPSTONE – Multiple Pathways

Term: 1, 2, or 3 trimesters Credits: Maximum of 6

Grade: 12

This course is a directed elective or elective for the Core 40, Academic Honors, and Technical Honors diplomas. This course is designed to provide students the opportunity to explore a career pathway. Students have the opportunity to apply the concepts and skills learned in previous coursework in real world professional, business, and industry settings. Each work-based learning or internship experience will be tailored to fit the needs and career interests of the student. Guidance and assistance will be provided by the Work Based Learning Teacher in obtaining work placements within the local business and professional These internships or work-based community. experiences may be paid or unpaid. This is a one-, two-, or three-credit course over one to three trimesters.

Recommended Prerequisites: Preparing for College and Careers AND completion of at least four credits of introductory and advanced CTE courses related to a student's pathway. Student's worksite placement must align to the student pathway.

#### 4540 PERSONAL FINANCIAL RESPONSIBILITY

Term—1 trimester

Credit: 1
Grades: 11-12

This course addresses the identification and management of personal financial resources to meet the financial needs, wants, and responsibilities of individuals and families. Topics to be covered include banking, credit risks, saving and investing, managing credit, risk, and insurance as well as personal and family financial planning. This course is recommended for all students regardless of their career pathway. Students can also earn dual credit for FIN 108 from ISU upon successful completion of this course. This course qualifies as a Quantitative Reasoning course.

### 4562 PRINCIPLES OF BUSINESS MANAGEMENT

Term: 2 trimesters

Credits: 2 Grades: 9-12

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. Students can also earn dual credit for BUS 100 from ISU upon successful completion of this course. This course counts as a Directed Elective or Elective for all diplomas.

#### **ENGLISH**

#### 1060 ETYMOLOGY

Term – 1 trimester Credit – 1

Grade: 10-12

This course provides instruction in the derivation of English words and word families from their Latin and Greek roots. This may or may not include Germanic (i.e., Anglo-Saxon) origins. It also provides a study of the connotative and denotative meaning of words in a variety of contexts. Students study the origins and meanings of English words, including roots, prefixes, suffixes, and reasons for language change. The analytic study of word history and semantics is reinforced through a written and oral component that involves specific analyses of texts that require etymological sensitivity, for example: Renaissance poetry or works in translation. As it enables students to increase their vocabularies, this course helps prepare students to perform well on the SAT test.

#### 1002 ENGLISH 9

Term - 2 trimesters

Credit - 2

This is a general survey course with emphasis placed on the basic principles of reading and writing. Students will establish a strong foundation enabling them to continue building language arts skills applicable to the ISTEP+ Exam, advanced classes, and practical life skills.

#### **1002 ENGLISH 9 HONORS**

Term – 2 trimesters

Credit - 2

Grade 9

This class is an accelerated English 9 course stressing composition, semantics, literature, and *The Odyssey*. Research will be emphasized in preparation for a continuation of enrollment in honor classes, culminating with AP English which allows students to possibly earn college credit before high school graduation. An outside novel may be required reading each six weeks. Lab fee charged.

Recommended Prerequisites: Pursuing an Academic Honors Diploma, or "A" in English 8.

#### 1092 CREATIVE WRITING

Term – 1 trimester Credit – 1 Grade 10-12

Creative Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, student demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, the purposes for writing and the style of their own writing.

#### 1034 FILM LITERATURE

Term – 1 trimester

Credit – 1 Grade: 10-12

Film Literature studies the diversified ideas and concepts that interact when written literature is adapted to film. This includes (1) the impact of film on the ways we perceive the human condition, (2) the ways men and women and various ethnic minorities are portrayed, (3) visual interpretations of literary techniques and auditory language effects, and (5) the limitations and special capacities of the two media to present the work. Students will present and discuss their ideas as well as role-play as movie directors to stage scenes. Written assignments include exploring and analyzing issues of interpretation, production, and cross-genre adaptation.

#### 1052 WORLD LITERATURE

Term – 1 trimester

Credit – 1

Grade: 10-12

World Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of ancient and modern representative works by major authors from six continents: Africa, Asia, Australia, Europe, North America, and South America. Students examine a wide variety of literary genres and themes. Students analyze how the ideas and concepts presented in the works are both interconnected and reflective of the cultures and historical periods of the countries represented by the authors.

#### **1004 ENGLISH 10**

Term - 2 trimesters

Credit - 2

General survey including oral communications, grammar, composition, literature, research paper writing and spelling. Some outside reading, writing and other projects are required. A Shakespearean selection is studied. Lab fee charged.

#### 1004 ENGLISH 10 HONORS

Term - 2 trimesters

Credit - 2

Grade 10

This class is an accelerated English 10 course stressing composition, semantics, literature, and research in preparation for AP or Dual Credit English which allows students to earn college credit before high school graduation. An outside novel may be required reading each six weeks. Students are responsible for obtaining their own copies of out of class reading assignments, a summer reading selection, and one selection of classical literature. Lab fee charged. A Core 40 and AHD course.

Recommended Prerequisites: Pursuing an Academic Honors diploma, "A" in English 9, or completion of English 9 Honors.

#### **1006 ENGLISH 11**

Term - 2 trimesters

Credit - 2

Grade 11-12

Emphasis is placed on vocabulary, sentence structure, organization, and effective presentation of ideas through outlining and formal composition techniques. Incorporated within this course is the study of major literary movements and genre of American literature. Completion of a research paper is required for credit in the course.

#### 1006 ENGLISH 11 HONORS

Term - 2 trimesters

Credits - 2

Grade 11

This is an accelerated English 11 course stressing writing skills, vocabulary, and literature for college preparation. Writing skills will be emphasized with a literature-based essay completed every two to three weeks. Vocabulary will be SAT-based. Outside reading consisting of a minimum of one novel per semester will be required. Lab fee charged. Summer reading project required.

Recommended Prerequisites: Pursuing an Academic Honors Diploma, "A in English 10 or completion of English 10 Honors.

#### **1076 SPEECH**

Term - 1 trimester

Credit - 1

Grade 10-12

This course is designed to introduce students to the basic principles of rhetorical persuasion and exposition to create awareness of personal communication styles and techniques. Students are required to make formal oral presentations, write speeches for competition, and participate in all impromptu activities.

#### **1008 ENGLISH 12**

Term - 2 trimesters Credit – 2 Grade 12 only

An upper-level study of the major literary movements in English and World Literature. Analytical/critical writing about the genre and philosophies of the literature will be required.

#### 1010 LANGUAGE ARTS LAB

Term: 1 Trimester Credit: 1-8 credits Grade: 9, 10, 11, 12

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing coursework aligned with the Indiana Academic Standards for English Language/Arts focusing on the writing standards. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards. This course allows for successive semesters of instruction for students who need additional support in any or all aspects of the writing standards. Counts as an elective for all diplomas. Applied Language Arts Lab Indiana Department of Education 161 High School Course Titles and Descriptions Applied Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support skills and content aligned to Indiana Academic Standards or Content Connectors for English/Language Arts. All students should be concurrently enrolled in an English course or have met the ELA requirements for the Certificate of Completion. Counts as an Elective for the Certificate of Completion.

### 1056 AP ENGLISH LANGUAGE AND COMPOSITION\*

Term – 2 trimesters Credit – 2 Grade 12

AP English Language and Composition is a course based on the content established by the College Board. Students enrolled in AP English Language and Composition become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. They become skilled writers who write a variety of forms – narrative, exploratory, argumentative – and on a variety of subjects. Students are required to complete all trimesters of the course and take the AP Exam in May. Students will pay one-half of the AP Exam unless the fee is paid in full by the Indiana Department of Education.

Recommended Prerequisites: English 9, 10, and 11 or equivalent courses. (English 12 could be incorporated into the Advanced Placement course.)

## FAMILY AND CONSUMER SCIENCES

#### 5342 NUTRITION AND WELLNESS (Foods I)

Term – 1 trimester Credit – 1 Grades 9-12

Nutrition and Wellness is an introductory course valuable for all students as a life foundation and is especially relevant for students interested in careers related to nutrition, food, and wellness. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. Food preparation experiences are a required component. This course is the first in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness. Lab fee charged.

### 5340 ADVANCED NUTRITION AND WELLNESS (Foods II)

Term – 1 trimester Credit - 1 Grades 10-12

Advanced Nutrition and Wellness is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. Advanced Nutrition and Wellness is an especially appropriate course for students interested in careers in the medical field, athletic training and dietetics. Topics include extensive study of major nutrients, nutritional standards across the lifespan, influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills; attention will be given to nutrition, food safety and sanitation. This course provides a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness. Lab fee charged.

Recommended Prerequisites: Nutrition and Wellness (Foods I)

### 5348 INTRODUCTION TO CULINARY ARTS AND HOSPITALITY (Foods III)

Term – 1-2 trimesters Credit – 1 per trimester Grades 11-12

Introduction to Culinary Arts and Hospitality is recommended for all students, but is especially appropriate for students with an interest in careers related to Hospitality, Tourism, and Culinary Arts. Topics include basic culinary skills in the foodservice industry, safety and sanitation, nutrition, customer relations and career investigation. Laboratory experiences that emphasize industry practices and develop basic skills are required components of this course. Lab fee charged. PREREQUISITES: Nutrition and Wellness, Advanced Nutrition and Wellness

### 5380 INTRODUCTION TO FASHION AND TEXTILES

Term- 1 Trimesters Credit 1 Grades 9-12

Introduction to Fashion and Textiles is an introductory course for those students interested in academic enrichment or a career in the fashion, textile, and apparel industry. This course addresses knowledge and skills related to design, production, acquisition, and distribution in the fashion, textile, and apparel arena. The course includes careers in the fashion, textile, and apparel industry; factors influencing the merchandising and selection of fashion, textile, and apparel goods and their properties, design, and production; and consumer skills. A project-based approach integrates instruction and laboratory experiences including application of the elements and principles of design, aesthetics, criticism, history and production; selection, production, alteration, repair, and maintenance of apparel and textile products; product research, development, and testing; and application of technical tools and equipment utilized in the industry. Lab fee charged.

#### 5362 CHILD DEVELOPMENT

Term- 1 trimester Credit – 1 Grades 10-12

Child Development is an introductory course for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child care giving and nurturing; and support systems for parents and caregivers. This course provides the foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children. Lab fee charged.

#### 2052 ADVANCED CHILD DEVELOPMENT

Term - 1 trimester

Credit -1 or 2 trimester course, 1 credit per trimester, 2 credits maximum
Grades 10-12

Advanced Child Development is for those students interested in knowledge of children, child development, and nurturing of children. This course addresses issues of child development from age 4 through age 8 (grade 3). Advanced Child Development includes the study of professional and ethical issues in child development; child growth and development; child development theories, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children; and career exploration in child development and nurturing. This course provides a foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children. Lab fee charged.

Recommended Prerequisites: Child Development

#### 5394 PREPARING FOR COLLEGE AND CAREERS.

Term – 1 trimester

Credit – 1

Grade: \*Required course

Recommended for grade 9; (10-12 allowed)

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. Topics to be addressed include 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.

#### 5408-5404 EDUCATION PROFESSIONS

Term - 3 trimesters

Credit – 1-2 per trimester

Grades 11-12

Education Professions I provides the foundation for employment in education and related careers and prepares students for study in higher education. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom

settings and career portfolios are required components. A standards-based plan guides the students' field experiences. Students are monitored in their field experiences by the Education Professionals I teacher.

Recommended Prerequisites: Nutrition and Wellness, Child Development, Advanced Child Development, and Interpersonal Relationships

#### HEALTH AND WELLNESS

#### 3542 & 3544 PHYSICAL EDUCATION I AND II

Term - 2 trimesters

Credit - 2

Grade 9

Knowledge of the basic rules, fundamental skills, and strategies taught concerning numerous individual and team sports. The course strives to attain a high proficiency of physical fitness. Required course for ninth grade boys and girls. Students are required to participate in swimming, and have a Southmont PE uniform and gym shoes.

#### 3560 ADVANCED PHYSICAL CONDITIONING

Term - 2 trimesters

Credit - 2

Grade 10-12

Course emphasis is on lifetime sports, recreation and physical fitness. Student activities will include tennis, volleyball, golf, bowling, softball, basketball, flag football, soccer, badminton, and other recreational activities. They will also be involved in the instruction of officiating IHSAA sports. Aerobic fitness units will teach proper techniques of stretching and exercises. Students will also receive instruction in CPR and First Aid with the possibility of becoming certified in these areas. This course will make students aware of physical activities that can be enjoyable as well as useful in maintaining acceptable levels of physical fitness throughout their lives. The primary purpose of the course is to give the students the skills, attitudes and knowledge of activities which they may pursue after their school years.

#### 3506 HEALTH & WELLNESS EDUCATION

Term - 1 trimester

Credit - 1

Grade 10

Issues are drugs/alcohol, physical, mental and social health, personal relations, communicable diseases and Aids.

#### INDUSTRIAL TECHNOLOGY

#### 4802 INTRODUCTION TO ENGINEERING DESIGN

Term – 1 Trimester

Credit – 1

Grade level: 9-12

Introduction to Engineering Design is an introductory course which develops student problem solving skills by applying conventional principles into the design process involving mechanical drawing. HANDS-ON technical drawing practices will emphasize geometric construction as it relates to point location. Students will gain a comprehensive awareness to the skills necessary in converting an idea into an industrial quality technical print. Students will be asked to produce single view, multi-view orthographic, and isometric renderings by hand. Introduction to Computer-Aided Design (CAD) will provide the student with introductory 2D and 3D activities with Autodesk Software programs.

#### 4794 INTRODUCTION TO DESIGN PROCESSES

Term – 2 Trimesters

Credits - 2

Grade Level: 10 - 12

Introduction to Design Processes is a specialized course dealing with modern design and engineering processes in mechanical and architectural drawing. Students will focus on creative problem solving that will result in effective design concepts for the focus areas of manufacturing, construction, and transportation. HANDS-ON product outcomes will address aesthetic, economic, ergonomic, environmental, production, quality, and safety issues. Design concepts that become prototypes will be analytically tested and students will present findings to the group. Refinement will be part of the reverse engineering phase of student projects. Students will use Autodesk software products such as Inventor, Autocad and Revit for design activities. Students will have the opportunity to meet industrial professionals who process engineering prints and plans for their operations.

### 7108 PRINCIPLES OF ADVANCED MANUFACTURING

Term - 2 trimester course Credit - 1 credit per trimester Grade Level - 9 - 12

Principles of Advanced Manufacturing is a course that includes classroom and laboratory experiences in Industrial Technology and Manufacturing Trends. Domains include safety and impact, manufacturing essentials, lean

manufacturing, design principles, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience. •Recommended

### 7103 ADVANCED MANUFACTURING TECHNOLOGY

Term - 2 trimesters

Credits - 2

Grade Level: 9-12

Introduction to Advanced Manufacturing and Logistics focuses on manufacturing systems with an introduction to advanced manufacturing and logistics and their relationship to society, individuals, and the environment. Students apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products, and consumer products. Students investigate six major types of materials processes: casting and molding, forming, separating, conditioning, finishing and assembling. After gaining a working knowledge of these materials, students are introduced to advanced manufacturing, logistics, and business principles that are utilized in today's advanced manufacturing industry. Students gain a basic understanding of tooling, electrical skills, operation skills, inventory principles, MSDS's chart and graph reading and MSSC concepts. There is also emphasis placed on the flow process principles, material movement, safety, and related business operations. Students have the opportunity to develop the characteristics employers seek as well as skills that will help them in future endeavors.

#### 7130 PRINCIPLES OF CONSTRUCTION TRADES

Term - 2 trimesters Credits - 2 credits Grade - 9 - 12

Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic safety. Additionally students will study the roles of individuals and companies within the construction industry and reinforce mathematical and communication skills necessary to be successful in the construction field.

### **5610 INDUSTRIAL AUTOMATION AND ROBOTICS 1 (DUAL CREDIT)**

Term: 3 trimesters

Credits: 6

Grade Level: 11-12

Industrial Automation and Robotics 1 will introduce students to design and program concepts in basic robots that use sensors and actuators to solve specific problems and complete specific tasks. This will include introductory programming autonomous mode. Students will also learn to program a humanoid robot, tethered and in autonomous mode, able to react to specific circumstances and perform humanoid-like tasks when programming is complete. This course will provide fundamentals in industrial robotics basic programming and operations. Students will program an industrial robot through explanation of a teach pendant and use proper programming commands with hands-on utilization of an industrial robot. This course will provide fundamental

knowledge and skills in basic lasers, pneumatics, hydraulics, mechanics, basic electronics, and programmable logic controllers along with an understanding of career pathways in this sector.

#### **MATHEMATICS**

#### 2560 MATH LAB I

Term - 1 or 2 trimesters Credit - 1 or 2 credits Grade 9-12

This course is designed to help students master Indiana's Academic Standards for Mathematics. It is offered to those who did not meet the cut score for PSAT their sophomore year and need further remediation. This class is also to be taken in conjunction with a C40 Mathematics course, and the content of the Math Lab should be tightly aligned to the content of that course. Some of the areas to be covered in this course may include: number sense, geometry and measurement, probability and statistics, linear equations/inequalities, functions, systems of equations/inequalities, quadratic equations, and exponential equations.

Recommended Prerequisites: Must be enrolled in another C40 math class other than Algebra I.

#### 2516 ALGEBRA I LAB

Term - 1 trimester

Credit - 1

Grade 9 (1<sup>st</sup> trimester of year)

A student taking Algebra I Lab, first trimester, must also be enrolled in Algebra I during the same academic year (for the 2<sup>nd</sup> and 3<sup>rd</sup> trimester). It is a support course to Algebra I Core 40 and must be taken at the same time as Algebra I.

The following topics are taught: real numbers and expressions, functions, linear equations and inequalities, systems of equations and inequalities, quadratic and exponential equations, data analysis, and statistics.

#### 2520 ALGEBRA I

Term - 2 trimesters

Credit - 2

Grade 9-12

This course provides an informal development of algebraic skills and concepts. It is designed for the mathematically challenged student. The instructional program in this course provides for the use of algebraic skills in a wide range of problem solving situations.

#### 2520 ALGEBRA I HONORS

Term - 2 trimesters

Credit - 2

Grade 9-12

This course uses symbols and properties of numbers. Solutions to problems are solved by writing relationships and mathematical sentences from given information. It also includes the use of axioms, postulates, theorems, and formulas.

#### 2522 ALGEBRA II

Term – 2 trimesters

Credit - 2

Grade 10-12

This course provided a continuation of Algebraic skills and concepts to help prepare the student for more rigorous math courses in their future. It is designed for the mathematically challenged student who is planning for college and needs a Core 40 diploma.

#### **2522 ALGEBRA II HONORS**

Term - 2 trimesters

Credit - 2

Grade 9-12

It is recommended for students interested in the fields of math or science.

#### 2524 ANALYTICAL ALGEBRA II

Term -2 trimesters

Credit - 2

Grade: 9-12

Analytical Algebra II builds on previous work with linear, quadratic and exponential functions and extends to include polynomial, rational, radical logarithmic and other functions. Data analysis, statistics, and probability content should be included throughout the course, as students collect and use univariate and bivariate data to create and interpret mathematical models. Additionally, Analytical Algebra II should focus on the application of mathematics

in various disciplines including business, finance, science, career and technical education, and social sciences, using technology to model real-world problems with various functions, using and translating between multiple representations. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe the students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. This course is not recommended for students interested in pursuing a STEM degree at a four-year institution; this course does not prepare students for PreCalculus/Trigonometry.

#### 2532 GEOMETRY

Term - 2 trimesters

Credit - 2

Grade 10-12

This course provides an informal development of the understanding of shapes and their properties. The instructional program in this course provides for the use of reasoning skills in a wide range of problem-solving situations.

#### **2532 GEOMETRY HONORS**

Term - 2 trimesters

Credit – 2

Grade 10-12

This course is the study of relationships of parts of plane figures (relation of sides of triangle to one another, relations of diameters, radii and chords of a circle to one another). It uses intuition, induction, and deduction.

#### **2546 PROBABILITY AND STATISTICS HONORS**

Term – 1 trimester

Credit - 1

Grade 10-12

A study of basic probability which will include conditional probability, and elementary probability theory. A study of statistics including the mean variance, standard deviation, and their applications. Then, finish with the standard normal distribution, binomial distribution and sampling.

#### 2566 Pre-Calculus: TRIGONOMETRY

Term - 1 trimester

Credit - 1

Grade 10-12

A study of the six trigonometric functions and their properties. Also included will be an in-depth look at various trigonometric identities. Applications of trigonometric functions involving Law of Sines and Cosines will be utilized as well as sinusoidal variations. A look at angular velocity and linear velocity will be done.

#### 2564 PRE-CALCULUS: Algebra

Term – 1 trimester Credit – 1 Grade 10-12

This course continues the development of trigonometric relationships from an understanding of the circular functions, their properties, and graphs from Trigonometry I Honors. It covers polar coordinate systems, exponential and logarithmic functions, sequences and series, solving higher degree equations, and all types of various mathematical functions.

#### 2527 AP CALCULUS AB

Term - 2 trimesters

Credit - 2

Grade 12 (To be taken 2<sup>nd</sup> and 3<sup>rd</sup> trimester of year)

A full year college level course involving the study of limits, continuity, derivatives and their applications as well as the definite integrals and their applications. Also included will be trig functions, their integrals and their derivatives. Specific topics will include Intermediate Value Theorem, graphing functions, Mean Value Theorem, Fundamental Theorem of Calculus, and exponential growth and decay. Students are required to complete both trimesters of the course and take the AP Exam in May. Students will pay one half of the AP Exam unless the fee is paid in full by the Indiana Department of Education. Lab fee charged.

#### **MUSIC**

#### 4200 APPLIED MUSIC

Term – 1 trimester Credit – 1 Grade 10-12

This class is limited to students wishing to attend solo and ensemble or to push themselves in band. This class can be taken multiple years if they are serious about pursuing music.

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.

#### 4162 INSTRUMENTAL ENSEMBLE

Term – 1 trimester Credit – 1 Grade 9-12 This class is limited to band students or pre-approved non-band students who wish to participate in a percussion ensemble

Instrument Ensemble is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of chamber ensemble and solo literature, which develops skills in the psychomotor, cognitive, and affective domains. Students develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature as pertaining to chamber ensemble and solo 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 rehearsal 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

Term – 3 trimesters required Credit – 3 Grade 9-12

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 Ensemble and solo activities are affective domains. 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 number of public performances will 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.

\* If class conflicts with a required course, student must attend additional rehearsals, homeroom, all performances and practice on their own during the trimester they're off as well as take Summer Band

#### **4182 BEGINNING CHORUS**

Term - 1-3

Credit – 1 per trimester

Grade 8-12

Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. The chorus may be composed of female and/or male singers. Activities in this class create the development of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Chorus classes provide instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students have the opportunity to experience live performances by professionals during and outside the school day. A limited amount of time, outside the school day, may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and music Students must participate in performance opportunities outside of the school day that support and extend the learning in the classroom.

### 4186 INTERMEDIATE CHORUS / SUDDEN IMPULSE

Term – 3 trimesters

Credit - 3

Grade 9-12

Sudden Impulse is a female intermediate entertainment choral ensemble that focuses on development of comprehensive choral musicianship (quality performers as well as knowledgeable and skilled musicians) through the performance experience. Students will be exposed to a breadth of music literature, appropriate in difficulty and range, with an emphasis on high quality performance and thorough understanding. Choreography is added to enhance the literature studied. Students are expected to purchase costumes and show accessories. Fundraising opportunities will be offered to defer costs. This ensemble performs regularly throughout the year in competitive and non-competitive arenas. It is expected that all students will participate in performances and extra rehearsals as a requirement for earning credit in the course. Enrollment is by audition and/or recommendation by the director.

#### 4188 ADVANCED CHORUS / PANACHE

Term - 3 trimesters

Credit - 3

Grade 9-12

Panache is a male and female advanced choral ensemble that focuses on the development of musicianship, vocal and choreography techniques, and group specific performance skills through ensemble and solo singing. This class includes quality repertoire that is appropriate in difficulty and diversity of musical styles. Chorus classes provide performance opportunities in all arenas, including competitive and non competitive environments. All students are required to participate in performances and extra rehearsals as a requirement for earning credit in the course. Students are required to purchase costumes and show accessories, however fundraising opportunities are offered to defer costs. Enrollment is by audition and upon approval by the director.

#### SCIENCE

#### 3024 BIOLOGY I (Biology)

Term - 2 trimesters

Credit - 2

Grade 9-12

Biology I provides, through regular laboratory and field investigations, a study of the structures and functions of living organisms and their interactions with their environment. At a minimum, this study explores the functions and processes of cells, tissues, organs, and systems within various species of living organisms.

Lectures and laboratory experiments to give a broad, but concise view of the science of life. Prepares students for advanced study in high school biology or college level beginning biology course.

Lab fee charged.

#### 3010 ENVIRONMENTAL SCIENCE I (Ecology I)

Term - 1 trimester

Credit - 1

Grade 10-12

A course designed to study ecosystems, populations, world food needs, and natures various cycles. Emphasis will be on conservation problems from a biological standpoint and sustainable solutions. \*Credit only if not take prior to or concurrently with Natural Resource Management.

Lab fee charged.

**Recommended Prerequisites:** Biology or Earth Science.

#### 3010 ENVIRONMENTAL SCIENCE II (Ecology II)

Term - 1 trimester

Credit - 1

Grade 10-12

A course designed to study conservation problems from a biological standpoint including water pollution, air pollution, wild species, natural resources, and energy resources. Special attention will be given to the affects these issues will have on humans and the earth. \*Credit only if not taken prior to or concurrently with Natural Resource Management.

Lab fee charged.

Recommended Prerequisites: Biology or Earth Science.

#### **3026 BIOLOGY II/GENETICS**

Term - 1 trimester Credit - 1 Grade 10-12

An overview of basic genetics covering the topics of chance and probability, genetics of human populations, gene mapping, DNA sequencing, and genetic engineering. This will be a lab intensive course. This course has proven to be beneficial for students to take before enrolling in Dual Credit Biology or pursuing a career in the Health Sciences.

Lab fee charged.

**Recommended Prerequisites:** "C' or better in Biology and "C" or better in Algebra I.

#### 3026 BIOLOGY II/MICRO-BIOLOGY

Term - 1 trimester

Credit - 1

Grade 10-12

A course covering the fundamentals of microbiology including a survey of microbial groups, interactions between microbes and hosts, human disease, and environmental microbiology. This will be a lab intensive course. Field trips will be a part of the curriculum. This course has proven to be beneficial for students to take before enrolling in Dual Credit Biology or pursuing a career in the Health Sciences. Lab fee charged.

Recommended Prerequisites: "C" or better in Biology.

#### 5276 ANATOMY AND PHYSIOLOGY

Term - 2 trimesters

Credit - 2

Grade 11-12

A look into the human body systems and how they work together. Students will learn location of bones, muscles, and organs. This course will include the function of these parts and the development of the full human body. This class includes a dissection of a heart (cow or sheep), brain (sheep), and an eye (cow). Lab fee charged. This course has proven to be beneficial for students to take before enrolling in Dual Credit Biology or pursuing a career in the Health Sciences (nursing, PT, OT, athletics, etc.). Both trimesters are required.

#### Lab fee Charged

Recommended Prerequisites "C" or above in Biology.

3090 PRINCIPLES OF BIOLOGY I\* (Biol 100) – Dual Credit Dual Credit Principles of Biology Laboratory I\* (Biol 100L) 785-786 PRINCIPLES OF BIOLOGY I – Non Dual Credit Grade 11-12

Term- 2 Trimesters

Credit-2 (High School) Credit- 4 (College Vincennes University) Hands-on, inquiry methods will be used to investigate characteristics, processes, and phenomena common to humans and their environment; writing and testing hypotheses, analyzing results, drawing conclusions, and communicating results clearly to others will be emphasized. The importance and role of ethics in science will also be discussed. This course is a transferIN course.

Students can earn 4 (3 credits for Biol 100 and 1 Credit for Biol 100 L) College Credits with the completion of both trimesters and a grade of C or higher in the lecture (Biol 100) and Laboratory (Biol 100L) portions of the course along with meeting the prerequisites below.

Recommendations for taking Principles of Biology 100 and Principles of Biology 100 Laboratory Dual Credit

- -B or better in Biology, Chemistry and Algebra 2
- \*Prerequisites for obtaining College Credit from Vincennes University

-A grade of C or higher in Biol 100 and Biol 100 L Visit the link below for the most up to date Accuplacer/ PSAT/ACT/SAT Scores

https://my.vinu.edu/web/project-excel/course-listing-and-placement-chart

\* These scores must be met prior to Vincennes University Registration and are Subject to change.

#### **Additional Information**

As of September 2015 the tuition fee for the 2015-2016 school year will be \$100.00 (\$25 per credit hour) and is to be paid by the student. Any tuition increases will be the responsibility of the student.

- The Course will be a weighted course
- Lab fee required

## 3090 DUAL CREDIT PRINCIPLES OF BIOLOGY II\* (Biol 101)/Dual Credit Principles of Biology Laboratory II (Biology 101L)\*

### 787-788 NON DUAL CREDIT PRINCIPLES OF BIOLOGY

Term- 2 Trimesters

Credit-2 (High School)

Credit- 4 (College Vincennes University)

Grade 12

The major theme of the course will be the interrelationships among living things and between living things and their nonliving surroundings. This will include an examination of how plants and animals are structured and how they behave, to allow them to fit into their place in the environment.

Laboratory activities are included to reinforce each of these topics. Students can earn 4 (3 credits for Biol 101 and 1 Credit for Biol 101L) College Credits with the completion of both trimesters and a grade of C or higher in the lecture (Biol 101) and Laboratory (Biol 101L) portions of the course along with meeting the prerequisites below.

Requirement for taking Principles of Biology 101 and Principles of Biology Laboratory 101 Dual Credit

- -Earned College Credit and a C or higher Grade in Biology 100 and 100 L
- \*Prerequisites for obtaining College Credit from Vincennes University

Visit the link below for the most up to date Accuplacer/ PSAT/ACT/SAT Scores

#### https://my.vinu.edu/web/project-excel/course-listing-and-pl acement-chart

- -A grade of C or higher in Biol 100 and Biol 100 L
- \* These scores must be met prior to Vincennes University Registration and are Subject to change.

#### **Additional Information**

As of September 2015 the tuition fee for the 2<mark>015-2016 school</mark> year will be \$100.00 (\$25 per credit hour)

and is to be paid by the student. Any tuition increases will be the responsibility of the student.

- The Course will be a weighted course
- Lab fee required

#### 3064 CHEMISTRY I

Term - 2 trimesters

Credit - 2

Grade 10-12

Chemistry I allows students to synthesize useful models of the structure of matter and the mechanisms of its interactions of matter and chemical reactions. A Core 40 and AHD course. Chemistry at the senior high level is designed to not only prepare students for college course and laboratory work, but to also strengthen problem-solving and critical thinking skills, as well as make them more aware of how the interactions between particles that make up our world work, and why these interactions This course includes study of atomic structure, subatomic particles and bonding, the design and development of the periodic table, the mole concept and stoichiometry, chemical reactions, gases, and acid-base chemistry.

#### Lab fee charged.

**Recommended Prerequisites:** A B- or higher average in Algebra I and Biology is recommended, but not required.

#### 3108 INTEGRATED CHEMISTRY-PHYSICS

Term – 2 trimesters

Credit - 2

#### Grade 11-12

Integrated Chemistry-Physics studies the basic fundamentals of chemistry and physics. The first trimester of the course focuses on chemistry including the study of the structure and properties of matter, atomic structure, the development and organization of the periodic table and chemical reactions. The second trimester of the course focuses on physics including motion, forces and energy transformations. A Core 40 and AHD course.

#### Lab fee charged.

**Recommended Prerequisites:** Students pursuing an Academic Honors Diploma and/or a career in the sciences, medicine or engineering are recommended to take Chemistry instead of this course.

### 3090 DUAL CREDIT CHEMISTRY I\* 769-770 NON DUAL CREDIT CHEMISTRY I

Dual Credit (ACP—Advanced College Project)(C101/C121)

Principles of Chemistry I (C101)/Dual Credit (ACP) Chemistry Lab (C121)

Term - 2 trimesters

Credit - 2 High School – 5 College credits through Indiana University (3 for C101 and 2 for C121)

Grade 11-12

This course is a college-level chemistry course for high school students. It counts as a science course for the general, Core 40 and Honors diplomas. The course materials, assignments, laboratories and grading standards are the same as required through this identical course at Indiana University. This course offers a more in-depth study of topics introduced in Chemistry I as well as new topics including measurement, atomic structure, the periodic table, nuclear chemistry, bonding, chemical reactions, stoichiometry, gases, thermochemistry, solutions, acids and bases and chemical equilibrium. The lab portion of the class is an introduction to laboratory experimentation with emphasis on the collection and use of experimental data. Credit will be earned through Indiana University (all campuses) for grades of a D- or higher. Credits may be transferred to other institutions if the student earns a C or higher.

#### The course will be a weighted course. Lab fee required.

**Recommended Prerequisites:** B- or higher in Chemistry and Algebra I. This course is recommended for students pursuing a college degree in the sciences, medicine or engineering as a foundational college chemistry course. For non-science college majors, credits may be used to meet the general science college coursework requirement.

#### 3044 EARTH AND SPACE SCIENCE (Earth Science)

Term – 2 trimesters

Credit - 2

Grade 10-12

This course provides a study of the earth's lithosphere, atmosphere, hydrosphere, and its celestial environment. This course emphasizes the study of energy at work in forming and modifying earth materials, land forms, and continents through geological time. A Core 40 and AHD course. Study of physical law and scientific concepts as they exist on the planet earth. Survey of the physical planet and the universe. Lab work included.

Lab fee charged.

### 3046 EARTH/SPACE SCIENCE II/STELLAR ASTRONOMY

Term - 1 trimester Credit -1

Grade 10-12

Emphasis will be placed on stars and interstellar space. The study of the beginning of the universe, space time, and cosmology along with galaxy types will be the main features of the second half of this course.

#### Lab fee charged.

Recommended Prerequisites: Biology or Earth Science – Junior or Senior who has had Biology, Earth Science or Chemistry or a Sophomore with a science teacher recommendation.

### 3046 EARTH/SPACE SCIENCE II/SOLAR SYSTEM ASTRONOMY

Term - 1 trimester

Credit - 1

Grade 10-12

The formation of the solar system and the bodies of the solar system will be the emphasis of this class. Comets, asteroids, meteors, and all of the minor bodies of the solar system will also be studied. Man's future in space will be part of the curriculum. Lab fee charged.

Recommended Prerequisites: Biology or Earth Science – Junior or Senior who has had Biology, Earth Science or Chemistry or a Sophomore with a science teacher recommendation.

Lab Fee Charged

#### 3046 EARTH/SPACE SCIENCE II/OCEANOGRAPHY

Term - 1 trimester

Credit - 1

Grade 10-12

This course will attempt to unravel many of the secrets of the oceans through scientific inquiry using a laboratory and lecture format. All aspects of the ocean world will be open to study. Physical, chemical, biological, and geologic aspects of the ocean will be covered as will various historic voyages and explorations. Human use and abuse of this ocean world will be discussed along with some possible future explorations and exploitations.

#### Lab fee charged.

**Recommended Prerequisites:** Biology or Earth Science – Junior or Senior who has had Biology, Earth Science or Chemistry or a Sophomore with a science teacher recommendation.

#### 3046 EARTH/SPACE SCIENCE II/METEOROLOGY

(Offered 2022-2023) Not Offered(2023-2024)

Term: 1 trimester Credit: 1

Credit: 1 Grade: 10-12

A Core 40 and AHD course. This course will concentrate on the basic structure of the atmosphere and look at atmospheric effects on humanity by storms and changing weather conditions. Predicting weather will be an important part of this class with an eye toward long term climate change and global warming. Lab fee charged.

Recommended Prerequisites: Biology or Earth Science – Junior or Senior who has had Biology, Earth Science or Chemistry or a Sophomore with a science teacher recommendation.

#### **3046 EARTH /SPACE SCIENCE II/GEOLOGY**

Term - 2 trimesters

Credit - 2

Grade 10-12

Earth/Space Science II: Geology can be taken as two independent courses in which the students begin by examining the physical aspects of geology as it relates to the formation of our planet and its relationship to plate tectonics. Geology B is centered on the remaining physical aspects that shape our world, like erosion, mass wasting, and mountain building. Geology B concludes by examining the historical significance of different time periods within the geological time scale and its relevance to the appearance and our understanding of our world today. Geology A and B can be taken independently of each other or out of sequence.

#### Lab Fee Charged.

**Recommended Prerequisites:** Biology or Earth Science – Junior or Senior who has had Biology, Earth Science or Chemistry or a Sophomore with a science teacher recommendation.

#### **3084 PHYSICS I**

(Not Offered 2022-2023) (Offered 2023-2024)

Term – 2 trimesters

Credit - 2

Grade 11-12

Physics I aids students in synthesizing the fundamental concepts and principles concerning matter and energy through the laboratory study of mechanics, simple harmonic motion, mechanical waves and sound, electricity, and circuits. A Core 40 and AHD course. Physics at the senior

high level is designed to not only prepare students for college coursework in the physical sciences and math, but to also strengthen their problem-solving and critical thinking skills, as well as make them more aware of how the world around them works. Circular motion, planetary motion, magnetism, electromagnetic induction, electromagnetic waves, electric forces and fields, the theories of general and special relativity, and atomic physics will also be studied.

Lab fee charged.

Recommended Prerequisites: Algebra II, and Geometry.

#### **SOCIAL STUDIES**

#### 1540 UNITED STATES GOVERNMENT

Term - 1 trimester

Credit - 1

Grade 12

This course introduces the student to the background of United States government by tracing the evolution of the United States political system. Much of the course will involve current political issues and their impact on the United States government. The three branches of Federal and State government will be studied. Emphasis will be placed on local, state, national government and the election process.

#### 1548 WORLD HISTORY AND CIVILIZATION

Term - 2 trimesters

Credit - 2

Grade 9-12

This course gives the student a look at the development of influential and significant world cultures. The course begins with a review of the ancient origins of western civilization. It emphasizes the cultural development of world civilization, with special emphasis given to the influence of religious, social, economic, political, geographic and scientific influences upon the growth of civilizations around the world. World Civilization also examines the influences around the world. World economic developments of the twentieth century in terms of how those forces influence and explain world events today.

#### 1514 ECONOMICS

Term - 1 trimester

Credit - 1

Grade 12

This course is designed to introduce students to the basic principles of economics. The students will study the basic concepts of: Supply and Demand, Economic Markets, Economic Decision Making, Money and Banking, the Government and Economic Policies, International Trade and Consumer Economics

#### 1542 UNITED STATES HISTORY

Term - 2 trimesters

Credit - 2

Grade 10-11-12

This course begins with a brief review of the early beginnings of the new nation and the launching of a new government. The in-depth study begins with the Civil War Era. Discussion continues with the transformation of the nation from a rural to an urban industrialized society. Changes and reforms are illustrated by the Progressive Movement in the years 1900-1920. The first semester closes with the United States becoming a world power as a result of its role in World War I.

Among topics stressed, and analyzed in depth during the second semester, include the Great Depression, World War II, the Korean War, the Cold War in general, the Vietnam War, the Civil Rights Movement of the 1960's, the Watergate Scandal, and closing with the Persian Gulf War. NOTE: A student cannot take US History after AP US History.

#### 1562 AP US HISTORY

Term - 2 trimesters

Credits - 2

Grades - 11-12

AP US History Is a survey course that covers major themes including the post-Civil War period, western expansion, industrial growth of the nation and its effects, immigration and urban discontent and attempts at reform, World War I, the Roaring Twenties, social and governmental changes of the thirties, World War II and its consequences, the growth of the federal government, social upheaval in the sixties and seventies, and recent trends in conservatism, globalization, and cultural diversity.

**RECOMMENDATION:** 'B' or higher in World History and English 10. NOTE: A student cannot take US History after Honors Dual Credit US History.

#### 1534 SOCIOLOGY

Term - 1 trimester

Credit - 1

Grade 10-11-12

This introductory course examines the basic relationships between human beings and the influence of groups of human beings, upon the individual. It examines the socializing process. It looks at the influence of such basic institutions as the family, the school, the church, and the government. It further examines social class system, and finally social changes.

#### 1532 PSYCHOLOGY

Term - 1 trimester

Credit - 1 Grade 11-12

This is a course that focuses upon individual human behavior. It begins by examining emotional adjustment and evolves into a study of personality development and personality theories. The individual's adjustment to change and social conditions are examined. The individual's thinking and motivation are analyzed and evaluated in light of the many theories of learning and motivation. Students can receive college credit if they pass the Advanced Placement Exam available in May.

#### WORLD LANGUAGE

#### 2020 FRENCH I

Term – 2 trimesters

Credit – 2 Grades: 9-12

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

#### 2022 FRENCH II

Term – 2 trimesters

Credit – 2 Grades: 10-12

French II, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for French language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate

independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of French-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding French language and culture outside of the classroom.

Recommended Prerequisites: French I.

#### 2024 FRENCH III

Term – 2 trimesters

Credit – 2 Grades: 11-12

French III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for French language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course 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 an understanding of French-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding French language and culture outside of the classroom.

Recommended Prerequisites: French I and II.

#### 2026 FRENCH IV

Term – 2 trimesters

Credit – 2 Grades: 12

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

Recommended Prerequisites: French I, II and III.

#### 2060 JAPANESE I

Term – 2 trimesters

Credit – 2 Grades: 9-12

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

#### 2062 JAPANESE II

Term - 2 trimesters

Credit – 2 Grades: 10-12

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

Recommended Prerequisites: Japanese I.

#### **2064 JAPANESE III**

Term – 2 trimesters

Credit – 2 Grades: 11-12

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

**Required Prerequisites:** Japanese I and II.

#### 2066 JAPANESE IV

Term - 2 trimesters

Credit - 2Grades: 12

Japanese 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 an understanding of Japanese-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student's own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Japanese language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Japanese speakers.

Recommended Prerequisites: Japanese I, II and III.

#### 2120 SPANISH I

Term – 2 trimesters

Credit - 2Grades: 9-12

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 encourages interpersonal cultures. This course 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

Term – 2 trimesters

Credit - 2Grades: 10-12

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 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 Prerequisites: Spanish I.

#### 2124 SPANISH III

Term – 2 trimesters

Credit – 2

Grades: 11-12

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 Prerequisites: Spanish I and II.

#### 2126 SPANISH IV

Term – 2 trimesters

Credit – 2
Grades: 12

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 an understanding of Spanish-speaking cultures 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 Prerequisites: Spanish I, II and III.

## **Career and Technical Education** (CTE)

T301-T302-T303 AUTOMOTIVE SERVICES
TECHNOLOGY I - Dual Credit Ivy Tech
Crawfordsville HS

### T101-T102-T103 AUTOMOTIVE SERVICES TECHNOLOGY I – Non-Dual Credit

Term - 3 trimesters Credit - 6

Grade 11

Beginning class for 11th grade students only. Class meets two periods a day at Crawfordsville from 12:00 - 3:00 p.m.. Basic study for components, systems, principles, practices, procedures using language of the trades. Use of hand tools, special instruments and equipment will be included. Students must provide safety glasses and leather work boots. Tools are provided.

Recommended Prerequisites: Previous regular attendance at school. Power Systems and/or knowledge of auto mechanics. Students are required to provide their own transportation. The class will meet on Crawfordsville High School's school calendar.

T401-T402-T403 AUTOMOTIVE SERVICES
TECHNOLOGY II - Dual Credit Ivy Tech
Crawfordsville HS

### T201-T202-T203 AUTOMOTIVE SERVICES TECHNOLOGY II – Non-Dual Credit

Term - 3 trimesters

Credit - 6

Grade 12

Advanced class for 12th grade students only. Class meets for two periods per day and students should have a "C" or above in the beginning class and permission of the instructor. Continuation for beginning class and will re-emphasize and build on class content plus provide experience in several work areas. Student must provide own transportation. The class will meet on Crawfordsville High School's school calendar. NOTE: This class begins at an earlier time than Southmont classes.

### 884-885-886 EDUCATION PROFESSIONS Southmont High School

Term - 3 trimesters

Credit - 1 per trimester

Seniors only

Education Professions prepares students for employment in education and related careers. It provides the foundation for study in higher education, and other child related careers. The course of study includes but not limited to: planning and guiding developmentally appropriate lessons and activities for school age children. The course is reserved for senior students interested in pursuing a teaching career. Senior students will get actual hands on teaching experience when assigned to elementary and junior high teachers. Child Development and Advanced Child Development are recommended prerequisite for the course. This is a year-long course (three trimesters). Students must be able to provide their own transportation.

Recommended Prerequisites: Seniors with a "B" or above GPA, a good attendance record, and with a sincere interest in the teaching profession will be considered for the course.

P301-P302-P303 RADIO TELEVISION I (grade 11-12)
Dual Credit Vincennes Univ. Western Boone HS
P101-P103-P103 RADIO TELEVISION I Non Dual
Credit

P401-P402-P403 RADIO TELEVISION II (grade 12)
Dual Credit Vincennes University

### P201-P202-P203 RADIO TELEVISION II Non Dual Credit

Term - 3 or 6 trimesters

Credit - 2 each trimester (total 6 or 12)

Grade 11-12

This course is taught at Western Boone High School. The Radio/TV Broadcasting program at Western Boone High School is a 1, or 2 year program. Students become an employee of a TV station as this mostly hands-on class teaches all aspects of the Radio and TV Industry. The class also covers news events within the community as well as the production of a daily newscast which is seen by nearly 1,000 students. Many ballgames and political events are also covered as part of a partnership with Crawfordsville's Accelplus cable network. Highly motivated students may have the opportunity to job shadow at area TV and radio stations. Students are encouraged, but not required to be on-air and may have the opportunity to receive college credit after meeting added requirements. Open to juniors and seniors with own transportation and an interest in broadcasting. See counselor for more information

## H401-H402-H403 CONSTRUCTION TRADES: HVAC I – Dual Credit Ivy Tech Crawfordsville HS

### H101-H102-H103 CONSTRUCTION TRADES: HVAC I – Non-Dual Credit

Term - 3 trimesters

Credits - 6

Grade 11-12

This program will include classroom and laboratory experiences which focus on piping, electrical fundamentals, heat generation systems such as oil burners, gas furnaces, and electrical heating units as well as instruction in the theory and application of basic principles of air conditioning and heat pumps. Certifications in refrigerant handling are offered.

Experience will enable students to become proficient in the installation, repair and maintenance of heating/air conditioning systems which will provide opportunities for immediate entry level employment and/or further education. This is a morning class.

Recommended Prerequisites: Electronics or Electricity or other Industrial Tech courses are encouraged, but not required. Students will need to provide their own transportation to and from Crawfordsville High School.

#### H501-H502-H503 CONSTRUCTION TRADES: HVAC II – Dual Credit Ivy Tech Crawfordsville HS

### H201-H202-H203 CONSTRUCTION TRADES: HVAC II – Non-Dual Credit

Term – 3 trimesters

Credit – 6

Grade 12

A continuation of Heating and Air Conditioning I. This is an afternoon class. Off campus installations of heating and air conditioning equipment are part of this class. Students are required to provide their own transportation to these sites as well as to Crawfordsville High School.

Recommended Prerequisites: Same as for Heating and Air Conditioning I.

L101-L102-L103 CRIMINAL JUSTICE I – Dual Credit Ivy Tech Southmont High School

L301-L302-L303 CRIMINAL JUSTICE I – Non-Dual Credit

L201-L202-L203 CRIMINAL JUSTICE II – Dual Credit Ivy Tech

### L401-L402-L403 CRIMINAL JUSTICE II – Non-Dual Credit

Term – 3 trimesters

Credit − 2 per trimester/6 total

#### Grade 11-12

Southmont will be the host school. The class will meet two periods a day. This course will provide students with experiences in law enforcement through hands-on activities. Students will learn how to perform actual law enforcement duties including, but not limited to, accident, criminal, and traffic investigations. This course will also concentrate on report writing and criminal apprehension. Students will be required to provide own transportation and will be required to follow the dress code required for the class. Only students who are truly interested in law enforcement should consider this class. College credit available.

#### F101-F102-F103 FIRE RESCUE I – Dual Credit Ivy Tech Southmont High School

#### F201-F202-F203 FIRE RESCUE I - Non-Dual Credit

Term - 3 trimesters

Credit – 2 per trimester/6 total

Grade 11-12

Firefighters 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. This program requires diligence, teamwork, and acceptance of constructive criticism.

During the first year of the program, students will receive instruction to prepare for the American Heart Association, CPR, Hazardous Materials Awareness, Hazardous Materials Operations, Firefighter I, and Firefighter II certifications. In addition to classroom instruction, students will complete activities, skills training, and additional clinical experiences. Some clinical experiences may occur during time outside of the classroom.

Recommended Prerequisites: Work in constrictive conditions, wear an air mask for long periods of time, lift 50 pounds, and be in generally good health.

### F301-F302-F303 FIRE RESCUE II – Dual Credit Ivy Tech

#### F401-F402-F403 FIRE RESCUE II - Non-Dual Credit

Term – 3 trimesters

Credit – 2 per trimester/6 total

Grade 11-12

During the second year of Fire Rescue, students will receive instruction to prepare for the Emergency Medical Technician (EMT) certification. In addition to classroom instruction, students will complete activities, skills training, and additional clinical experiences. Some clinical experiences may occur during time outside the classroom.

## H701-H702-H703 DUAL CREDIT HEALTH SCIENCE EDUCATION I I: Nursing – Dual Credit Ivy Tech HLHS 100

### H801-H802-H803 NON-DUAL CREDIT HEALTH SCIENCE EDUCATION II: Nursing

Term – 2 trimesters

Credits - 6

Grades - 12

Crawfordsville Franciscan St. Elizabeth Health

Health Science Education II: Nursing is an extended laboratory designed to give students the opportunity to learn, and then to practice those technical skills previously learned in the classroom at qualified clinical sites while 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 of the healthcare field; 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 such as providing appropriate personal care to patients; reporting necessary information to nursing staff; operating and monitoring medical equipment; teaching and assisting patients and families with the management of their illness or injury; and performing general health screenings. 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.

Recommended Prerequisites: Strong interest in a Health Career. Teacher Recommendations. Committee Approval

### H601-H602-H603 DUAL CREDIT HEALTH SCIENCE EDUCATION I with MEDICAL TERMINOLOGY

## H301-H302-H303 NON-DUAL CREDIT HEALTH SCIENCE EDUCATION I with MEDICAL TERMINOLOGY

### Dual Credit: Ivy Tech HLHS 100 Dual Credit: Ivy Tech HLHS 101

Term - 3 trimesters

Credits: 2 credits (Medical Terminology 2 trimesters, 4 credits Hlth Science Education

Grades 11-12

This course combines the Health Science Education I and Medical Terminology classes for an introduction to a variety of health care careers. Students will learn anatomy, physiology and the language of medicine in a classroom

setting during the first semester. During the second semester, experiences at a clinical setting, such as Franciscan Health, will allow students to explore a variety of health careers. This is a challenging course that will expand your knowledge of health care.

Recommended Prerequisites: Above average student with a strong interest in a Health Career. Teacher Recommendations. Committee Approval.

### 130'-I302-I303 ADVANCED MANUFACTURING I – Dual Credit Ivy Tech (ADVM 101)

### I101-I102-I103 ADVANCED MANUFACTURING I – Non-Dual Credit

Intro to MSSC Certification

Term – 3 trimesters

Credits - 6

Grade Level: 11-12

Advanced Manufacturing I is a hands-on class that introduces the basic principles of Safety and Quality as they are used in manufacturing environments. Safety instruction covers topics including: Material Safety Data Sheets (MSDS), lockout/tag out, safety audit, hazardous materials, storage of flammable materials, storage of fuel gas and high pressure gas cylinders, portable power tools safety, machine tool safety, safety enforcement practices and right to know. perform HANDS-ON manufacturing Students will simulations and apply basic statistical controls on process, process flow, sampling, and variable charting. Emphasis will be placed on teaming and accepted manufacturing strategies including continuous improvement in order to complete project outcomes. The course will use well equipped labs for all design, production and automation related activities. Comprehensive machine tool operations including CNC, welding and fabrication, 3D technologies, laser, packaging and robotics applications will be presented. Lecture, lab, online simulations and programming will be used to prepare students for Certified Production Technician Testing through the Manufacturing Skills Standards Council (MSSC). In addition, this course will also include an online OSHA 10 hour certification program in which leads to students earning their OHSA 10 General Industry Certification

### I401-I402-I403 ADVANCED MANUFACTURING II – Dual Credit Ivy Tech (ADVM 102)

### I201-I202-203 ADVANCED MANUFACTURING II – Non-Dual Credit

Capstone MSSC Certification

DOE Code: 5606 Term – 3 trimesters

Credits - 6

Grade Level: 11-12

Advanced Manufacturing II introduces students to manufacturing processes and basic mechanical, electrical, electronic and fluid power principles associated with the manufacturing environment. Topics include: types of production, production materials, machining and tooling, manufacturing planning, process and production control, and product distribution. Students will be expected to perform HANDS-ON simulation activities from product conception through distribution. Basic power, energy transfer, machine operations and control strategies will be explored with both traditional and automated equipment. This course will also use lecture, lab, online simulation and programming to prepare students for Certified Production Technician Testing through the Manufacturing Skills Standards Council (MSSC). A student who successfully completes the C.P.T. will carry certifications in Safety, Manufacturing Processes and Production, Quality Practices and Measurement, and Maintenance awareness. The C.P.T. is an industry recognized entry level credential for front line workers from entry to first line supervision.

#### J101-J102 PHARMACY TECH

Term – 2 trimesters Credits – 1 per trimester

Grade - 12

Introduction to Pharmacy is an online course which introduces students to the field of pharmacy and prepares them to take the Pharmacy Tech Certification Board (PTCB) federal exam.

Students desiring to enroll in this course should be well-organized, very conscientious, a self-starter and be able to work with minimal supervision. While an onsite teacher will not be available, technical assistance will be available online to students.

The Pass Assured Company provides software and technical support for the program. In fact, the company offers a guarantee to assist candidates in successfully completing the PTCB depending upon their performance.

The Pharmacy staff at St. Vincent Williamsport Hospital in Williamsport provides on-going support to students online, via telephone and through periodic meetings. Student performance (grades) are reported directly to participating schools by the pharmacy staff.

Recommended Prerequisites: Core 40 Curriculum (Biology, Chemistry, Computer Application, Algebra II (or concurrently)

### W101, W102, W103 WELDING TECHNOLOGY I (WELD TECH I)

Term – 3 trimesters

Credits – 6 Grade: 11-12 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: 11, 12Required Prerequisites: none
- 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

#### SPECIAL SERVICES

#### 1002 Applied English 9

Applied English 9 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- •Counts as an English/Language Arts Requirement for the Certificate of Completion

#### **1004** Applied English 10:

Applied English 10, an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature,

composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

#### 1006 Applied English 11

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.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

#### 1008 Applied English 12

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.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion
- Course may be used for students in 18-22 year-old programming.

#### 1076 Applied Speech

Applied 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/or multimedia presentations, including student portfolios, viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Student products are aligned to their mode of communication.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an English/Language Arts or Employability Requirement for the Certificate of Completion

#### 3506 Applied Health & Wellness Education

Applied 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an elective or Health & Wellness requirement for the Certificate of Completion

#### 3542 Applied Physical Education I (L)

Applied 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 which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes individual progress and performance-based skill evaluation.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as a Physical Education requirement for the Certificate of Completion

#### **3544 Applied Physical Education II (L)**

Applied 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 covered in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes individual progress and performance-based skill evaluation.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none

• Applied Units: 2 units maximum

• Counts as a Physical Education requirement for the Certificate of Completion

#### 2516 Applied Algebra I Lab

Applied Algebra I Lab is a mathematics support course. Algebra I Lab should be taken while students are concurrently enrolled in a math course or have met the math requirements for the certificate of completion. This course provides students with additional time to build the foundations necessary for high school math courses and work on specific, individualized math skills, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas align with the critical areas of Math: Number Sense; Computation; Data Analysis; Geometry and Measurement; and Algebraic Thinking. 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

• 4 units maximum

• Fulfills an elective for the Certificate of Completion

#### 2520 Applied Algebra I

Applied Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of five strands: Numbers Sense; Expressions and Computation; Linear Equations; Inequalities and Functions; Systems of Equations and Inequalities and Quadratic and Exponential Equations and Functions. The strands are further developed by focusing on the content of the Algebra content connectors.

• Recommended Grade: 9, 10, 11, 12

• Required Prerequisites: None

• Recommended Prerequisites: None

• 4 units maximum

• Fulfills a Math requirement for the Certificate of Completion

#### **2532 Applied Geometry**

Applied Geometry formalizes and extends students' geometric experiences from the middle grades. These critical areas comprise the Geometry course: 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: 9, 10, 11, 12
Required Prerequisites: None
Recommended Prerequisites: None

#### 2560 Applied Mathematics Lab

Applied Mathematics Lab provides students with individualized instruction designed to increase math related competencies and/or mathematics coursework aligned with Indiana's Academic Standards or Content Connectors for Mathematics.

• Recommended Grade: 9, 10, 11, 12

• Required Prerequisites: None

• Recommended Prerequisites: None

• 4 units maximum

• Fulfills an elective course requirement for the Certificate of Completion

#### 4512 Applied Business Math

Applied 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 application of money management skills, navigating industry specific technology and apps, establishing and managing budgets, and maintaining inventory for products and other necessary skills that provides the foundation for students interested in careers in business related fields and everyday life. The content includes basic mathematical operations related to accounting, banking and finance, marketing, management, and retail. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences

• Recommended Grade: 10, 11, 12

• Required Prerequisites: none

• Recommended Prerequisites: none

• 4 units maximum

• Counts as an elective for the Certificate of Completion

• Fulfills a Mathematics requirement for the Certificate of Completion

• Qualifies as a quantitative reasoning course

## 4540 Applied Personal Financial Responsibility

Applied 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 and apply skills in financial literacy and responsible decision making. Content includes analyzing personal standards, needs, wants, and goals; identifying sources of income, and navigating technology for money management. A project based approach and applications through authentic settings such as work based observations, service learning experiences and community-based instruction are appropriate. Direct, concrete applications of basic mathematics proficiencies in projects are encouraged.

- Recommended Grade: 9,10,11,12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 units maximum
- Counts as an elective for the Certificate of Completion
- Qualifies as an Applied Math course for the Certificate of Completion

## 4528 Applied Digital Applications and Responsibility

Applied Digital Applications and Responsibility prepares students to use technology in an effective and appropriate manner in school, in a job, or everyday life. Students develop skills related to word processing, spreadsheets, presentations, and communications software and may use highly specialized or individualized technology or software. Students learn what it means to be a good digital citizen and how to use technology, including social media, responsibly. Students expand their knowledge of how to use digital devices and software to build decision-making and problem-solving skills. Students may provided with the opportunity seek industry-recognized digital literacy certifications.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 4 units maximum
- Counts as an elective or Employability requirement for the Certificate of Completion

Applied 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, computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

- Recommended Grade: 9,10,11,12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 units maximum
- Counts as an elective or Employability for the Certificate of Completion

## 5974 Applied Work Based Learning Capstone

Applied Work Based Learning Capstone is an instructional strategy that can be implemented as a standalone course or a component of any CTE course that prepares students for college and career. This strategy builds individual students' skills and knowledge within the area of interest. A standards based training plan is developed by the student, teacher, and workplace mentor to guide the student's work based learning experiences and assist in evaluating progress and performance, whether WBL is a standalone course or a component of a discipline-specific CTE course.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 6 units maximum
- Counts as an Employability Requirement, Capstone Course or elective for the Certificate of Completion

### 5394 Applied Preparing for College and Careers

## 5330 Applied Adult Roles and Responsibilities

Applied Adult Roles and Responsibilities is recommended for all students as life foundations and academic enrichment for students with interest in family and community services, personal and family finance, and similar areas. This course builds knowledge, skills, attitudes, and behaviors that students will need as they complete high school and prepare to take the next steps toward adulthood in today's society. The course includes the study of interpersonal standards, lifespan roles and responsibilities, individual and family management, and financial responsibility and resources. A project or community-based approach that utilizes problem solving skills, communication, leadership, self determination processes. skills. management and college, career and fundamentals to community membership success. Service learning and other authentic applications are strongly recommended.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 units maximum
- Counts as an elective or Employability Requirement for the Certificate of Completion

#### **5342 Applied Nutrition and Wellness**

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 units maximum
- Counts as an Employability Requirement or elective for the Certificate of Completion

#### 5364 Applied Interpersonal Relationships

Applied Interpersonal Relationships introductory course that is relevant for students interested in careers that involve interacting with people and for everyday life relationships. This course addresses knowledge and skills needed for positive and productive relationships in career, community, and family settings. Major course topics include communication skills; leadership, self-determination, teamwork. collaboration: conflict prevention. resolution. and management; building and maintaining relationships; and individual needs and characteristics and their impacts on relationships. A project or community-based approach is recommended in order to apply these topics of interpersonal relationships. This course provides a foundation for all careers and everyday life relationships that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, the general public, family and friends.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 units maximum
- Counts as an Employability Requirement or elective for the Certificate of Completion

#### 3024 Applied Biology I (L)

Applied 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Fulfills as a science requirement for the Certificate of Completion

#### **3044** Applied Earth and Space Science I (L)

Applied Earth and Space Science I is a course focused on the following core topics: study of the earth's layers;

atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation and experimentation, by conducting investigations, and evaluating and communicating the results of those investigations. This course may include a variety of learning experiences and tools to support the process of investigation, data collection, and analysis.

• Recommended Grade: 9, 10, 11, 12

• Required Prerequisites: none

• Recommended Prerequisites: none

• Applied Units: 4 units maximum

• Counts as an elective or science requirement for the Certificate of Completion

### 1570 Applied Geography and History of the World

Applied Geography and History of the World is designed to enable students to use geographical tools, skills and historical concepts to apply their understanding of major global themes including the origin and spread of world religions; exploration; conquest, and imperialism; and urbanization; innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety of sources, organizing information by creating graphic representations, analyzing information to understand, determine and explain patterns and trends, planning for the future, and documenting and presenting findings orally or in writing. Students use the knowledge, tools, and skills obtained from this course in order to understand, 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.

• Recommended Grade: none

• Required Prerequisites: none

• Recommended Prerequisites: none

• Applied Units: 4 units maximum

• Counts as a Social Studies Requirement or elective for the Certificate of Completion

#### **1542 Applied United States History**

Applied United States History is a course that builds upon concepts 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 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 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 specific topics or the cause for changes in the nation over time.

• Recommended Grade: none

• Required Prerequisites: none

• Recommended Prerequisites: none

• Applied Units: 4 units maximum

• Counts as a Social Studies Requirement or elective for the Certificate of Completion

#### 1540 Applied United States Government

Applied 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; 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 recognize their own impact, 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: 11, 12

• Required Prerequisites: none

• Recommended Prerequisites: none

• Applied units: 2 units maximum

• Counts as a social studies requirement or elective for the Certificate of Completion

#### 1514 Applied Economics

Applied Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course identifies economic 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. Students may be offered opportunities to better understand and apply course content through a variety of instructional strategies including project- and community-based instruction and real world experiences.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites:
- Applied Units: 2 units maximum
- Counts as a Social Studies Requirement or elective for the Certificate of Completion

#### 0500 BASIC SKILLS DEVELOPMENT

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester up to 8 semesters, 8 credits maximum
- Counts as an elective for all diplomas

