



Triton High School
Course Description
Guide
2022 - 2023

COUNSELORS

Mrs. Sarrah Arvesen
7th-12th Grade Counselor
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Mrs. Ashli Faulkner
7th-12th Grade Counselor
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ADMINISTRATION

Mr. Nathan McKeand
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Mr. Rick Yarbrough
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Mr. Rodney Younis
Athletic Director
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OFFICE STAFF

Mrs. Mendy Davis- Main Office
Mrs. Kim Stetzel - Guidance

SCHEDULE CHANGES

Classes may be changed during the first three days of each semester for the following reasons: unscheduled class period, class needed to complete graduation requirements, elective change, or failure of a prerequisite.

***For 2022-2023, schedule change requests need to be submitted before the school year begins.

GRADES AND ATHLETIC ELIGIBILITY

To demonstrate the importance of academics, we have adopted a "NO PASS - NO PLAY" rule. Students who receive a failing grade during any of the nine week grading periods will become ineligible until the next mid-term progress report. Mid-term grades can be used to make athletes eligible for participation, but the mid-term grade will not be used to make an athlete ineligible.

The following Guidance activities are planned to help students develop an appropriate course of study for the 2022-2023 school year:

- Mrs. Arvesen and Mrs. Faulkner will meet with 7th-12th grade students to determine class selections and review each student's four year graduation plan.
- Mrs. Arvesen and Mrs. Faulkner will meet with 11th and 12th grade students to review graduation requirements, post-secondary plans, college entrance requirements, and senior courses.
- Mrs. Arvesen and Mrs. Faulkner will meet with all 8th grade students to determine class selections and build each student's four year graduation plan.
- Counselors will conduct an evening informational session for parents of incoming freshmen to give an overview of high school life, including curriculum and graduation requirements.

Triton Jr-Sr High School

Indiana Core 40 Diploma Requirements

ENGLISH	English 9, English 10, English 11, English 12	8 Credits
MATH*	Algebra I, Geometry, Algebra II	6 Credits
SCIENCE	Biology, Chemistry, 2 additional credits	6 Credits
SOCIAL STUDIES	World History, US History, Government, Economics	6 Credits
PHYSICAL ED	PE I and PE II	2 Credits
HEALTH	Health & Wellness	1 Credit
REQUIRED ELECTIVE	Prep for College and Careers	1 Credit

Must also complete five total credits in any of the following three areas:

WORLD LANGUAGE	Spanish	5 Credits
FINE ARTS	Art or Music	
CAREER/TECHNICAL	Any career oriented electives	

ELECTIVE CREDITS	Any elective classes beyond requirements listed above	6 Credits
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**Students MUST take a Math OR “Quantitative Reasoning” class every year of High School. See list of Quantitative reasoning classes at the end of the diploma requirements section.*

TOTAL NUMBER OF CREDITS REQUIRED: 41 Credits



Triton Jr-Sr High School

Indiana Core 40 with Academic Honors Diploma Requirements

ENGLISH	English 9, English 10, English 11, English 12	8 Credits
MATH*	Algebra I, Geometry, Algebra II, 2 additional credits	8 Credits
SCIENCE	Biology, Chemistry, 2 additional credits	6 Credits
SOCIAL STUDIES	World History, US History, Government, Economics	6 Credits
PHYSICAL ED	PE I and PE II	2 Credits
HEALTH	Health & Wellness	1 Credit
REQUIRED ELECTIVE	Prep for College and Careers	1 Credit

FINE ARTS	Music or Art classes	2 Credits
WORLD LANGUAGE	Spanish I, Spanish II, Spanish III	6 Credits

ELECTIVE CREDITS	Any elective classes beyond requirements listed above	7 Credits
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GPA REQUIREMENT	Must have a minimum of 2.9 GPA at the end of 12 th grade
GRADE REQUIREMENT	No semester grade lower than a C-

MUST COMPLETE 1 OF THE FOLLOWING:	
	Four AP Credits & Exams
	Two AP Credits & Exams and one
	Dual Credit Class*
	Two Dual Credit Classes*
	1250 SAT Score (Minimum
	scores: 560-Math, 590-EBRW)
	26 ACT (includes writing section)

TOTAL NUMBER OF CREDITS REQUIRED: 47 Credits

Triton Jr-Sr High School

Indiana Core 40 with Technical Honors Diploma Requirements

ENGLISH	English 9, English 10, English 11, English 12	8 Credits
MATH*	Algebra I, Geometry, Algebra II	6 Credits
SCIENCE	Biology, Chemistry, 2 additional credits	6 Credits
SOCIAL STUDIES	World History, US History, Government, Economics	6 Credits
PHYSICAL ED	PE I and PE II	2 Credits
HEALTH	Health & Wellness	1 Credit
REQUIRED ELECTIVE	Prep for College and Careers	1 Credit

Must also complete five total credits in any of the following three areas:

WORLD LANGUAGE	Spanish	
FINE ARTS	Art or Music	
CAREER/TECHNICAL	Any career oriented electives	
		5 Credits

Must complete six credits in a College and Career Pathway and one of the following:

Pathway designated industry-based certification
 Pathway dual credits resulting in 6 transcribed credits
 6 Credits

GPA REQUIREMENT Must have a 2.9 GPA at the end of 12th grade

GRADE REQUIREMENT No semester grade lower than a C-

MUST COMPLETE ONE OF THE FOLLOWING:

Achieve required WorkKeys Score
 Earn minimum scores on Accuplacer test
 Earn minimum score on Compass test
 Achieve any one of the five options of the Academic Honors Diploma

TOTAL NUMBER OF CREDITS REQUIRED: 47 Credits

Triton Jr-Sr High School

Indiana **General Diploma** Requirements (*REQUIRES Core 40 Opt Out Form*)

ENGLISH	English 9, English 10, English 11, English 12	8 Credits
MATH*	Algebra I, 2 additional credits	4 Credits
SCIENCE	Biology, 2 additional credits	4 Credits
SOCIAL STUDIES	US History, Government, 1 additional credit	4 Credits
PHYSICAL ED	PE I and PE II	2 Credits
HEALTH	Health & Wellness	1 Credit
REQUIRED ELECTIVE	Prep for College and Careers	1 Credit
FINANCIAL LITERACY	Economics, Personal Finance, or Adult Roles	1 Credit

CAREER SEQUENCE	Any Career Pathway	6 Credits
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ELECTIVE CREDITS	Any elective classes beyond requirements listed above	6 Credits
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**Students MUST take a Math OR “Quantitative Reasoning” class every year of High School. See list of Quantitative reasoning classes at the end of the diploma requirements section.*

TOTAL NUMBER OF CREDITS REQUIRED: 41 Credits



Quantitative Reasoning Classes

**Any Core 40, Academic Honors, and Technical Honors students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school. General Diploma students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.*

Integrated Chemistry-Physics

Chemistry I

Physics I

AP Physics I - Algebra-Based

Business Math

Personal Financial Responsibility

Economics

Construction Trades II

Advanced Life Science, Animals

Advanced Life Science, Plants and Soils

Computer Science (I & II)

Computer Integrated Manufacturing

Principles of Engineering

Industrial Automation and Robotics

Precision Machining (I & II)

Robotics Design and Innovation

Additional Core 40 Science Courses Offered at Triton Jr./Sr. High School

To earn a Core 40 diploma designation, students are still required to obtain:

- (1) two credits of Biology I,*
- (2) two credits of Chemistry I or Physics I or Integrated Chemistry-Physics, and*
- (3) two credits of any other Core 40 science course.*

Computer Science I

Computer Science II

Principles of Engineering

Animal Science

Plant and Soil Sciences

PLTW Human Body Systems

PLTW Medical Interventions

Principles of Computing

Agriculture

Agriculture Power, Structure, & Technology: Ivy Tech AGRI 106

Length: Year Credits: 2 Grade: 10, 11, 12

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 while incorporating technology. Topics covered include: safety, electricity, plumbing, concrete, carpentry, metal technology, engines, emerging technologies, leadership development, supervised agricultural experience and career opportunities in the area of agriculture power, structure and technology.

Agriculture Structures Fabrication and Design

Length: Year Credits: 2 Grade: 10, 11, 12

Required Prerequisite(s): Principles of Agriculture

Recommended Prerequisite(s): Introduction to Agriculture, Food and Natural Resources

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.

Animal Science: Ivy Tech AGRI 103

(Offered '23-'24)

Length: Year Credits: 2 Grade: 10, 11, 12

Animal Science is a two semester program that provides students with an overview of the field of animal science. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, and management practices for the care and maintenance of animals.

Agribusiness Management: Ivy Tech AGRI 102

****Not offered '22-23 School Year****

Length: Year Credits: 2 Grade: 11, 12

*Qualifies as Quantitative Reasoning Course.

Agribusiness Management provides foundational concepts in agricultural business. It is a two semester course that introduces students to the principles of business organization and management from a local and global perspective while incorporating technology. Concepts covered in the course include food and fiber, forms of business, finance, marketing, management, sales, leadership

development, supervised agricultural experience career opportunities in the area of agribusiness management.

Plant and Soil Science: Ivy Tech AGRI 105

Length: Year Credits: 2 Grade: 10, 11, 12

Plant and Soil Science is a two semester course that provides students with opportunities to participate in a variety of activities which includes laboratory work. The following topics are found in this course: plant taxonomy, components and their functions; plant growth, reproduction and propagation; photosynthesis and respiration; environmental factors affecting plant growth, management of plant diseases and pests; biotechnology; the basic components and types of soil; calculation of fertilizer application rates and procedures for application; soil tillage and conservation; irrigation and drainage; land measurement, cropping systems, precision agriculture, principles and benefits of global positioning systems; and harvesting. Leadership development, supervised agricultural experience and career exploration opportunities in the field of plant and soil science are also included.

Advanced Life Science, Animals: Ivy Tech AGRI 107

Length: Year Credits: 2 Grade: 10, 11, 12

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



Agriculture continued

Advanced Life Science, Plant and Soil: Ivy Tech AGRI 109 (Offered '23-'24)

Length: Year Credits: 2 Grade: 10, 11, 12

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

examine plant evolution and the role of plants in ecology. Students investigate, through laboratories and fieldwork, how plants function and how soil influences plant life

Supervised Agricultural Experience (Summers Only)

Length: Summer session Credits: 1 Grade: 9, 10, 11, 12

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards-based plan for learning. Students work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program.

Business

Business Law and Ethics

****Not offered in '22-'23****

Length: Year Credits: 2 Grade: 10, 11, 12

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

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.

Intro to Business

Length: Semester Credits: 1 Grades: 9, 10, 11, 12

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

Business Math

Length: Year Credits: 2 Grade: 10, 11, 12

Required Prerequisite: Algebra 1

*Qualifies as Quantitative Reasoning course and Math credit for General Diploma only

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

Personal Financial Responsibility

Length: Semester Credits: 1 Grades: 10, 11, 12

Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, saving and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt.

Introduction to Accounting

Length: Year Credits: 2 Grade: 10, 11, 12

Accounting introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both

Business continued

Principles of Business Management

Length: Year Credits: 2 Grades: 9,10, 11, 12

Recommended prerequisite: Intro to Business

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.

Management Fundamentals

Length: Year Credits: 2 Grade: 10, 11, 12

Required Prerequisite(s): Principles of Business Management

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

Marketing Fundamentals

Length: Year Credits: 2 Grade: 11, 12

Required Prerequisite(s): Principles of Business Management

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



Engineering and Technology

PLTW Intro to Engineering Design

Length: Year Credits: 2 Grade: 9, 10, 11, 12

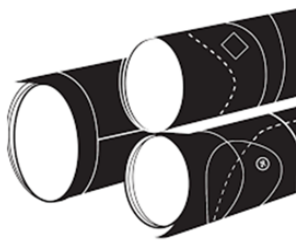
Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

PLTW Principles of Engineering

Length: Year Credits: 2 Grade: 10, 11, 12

Prerequisite: Must have completed PLTW Intro to Engineering and Design

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



PLTW Computer Integrated Manufacturing

Length: Year Credits: 2 Grade: 11, 12

Required prerequisite: Must have completed PLTW Intro to Engineering and Design and PLTW Principles of Engineering

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes.

Robotics Design and Innovation

Length: Year Credits: 2 Grade: 9, 10, 11, 12

Robotics Design and Innovation allows students to design, program, and test innovative technological designs related to robotic systems. Topics involve mechanics, pneumatics, control technologies, computer fundamentals, and programmable control technologies. Students design, build, and optimize robots to perform a variety of predesignated tasks.

Introduction to Computer Science

****Not offered in '22-'23****

Length: Year Credits: 2 Grade: 9, 10, 11, 12

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

Principles of Computing

Length: Year Credits: 2 Grade: 9, 10, 11

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

Topics in Computer Science

Length: Year Credits: 2 Grade: 10, 11, 12

Required Prerequisites: Principles of Computing

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

Computer Science II

Length: Year Credits: 2 Grade: 11, 12

Required Prerequisites: Computer Science I

Computer Science II explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. 67 Indiana Department of Education High School Course Titles and Descriptions 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.

Qualifies as a quantitative reasoning course

Family & Consumer Science

Adult Roles & Responsibilities

****Not offered in '22-'23****

Length: Semester Credits: 1 Grade: 10, 11, 12

Adult Roles and Responsibilities is recommended for all students as life foundations and academic enrichment, and as a career sequence course for students with an 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 resource management, and financial responsibility and resources. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of adult roles and responsibilities. Direct, concrete mathematics and language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to individual and family life.

Advanced Child Development

Length: Semester Credits: 1 Grade: 10, 11, 12

Advanced Child Development is for those students interested in life foundations, academic enrichment, and/or careers related to knowledge of children, child development, and nurturing of children. This course addresses issues of child development from age 4 through age 8 (grade 3). 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.

Child Development

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Child Development is an introductory course that is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child care giving and nurturing; and support systems for parents and caregivers. A project-based approach that utilizes higher order

thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Authentic applications such as introductory laboratory/field experiences with young children and/or service learning that build knowledge of children, child development, and nurturing of children are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

Interpersonal Relationships

****Not offered in '22-'23****

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

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



Nutrition & Wellness

Length: 1 Semester Credits: 1 Grade: 9, 10, 11, 12

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

Advanced Nutrition & Wellness

Length: Semester Credits: 1 Grade: 9, 10, 11, 12

Recommended prerequisite: Nutrition and Wellness.

Advanced Nutrition and Wellness is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. *Advanced Nutrition and Wellness* is an especially appropriate course for students interested

in careers in the medical field, athletic training and dietetics. This course builds on the foundation established in *Nutrition and Wellness*, which is a required prerequisite. This is a project-based course; utilizing higher-order thinking, communication, leadership and management processes. Topics include extensive study of major nutrients, nutritional standards across the lifespan, and influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills; attention will be given to nutrition, food safety and sanitation. This course is the second in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness. Course may be taken up to two times.

Preparing for College & Careers

Length: Semester Credits: 1 Grade: 9

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.

Fine Arts

Advanced Concert Band

Length: Year Credits: 2 Grades: 9, 10, 11, 12

Advanced Concert Band is a continuation level course for students with 3 or more years of previous band experience. Participation is expected in athletic band activities such as marching and basketball band. Emphasis is on the advancement of instrument technique and the development of performance skills.

Advanced Choir

Length: Year Credits: 2 Grades: 9, 10, 11, 12

Advanced Choir is open to all interested students, it is important to note that one does not have to be a "good singer" to enroll in this class. Students must be willing to sing actively each day and will be expected to learn the music chosen by the director. In addition to learning how to sing students will be expected to participate in public performances every nine weeks.

Introduction to Two-Dimensional Art

Length: 1 Semester Credits: 1 Grade: 9, 10, 11, 12

Introduction to Two-Dimensional Art is a course where students will be introduced to basic art techniques and media in both black & white and color including: pencil, charcoal, pen & ink, pastel and scratchboard. Art history units will be delivered through online presentations throughout the semester. This course includes student evaluation and presentation of completed projects. Students will be required to keep a sketchbook and online art portfolio.

Introduction to Three-Dimensional Art

Length: 1 Semester Credits: 1 Grade: 9, 10, 11, 12

Prerequisite: Introduction to Two-Dimensional Art.

Introduction to Three-Dimensional Art introduces students to sculptural techniques and media. Students will complete projects utilizing paper, wire, clay, fiber arts and mixed media (bookmaking). Art history units will be delivered through online presentations throughout the semester. This course includes student evaluation and presentation of completed projects. Students will be required to keep a sketchbook and online art portfolio.

Advanced 2D Art

****Not offered in '22-'23****

Length: 1 Semester Credits: Grade: 10, 11, 12

Prerequisite: Must have taken Intro 2D Art and Intro 3D Art.

Advanced Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. This course builds on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works utilizing color media: colored pencils, acrylic paint, oil and chalk pastels. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students in this course will be required to keep a sketchbook and online art portfolio.

Advanced 3D Art

****Not offered in '22-'23****

Length: 1 Semester Credits: 1 Grades: 10, 11, 12

Prerequisite: Must have taken Intro 2D Art, Intro 3D Art, and Advanced 2D Art.

Advanced 3D Art is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Three-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students in this course will be required to keep a sketchbook and online art portfolio.

Ceramics

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Prerequisite: Introduction to Two-Dimensional Art, Introduction to Three-Dimensional Art

Ceramics is a course where students work with various clay forms and techniques. Students create works of art utilizing the processes of mosaic, hand building (slab and coil), molds, wheel throwing, and sculpture. Students will experiment with slip and glaze techniques and firing processes. This course includes student evaluation and presentation of completed projects. This course has both teacher directed and student choice projects. Students will be required to keep a sketchbook and online art portfolio. The nature of this course allows for successive semesters of instruction at an advanced level.

Digital Design

****Not offered in '22-'23****

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Prerequisites: Introduction to Two-Dimensional Art and Introduction to Three-Dimensional Art or Visual Communications

Digital Design is a course that will introduce students to the world of creating art using digital tools. Students will use a variety of available programs such as Photoshop, MS Paint, and Autodesk Sketchbook to create digital artwork and designs. The course will consist of guided tutorials and independent projects. This course includes student evaluation and presentation of completed projects. Students will be required to keep a sketchbook and online art portfolio. The nature of this course allows for successive semesters of instruction at an advanced level.

Drawing

****Not offered in '22-'23****

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Prerequisite: Introduction to Two-Dimensional Art, Introduction to Three-Dimensional Art

Drawing is a course that challenges students to use their skills to create drawings that build upon what they learned in Introduction to 2-D art. Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing and use a variety of media in black and white and color such as pencil, chalk, pastels, charcoal, scratchboard, mixed media and pen and ink. This course has both teacher directed and student choice projects. This course includes student evaluation and presentation of completed projects. Students will be required to keep a sketchbook and online art portfolio. The nature of this course allows for successive semesters of instruction at an advanced level.

Painting

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Prerequisite: Must have taken Introduction to Two-Dimensional Art, Introduction to Three-Dimensional Art

Painting is a course that allows students to experiment with using a variety of materials such as mixed media, watercolor, oil, finger paint and acrylics. Students in this course will be required to keep a sketchbook and online art portfolio. This course includes student evaluation and presentation of completed projects. This course has both teacher directed and student choice projects. The nature of this course allows for successive semesters of instruction at an advanced level.

Photography

****Not offered in '22-'23****

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Prerequisite: Introduction to Two-Dimensional Art, Introduction to Three-Dimensional Art or Visual Communications.

Photography is a course creating photographs utilizing a variety of digital tools and processes. Students will learn how to use Photoshop to manipulate photographs and learn the basics of digital photography and cameras. Students in this course will be required to keep digital photography files and online art portfolio to showcase their work. The nature of this course allows for successive semesters of instruction at an advanced level.

Sculpture

****Not offered in '22-'23****

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Recommended Prerequisites: Introduction to Two-Dimensional Art, Introduction to Three-Dimensional Art

Sculpture is a course where students use materials such as plaster, clay, paper, wood and mixed media, to create 3-D structures. Both realistic and abstract sculptures will be made utilizing subtractive and additive processes of carving, modeling, construction, and assembling. Students in this course will be required to keep a sketchbook and online art portfolio. This course has both teacher directed and student choice projects. The nature of this course allows for successive semesters of instruction at an advanced level.

Visual Communication- Yearbook

Length: 2 Semesters Credits: 2 Grade: 9, 10, 11, 12

Prerequisite: Application

Visual Communication is a course where students work together to create the school yearbook. Students are responsible for the planning, creation, marketing and sales of the book. They create print media utilizing graphic design, typography, illustration, photography and image creation with digital tools and computer technology. This course requires an application and selection process. Students must be willing to be involved in all aspects of yearbook production: advertising, sales, photography, page design and layout as well as be able to meet deadlines and work closely with others. Spending time outside of class photographing after school events is a requirement of this course. The nature of this course allows for successive semesters of instruction at an advanced level.



Language Arts

English 9

Length: Year Credits: 2 Grade: 9

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

English 9 Honors

Length: Year Credits: 2 Grade: 9

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Interested students must pass the ILEARN English Language Arts portion of the test prior to enrollment. Students must have achieved a B+ or higher in English 8 as a prerequisite. Students scoring below these standards will need to secure a waiver for entry.

Honors English 9, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 9, is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information. The subject matter in this class will be taught at a higher level than Regular English 9.

English 10

Length: Year Credits: 2 Grade: 10

English 10, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 10, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of

historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and persuasive compositions, and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

English 10 Honors

Length: Year Credits: 2 Grade: 10

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Interested students must have achieved a B- or higher in Honors English 9 or a B+ or higher in regular English 9 as a prerequisite. Students scoring below these standards will need to secure a waiver for entry.

Honors English 10, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 10, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write short stories and give oral presentations that are responses to literature, expository and persuasive compositions, research reports, and more. The subject matter in this class will be taught at a higher level than Regular English 10.



English 11

Length: Year Credits: 2 Grade: 11

English 11, an integrated English course based on Indiana's Academic Standards for English/Language Arts in Grade 11, is a study of language, literature, composition, and oral communication

with a focus on exploring characterization across universal themes and a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

Language Arts continued

English 11 Honors: Ivy Tech ENGL 111

Length: 1 Semester (Fall) Credits: 1 Grade: 11

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this college-level course. Students must have achieved a B- or higher in Honors English 10 or a B+ or higher in regular English 10 as a prerequisite. Must achieve required scores on either the ACCUPLACER, PSAT, or SAT/ACT in order to receive dual credit. Students scoring below these standards will need to secure a waiver for entry.

Ivy ENGL 111 is designed to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. This course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison, analysis, persuasion, and argumentation. A research paper is required. Numerous in-class writing activities are required in addition to extended essays written outside of class.

Adv Eng 11 CC: Ivy Tech ENGL 206

Length: 1 Semester Credits: 1 Grade: 11

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Students must have achieved a B- or higher in Honors English 10 or a B+ or higher in regular English 10 as a prerequisite. Must achieve required scores on either the ACCUPLACER, PSAT, or SAT/ACT in order to receive dual credit. Students scoring below these standards will need to secure a waiver for entry.

Ivy ENGL 206 focuses on the development of basic strategies for critically reading and interpreting poetry, fiction, and drama; introduction to the premises and motives of literary analysis and

critical methods associated with various literary concerns through class discussion and focused writing assignments.

English 12

Length: Year Credits: 2 Grade: 12

English 12, an integrated English course based on Indiana's Academic Standards for English/Language Arts for Grade 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

Advanced Speech and Communication: Ivy Tech COMM 101

Length: 1 Semester Credits: 1 Grade: 12

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Must achieve required scores on either SAT/ACT, PSAT, ACCUPLACER or qualify for GPA waiver in order to receive dual credit.

Ivy Tech COMM 101 introduces fundamental concepts and skills for effective public speaking, including audience analysis, outlining, research, delivery, critical listening and evaluation, presentational aids, and use of appropriate technology.

English 12 Honors: Ivy Tech ENGL 215

Length: 1 Semester Credits: 1 Grade: 12

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Must have completed ENGL 111 with a C- or higher to be eligible for dual credit. Must achieve required scores on either SAT/ACT, PSAT, or ACCUPLACER in order to receive dual credit.

Ivy ENGL 215 builds on the writing skills taught in ENGL 111 and emphasizes research-based analytic and argumentative writing. Designed to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. This course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison, analysis, persuasion and argumentation. A research paper is required. Numerous in-class writing activities are required in addition to extended essays written outside of class.

Mathematics

Algebra I

Length: Year Credits: 2 Grade: 9, 10, 11, 12

Algebra I provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. The concept of function is emphasized throughout the course. Topics include: (1) operations with real numbers, (2) linear equations and inequalities, (3) relations and functions, (4) polynomials, (5) algebraic fractions, and (6) nonlinear equations.

Algebra I Lab

****Not offered in '22-'23****

Length: Year Credits: 2 Grade: 9, 10, 11, 12

Algebra I Lab provides an opportunity for individualized instruction designed to help students successfully complete high-level work in mathematics. Algebra I Lab is a support class for Algebra. It will not only support the topics presented in Algebra I, but it will also work on foundational skills needed to master Algebra I concepts.

This course counts as math credits for a General Studies diploma only. It counts as elective credits for all other diploma types.

Geometry

Length: Year Credits: 2 Grades: 9, 10, 11, 12

Geometry students examine the properties of two- and three-dimensional objects. Proof and logic, as well as investigative strategies in drawing conclusions are stressed. Properties and relationships of geometric objects include the study of: (1) points, lines, angles and planes; (2) polygons, with a special focus on quadrilaterals, triangles, right triangles; (3) circles; and (4) polyhedral and other solids. Use of graphing calculators and computer drawing programs is encouraged.



Geometry Honors

Length: Year Credits: 2 Grade: 9, 10

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Students must have taken Algebra I Honors and received a B- or higher or Algebra I with an A. If they do not meet these requirements, they must sign a waiver for entry.

The *Honors Geometry* class is designed for students who excel in mathematics. Students are expected to investigate theorems and postulates, develop spatial reasoning skills, and challenge their way of thinking. The curriculum will include writing theoretical proofs, constructing geometric figures, and exploring mathematical concepts through the use of technology. Since technology will be used on a daily basis a TI-84 Plus calculator is required. The course will offer a glimpse into computer programming. Students will write and execute simple geometric formulas as calculator programs. The pace of the instruction will be held to an honors standard. Expect homework and assessments to be more rigorous than the regular Geometry class. Every student must complete an exit project to receive credit. A PowerPoint or Muvvee will be created by each student to incorporate Geometry's SketchPad diagrams with real-life pictures of Geometry in motion.

Algebra II

Length: Year Credits: 2 Grade: 10, 11, 12

Prerequisite: Must have passed Algebra I and Geometry.

Algebra II is a course that extends the content of Algebra I and provides further development of the concept of a function. Topics include: (1) relations, functions, equations and inequalities; (2) conic sections; (3) polynomials; (4) algebraic fractions; (5) logarithmic and exponential functions; (6) sequences and series; and (7) counting principles and probability.

Analytical Algebra II

Length: Year Credits: 2 Grade: 11, 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 that 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 *Requires consent form with student and parent signatures

Algebra II Honors

Length: Year Credits: 2 Grade: 10, 11, 12

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Students must have received a B- or higher in Geometry for entry. Students scoring below these standards will need to secure a waiver for entry.

Honors Algebra II is a course designed for students who excel in mathematics that extends the content of Algebra I and provides further development of the concept of a function. Topics include: (1) relations, functions, equations and inequalities; (2) conic sections; (3) polynomials; (4) algebraic fractions; (5) logarithmic and exponential functions; (6) sequences and series; and (7) counting principles and probability. The pace of the instruction will be held to an honors standard. Expect homework and assessments to be more rigorous than the regular Geometry class. Every student must complete an exit project to receive credit.

Quantitative Reasoning

Length: Year Credits: 2 Grade: 11, 12

Prerequisite: Must have passed Algebra I, Geometry, and Algebra II

Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling,

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

Pre-Calculus

Length: 1 Semester Credits: 1 Grade: 11, 12

Prerequisite: Must have passed Algebra I, Geometry, and Algebra II

Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement.

Pre-Calculus Honors – Ivy Tech MATH 136

Length: 1 Semester Credits: 1 Grade: 11, 12

Prerequisite: Completion of Algebra II with a C- or higher or teacher recommendation. If they do not meet these requirements, they must sign a waiver for entry. Must achieve required scores on either SAT/ACT, PSAT, or ACCUPLACER in order to receive dual credit.

Ivy 136 extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement.

Trigonometry

Length: 1 Semester Credits: 1 Grade: 11, 12

Prerequisite: C- or above in Algebra II

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, and finance (and nearly all

other STEM disciplines). Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer science.

Trigonometry Honors – Ivy Tech MATH 137

Length: 1 Semester Credits: 1 Grade: 11, 12

Prerequisite: Completion of Algebra II with a C- or higher or teacher recommendation. If they do not meet these requirements, they must sign a waiver for entry. Must achieve required scores on either SAT/ACT, PSAT, or ACCUPLACER in order to receive dual credit.

Ivy 137 is a one-credit course which provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses.

AP Calculus- Ivy Tech MATH 211

Length: Year Credits: 2 Grade: 12

Prerequisite: Completion of Pre-Calculus with a C- or higher or teacher recommendation. If they do not meet these requirements, they must sign a waiver for entry. Must achieve required scores on either SAT/ACT, PSAT, or ACCUPLACER in order to receive dual credit.

Calculus, Advanced Placement is a course based on content established by the College Board. AP Calculus is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: (1) functions, graphs, and limits; (2) derivatives; and (3) integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

Physical Education & Health

Physical Education I

Length: 1 Semester Credits: 1 Grade: 9

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

Physical Education II

Length: 1 Semester Credits: 1 Grade: 9

Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provide students with opportunities to actively participate in four of the following that were not in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics;

gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.)

Health & Wellness Education

Length: 1 Semester Credits: 1 Grade: 9, 10

Health & Wellness Education, a course based on Indiana's Academic Standards for Health & Wellness, provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts); determine personal values that support health behaviors; develop group norms that value a healthy lifestyle; develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, comprehensive health education curriculum. Priority areas include: promoting personal health and wellness, physical activity, healthy eating, promoting safety and preventing unintentional injury and violence, promoting mental and emotional health, a tobacco-free

lifestyle and an alcohol- and other drug-free lifestyle and promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

Elective Physical Education: Advanced PE

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Advanced Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in specific areas. A minimum of two of the following activities should be included: (1) health-related fitness activities (cardio respiratory endurance, muscular strength and endurance, flexibility and body composition), (2) team sports, (3) individual or dual sports, (4) aquatics and, (5) outdoor pursuits. It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation.

Advanced P.E. is a continuation of Physical Education I and II with special emphasis given to more advanced skills and techniques in each of the activities. Approved uniforms are required.

Elective Physical Education: Weightlifting

Length: 1 Semester Credits: 1 Grade: 10, 11, 12

Weightlifting/Conditioning is designed to provide students with the opportunity to develop their muscular strength and body explosiveness. Strength development will be achieved through consistent and rigid lifting routines. Body explosiveness will be achieved through plyometric training and instruction on non-lifting days. Students will lift three days-a-week. Due to the nature of the course, students MUST participate daily, and keep good records of their exercises in their notebooks. The students will also be instructed in skeletal muscle anatomy, their functions, proper stretching, and form running.

-Classes are coeducational unless the activity involves bodily contact or groupings are based on an objective standard of individual performance developed and applied without regard to gender -A maximum of six credits can be earned between Advanced PE and Weightlifting combined provided that there is no course or skill level duplication.

Science

Biology I

Length: Year Credits: 2 Grade: 10

Biology I is a course that covers the 2016 Indiana Biology Content Standards. At a minimum, students enrolled in Biology I explore cellular biology, ecology, genetics and evolution. Using the scientific process, classroom activities, and virtual simulations, students work with the concepts, processes, and theories to answer questions about the living world. Students enrolled in the course are expected to participate in group projects, discussions and presentations.

Biology I Honors **Not offered in '22-'23**

Length: Year Credits: 2 Grade: 9, 10

Prerequisite: Students classified as high ability are encouraged to enroll in this course. Application is required and must be approved by the instructor.

Biology I Honors is designed to cover Common Core Standards and all of the Indiana State Biology Standards with a more in-depth approach to concepts and processes. Honors Biology will provide a more rigorous pace combined with small group projects,

simulations and inquiry-based labs that will enhance biological understanding and allow for a more in-depth research on an individual basis.

Earth/Space Science I

Length: Year Credits: 2 Grade: 9, 10, 11, 12

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 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.

Earth Space Science II: Ivy Tech SCIN 100

****Not offered in '22-'23****

Length: Year Credits: 2 Grade: 10, 11, 12

Earth and Space Science II is an extended laboratory, field, and literature investigations-based course whereby students apply concepts from other scientific disciplines in synthesizing theoretical models of earth and its interactions with the macrocosm. Students enrolled in this course examine various earth and space science phenomena, such as the structure, composition, and interconnected systems of earth and the various processes that shape it, as well as earth's lithosphere, atmosphere, hydrosphere, and celestial environment. Students analyze and apply the unifying themes of earth and space science as part of scientific inquiry aimed at investigating earth and space science problems related to personal needs and community issues.

PLTW Principles of Biomedical Science –PBS (year 1)

Length: Year Credits: 2 Grade: 9, 10, 11

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

PLTW Human Body Systems- HBS (year 2)

Length: Year Credits: 2 Grade: 10, 11, 12

Prerequisite: PLTW Principles of Biomedical Science or AP Biology

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

PLTW Medical Interventions - (Year 3)

Length: Year Credits: 2 Grade: 10, 11, 12

Required Prerequisites: Principles of Biomedical Science

Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning High School Course Titles and Descriptions 2022-2023 300 approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. NOTE: This course aligns with the PLTW Medical Interventions curriculum. Use of the

Integrated Chemistry-Physics

Length: Year Credits: 2 Grade: 10, 11, 12

*Qualifies as Quantitative Reasoning

Integrated Chemistry-Physics is a course focused on the following core topics: constant velocity; uniform acceleration, Newton's Laws of motion (one dimension); energy; particle theory of matter; describing substances; representing chemical change; electricity and magnetism; waves; nuclear energy.

Chemistry I

Length: Year Credits: 2 Grade: 10, 11, 12

*Qualifies as Quantitative Reasoning.

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

Physics I

Length: Year Credits: 2 Grade: 11, 12

*Qualifies as a Quantitative Reasoning course.

Physics I is a course focused on the following core topics: motion and forces; energy and momentum; temperature and thermal energy transfer; electricity and magnetism; vibrations and waves; light and optics. 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.



Social Studies

Geography and History of the World

Length: Year Credits: 2 Grade: 9, 10, 11, 12

Geography and History of the World is designed to enable students to use geographical tools, skills and historical concepts to deepen their understanding of major global themes including the origin and spread of world religions; exploration; conquest, and imperialism; urbanization; and innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety of primary and secondary sources, organizing information by creating graphic representations, analyzing information to determine and explain patterns and trends, planning for the future, and documenting and presenting findings orally or in writing. The historical geography concepts used to explore global themes which include change over time, origin, diffusion, physical systems, cultural landscapes, and spatial distribution/patterns and interaction/relationships.

and processes of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes.

United States History

Length: Year Credits: 2 Grade: 11

United States History builds upon concepts developed in previous studies of U.S. History. Students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. They will develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

World History and Civilization

Length: Year Credits: 2 Grade: 9, 10, 11, 12

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



United States History Honors: Ivy Tech HIST 101 & HIST 102
(Dual Credits will not be offered during '22-'23)

Length: Year Credits: 2 Grade: 11

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course. Must have B- or above in World History to enroll.

United States History builds upon concepts developed in previous studies of U.S. History. Students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. They will develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

Economics

Length: Semester Credits: 1 Grade: 12

*Qualifies as a Quantitative Reasoning course.

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

United States Government

Length: Semester Credits: 1 Grade: 12

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and

effective participation of citizens is stressed. Students will understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students will examine how the United States Constitution protects the 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 examined. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

US Government Honors: Ivy Tech POLS 101

Length: Year Credits: 2 Grade: 12

Prerequisite: Students classified as high ability or who are college bound are encouraged to enroll in this course.

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

Psychology

Length: Semester Credits: 1 Grade: 11, 12

Psychology is the scientific study of mental processes and behavior. The course is divided into six content areas and uses the scientific methods to explore research methods and ethical considerations. Developmental psychology takes a life span approach to physical, cognitive, language, emotional, social, and moral development. Cognitive aspects of the course focus on learning, memory, information processing, and language. Personality, Assessment, and Mental Health topics include psychological disorders, treatment, personality, and assessment. Socio-cultural dimensions of behavior deal with topics such as conformity, obedience, perceptions, attitudes, and influence of the group on the individual. The Biological Basis focuses on the way the brain and nervous system function, including sensation, perception, motivation, and emotion.

Sociology

Length: Semester Credits: 1 Grade: 11, 12

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

Ethnic Studies

Length: Semester Credits: 1 Grade: 9, 10, 11, 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 cultures. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

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

Indiana Studies

Length: Semester Credits: 1 Grade: 9, 10, 11, 12

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

World Language

Spanish I

Length: Year Credits: 2 Grade: 9, 10, 11, 12

Spanish II

Length: Year Credits: 2 Grade: 9, 10, 11, 12

Prerequisite: Must have successfully completed *Spanish I*.

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



Spanish III

Prerequisite: Must have successfully completed Spanish II with a C- or above.

Length: Year Credits: 2 Grade: 10, 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 an understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.

Spanish IV

****Not offered in '22-'23****

Length: Year Credits: 2 Grade: 12

Prerequisite: Must have successfully completed Spanish III with a C- or above and have teacher permission.

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.

Career and Technical Education Programs **(Perkins V - Vocational/Occupational Courses)**

Automotive Technology I & II (KNOX)

Length: Year Credits: 6 (4 periods) Grade: 11, 12

Automotive Technology encompasses the sub topics of the NATEF/ASE identified areas of Steering and Suspension and Braking Systems. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or year-long instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, engine repair as time permits. This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of the course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

Aviation Flight

Length: Year Credits: 6 (3 periods) Grade: 11, 12

Aviation Flight familiarizes students with aviation technology and provides a historic overview of the field. This course also provides an overview of the careers and employment opportunities in the field of aviation. It prepares new student pilots for the maneuvers that are required to be performed during the Practical Test portion of the Private Check Ride. In addition to these maneuvers, the concepts of basic aerodynamics, aircraft systems, instrument operation, weight and balance, flight physiology and a basic working knowledge of aircraft power plants and their construction will be covered.

Aviation Operations

Length: Year Credits: 6 (3 periods) Grade: 12

Aviation Operations provides students with a broad-based introduction to the field of aviation. Course activities include: familiarization with aviation technology; a historic overview of the field of aviation; exploration of the current aviation environment and careers and employment opportunities in the field. Topics are focused on aircraft manufacturing, airline operations, general aviation, air-freight, airport management, and government service. Additional topics covered include: aviation safety, human factors, regulations, and certification. This course is designed to enhance the students' knowledge of the pertinent areas of aircraft basic science that comprise the scientific fundamentals applied in all areas of the aviation industry. The fundamental areas of the federal aviation regulations, pertinent to aviation operations, are also introduced in this course.

Construction Trades I & II (PLYMOUTH)

Length: Year Credits: 6 (3 periods) Grade: 11, 12

Construction Trades includes classroom and laboratory experiences covering the formation, installation, maintenance, and repair of buildings, homes, and other structures. This course also covers the use of working drawings and applications from the print to the work. Students will explore the relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching. Elementary aspects of residential design and site work will also be covered. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Students will examine the design and construction of floor and wall systems and develop the skills needed for layout and construction processes of floor and wall systems from blueprints and professional planning documents. Instruction will be given in the following areas, administrative requirements, definitions, building planning, foundations, wall coverings, roof and ceiling construction, and roof assemblies. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration's Safety & Health Standards for the construction industry.

Cosmetology (Inspire-Warsaw)

Length: 2 Years Credits: 8 (4 periods) Grade: 11, 12

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

Criminal Justice (TRITON)

Length: Year Credits: 2 (1 period) Grade: 11, 12

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

Culinary Arts and Hospitality I (Plymouth)

Length: Year Credits: 6 (3 periods) Grade: 11, 12

Culinary Arts and Hospitality I prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; ; apply basic principles of sanitation and Indiana Department of Education 93 High School Course Titles and Descriptions safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. Intensive laboratory experiences with commercial applications are a required component of this course of study.

Early Childhood Education (Plymouth)

Length: Year Credits: 6 (3 periods) Grade: 11, 12

Early Childhood Education prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of suggested topics. Major course topics include: career paths in early childhood education; promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula, and services available to young children. Students examine basic principles of child development, importance of family, licensing, and elements of quality care of young children. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings; developmentally appropriate practices of guidance and discipline; application of basic health, safety, and nutrition principles when working with children; overview of management and operation of licensed child care facilities or educational settings; child care regulations and licensing requirements; and employability skills. Intensive experiences in one or more early childhood settings, resumes, and career portfolios are required components. A standards-based plan for each student guides the laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Early Childhood Education teacher. Student laboratory/field experiences

may be either school-based or “on-the-job” in community-based early childhood education centers or in a combination of the two. Dual credit agreements with postsecondary programs are encouraged.

Education Professions I (TRITON)

Length: Year Credits: 4 (2 periods) Grade: 12

Education Professions I prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Field experiences in one or more classroom settings, resumes, 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 Professions* teacher. Articulation with postsecondary programs is encouraged.

Emergency Medical Services (Oregon-Davis)

Length: Year Credits: TBA Grade: 11, 12

Emergency Medical Services prepares students for a state certification which may lead to a career in Emergency Medical Services. Examples of those careers include Emergency Medical Technician and Paramedic. This course is designed for persons desiring to perform emergency medical care. Theories, techniques, and operational aspects of pre-hospital emergency care, within the scope and responsibility of the basic emergency medical technician are covered in this course. Students will learn to recognize the seriousness of the patient’s condition, use the appropriate emergency care techniques and equipment to stabilize the patient, and safely transport them to the hospital. The handling of victims of hazardous materials accidents is also addressed in this course. Opportunities for laboratory practice and clinical observation in a hospital emergency room and ambulance are also included to provide occasions for students to further develop clinical skills and the appropriate ethical behavior. Leadership skills are developed and community service opportunities are provided through participation in HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level.

Fire and Rescue I (Oregon-Davis)

Length: Year Credits: TBA Grade: 11, 12

Fire and Rescue I; Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be

called upon to put out a fire, treat injuries or perform other vital functions. The Fire and Rescue curriculum may include five Indiana state fire certifications: (1) Mandatory, (2) Firefighter I, (3) Firefighter II, (4) Hazardous Materials Awareness, and (5) Hazardous Materials Operations. An additional two industry certifications may be earned by adding (6) First Responder, and (7) Emergency Medical Technician-Basic to the curriculum.

Graphic Imaging Technology (KNOX)

Length: Year Credits: 4 (3 periods) Grade: 11, 12

Graphic Imaging Technology will include organized learning experiences that focus on theory and laboratory activities in pre-press, press and finishing operations. Emphasis will be placed on elements of design and layout leading to computerized electronic image generation, plate preparation, pressroom operations, and finishing techniques. Instructional activities will enhance students' language arts skills through the use of proofreading, spelling, and punctuation exercises. The course will include actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging, and their allied industries.

Health Sciences Education I & II (PLYMOUTH)

Length: Year Credits: 6 (3 periods) Grade: 11, 12

Health Occupations content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, an introduction to health care systems, anatomy, physiology, and medical terminology. Leadership skills developed through HOSA participation are also included. Lab experiences are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course.

Industrial Automation and Robotics I (Knox)

Length: Year Credits: 6 (4 periods) Grade: 11, 12

Industrial Automation and Robotics I, will introduce students to design and programming 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 human-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.

Networking I (Plymouth)

Length: Year Credits: 6 (3 periods) Grade: 11, 12

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

Precision Machining I& II (PLYMOUTH)

Length: Year Credits: 4 (3 periods) Grade: 11, 12

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

Welding Technology I & II (Plymouth)

Length: Year Credits: 6 (3 periods) Grade: 11, 12

Welding Technology 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. Dual credit through Ivy Tech and AWS Certification is available for students who complete the two year program.

Work Based Learning Capstone, Multiple Pathways (TRITON)

Length: Year Credits: 4 (3 periods) Grade: 12

Required Prerequisites: A minimum of 4 credits of introductory and advanced courses related to a student's pathway and to the work site placement

Work Based Learning Capstone is an instructional strategy that can be implemented as a stand-alone course or a component of any CTE course that prepares students for college and career. This strategy builds students' skills and knowledge in their chosen

career path or furthers their study 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 achievement and performance, whether WBL is a stand-alone course or a component of a discipline-specific CTE course.



Career and Technical Education Programs **(Next Level Programs of Study (NLPS) - Vocational/Occupational Courses)**

Automotive Services

Principles of Automotive Services (Knox)

Length: Year Credits: 2 (1 period) Grade: 11, 12

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

Brake Systems (Knox)

Length: Year Credits: 2 (1 period) Grade: 11, 12

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

Steering and Suspensions (Knox)

Length: Year Credits: 2 (1 period) Grade: 11, 12

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

repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. Hybrid/Alternative fuel technology will also be introduced.

Aviation Management

Principles of Aviation Management (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

This course provides the student the opportunity to develop an understanding of various aspects of the aviation industry to include general regulations and laws associated with the field. Included is an overview of the aviation field and all employment opportunities. Areas of study include aerodynamics, aircraft systems, performance, weight and balance, physiology, regulations, cross country planning, weather, and decision-making skills. Students will also learn of the departments associated with an airport and their impact on the industry as a whole.

Private Pilot Theory (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

The student will receive ground school knowledge required for certification as a private pilot with an airplane single engine land rating. Areas of study include aerodynamics, aircraft systems, performance, weight and balance, physiology, regulations, cross country planning, weather, and decision-making skills.

Aviation Safety and Operations (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

This course is an overview of general aviation operations, including the operation and management of the Fixed Base Operation (FBO). It introduces the challenges and complexity of aviation security faced by aviation professionals across the industry and traces the evolution of current security approaches and explores technologies and processes targeting threat mitigation and improved operational

efficiency. Emphasis will be placed on financial and operational considerations as well as on regulatory requirements and constraints.

Construction Trades-Carpentry **Principles of Construction Trade (Plymouth)**

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Construction Trades covers the NCCER Core Curriculum and is a prerequisite to most other construction courses. Its modules cover topics such as basic safety, communication skills, and introduction to construction drawings; all basic skills needed to continue education in the construction program.

Construction Trades: General Carpentry (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Construction Trades: General Carpentry covers the NCCER Carpentry Level 1. Its modules cover topics such as building materials, fasteners, adhesives, hand and power tools, introduction to construction drawings, specifications, layout, floor systems, wall systems, ceiling joist and roof framing, basic stair layout, and introduction to building envelope systems.

Construction Trades: Framing and Finishing (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Construction Trades: Framing and Finishing covers NCCER Carpentry Framing and Finishing Level 2. Its modules cover topics such as commercial drawings, roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

Human Services-Cosmetology

Cosmetology (Inspire-Warsaw)

Length: 2 Years Credits: 8 (4 periods) Grade: 11,12

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

Principles of Barbering and Cosmetology (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Cosmetology offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and

bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours.

Barbering and Cosmetology Fundamentals (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Barbering and Cosmetology Fundamentals focuses on the development of practical skills introduced in Principles of Cosmetology. Clinical application and theory in the science of cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours.

Advanced Cosmetology (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Advanced Cosmetology will emphasize the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology as it applies to cosmetology. Successful completion of the course requires at least 375 Cosmetology studio hours

Criminal Justice

Principles of Criminal Justice (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Criminal Justice covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system. It will critically examine the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis.

Law Enforcement Fundamentals (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Law Enforcement and Cultural Awareness introduces fundamental law enforcement operations and organization. Includes the evolution of law enforcement at federal, state, and local levels. Emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime.

Corrections and Cultural Awareness (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Corrections and Cultural Awareness emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy

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

Culinary Arts- Baking and Pastry

Principles of Culinary and Hospitality (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

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

Nutrition (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

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

Culinary Arts (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

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

Early Childhood Education

Principles of Early Childhood Education (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

This course provides students with an overview of skills and strategies necessary to successfully complete a certificate. Additionally, it provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula and services available to young children. This course also examines basic principles of child development, Developmentally Appropriate Practices (DAP), importance of family, licensing, and elements of quality care of young children with an emphasis on the learning environment related to health, safety, and nutrition. Students may be required to complete observations and field experiences with children as related to this course.

Early Childhood Education Curriculum (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Early Childhood Education Curriculum examines developmentally appropriate environments and activities in various childcare settings while exploring the varying developmental levels and cultural backgrounds of children. Students may be required to complete observations and field experiences with children as related to this course.

Early Childhood Education Guidance (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

This course allows students to analyze developmentally appropriate guidance, theory and implementation for various early care and education settings. It also provides a basic understanding of the anti-bias/multicultural emphasis in the field of early childhood. Students may be required to complete observations and field experiences with children as related to this course.

Emergency Medical Technician

Principles of Health Care (Oregon Davis)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

Medical Terminology (Oregon Davis)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and High School Course Titles and Descriptions 2022-2023 301 medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of

medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

Emergency Medical Tech (Oregon Davis)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

This course is based on the training program developed by the Department of Transportation and the Emergency Medical Services Commission of Indiana. It covers theories, techniques and operational aspects of pre-hospital emergency care within the scope and responsibility of the emergency medical technician (EMT). It requires laboratory practice and clinical observation in a hospital emergency room and ambulance. Successful completion of the course meets national requirements to test for certification as an NREMT.

Graphics Imaging

Principles of Digital Design (Oregon Davis)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

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

Digital Design Graphics (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

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

Health Science- Certified Nursing

Principles of Health Care (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student's career objectives.

Medical Terminology (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and High School Course Titles and Descriptions 2022-2023 301 medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

Health Care Specialist CNA (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

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

Industrial Automation and Robotics

Principles of Advanced Manufacturing (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 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.

Advanced Manufacturing Technology (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Advanced Manufacturing Technology introduces manufacturing processes and practices used in manufacturing environments. The course also covers key electrical principles, including current, voltage, resistance, power, inductance, capacitance, and

transformers, along with basic mechanical and fluid power principles. Topics include, types of production, production materials, machining and tooling, manufacturing planning, production control, and product distribution will be covered. Students will be expected to understand the product life cycle from conception through distribution. This course also focuses on technologies used in production processes. Basic power systems, energy transfer systems, machine operation and control will be explored. This course will use lecture, lab, online simulation and programming to prepare High School Course Titles and Descriptions 2022-2023 232 students for Certified Production Technician Testing through Manufacturing Skill Standards Council (MSSC).

Mechatronics Systems (Knox)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Mechatronics Systems covers the basic electrical and mechanical components and functions of a complex mechatronics system. Through a systems approach, students will learn about mechanical components which lead and support the energy through a mechanical system to increase efficiency and to reduce wear and tear. By understanding the complete system, students will learn and apply troubleshooting strategies to identify, localize and (where possible) to correct malfunctions. Preventive maintenance of mechanical elements and electrical drives as well as safety issues within the system will also be discussed.

Precision Machining

Principles of Precision Machining (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Precision Machining will provide students with a basic understanding of the processes used to produce industrial goods. Classroom instruction and labs will focus on shop safety, measurement, layout, blueprint reading, shop math, metallurgy, basic hand tools, milling, turning, grinding, and sawing operations. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Measurement, Materials, & Safety certification that may be required for college dual credit.

Precision Machining Fundamentals (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Precision Machining Fundamentals will build a foundation in conventional milling and turning. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations. Lab work will consist of the setup and operation of vertical and/or horizontal milling machines and engine lathes. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Milling I certification that may be required for college dual credit.

Advanced Precision Machining (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Advanced Precision Machining will build upon the Turning and Milling processes learned in Precision Machining Fundamentals and will build a foundation in abrasive process machines. Students will be instructed in the classroom on topics of shop safety, theory, industrial terminology, and calculations associated with abrasives. Lab work will consist of the setup and operation of bench grinders and surface grinders. Additionally students will be introduced to Computerized Numeric Controlled (CNC) setup, operations and programming. This course prepares the student for the optional National Institute for Metalworking Skills (NIMS) Grinding I certification that may be required for college dual credit.

Welding Technology

Principles of Welding Technology (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Principles of Welding Technology includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and basic welding. This course is designed for individuals who intend to make a career as a Welder, Technician, 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 postsecondary and career success.

Shielded Metal Arc Welding (Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Shielded Metal Arc Welding involves the theory and application of the Shielded Metal Arc Welding process. Process theory will include basic electricity, power sources, electrode selection, and all aspects pertaining to equipment operation and maintenance. Laboratory welds will be performed in basic weld joints with a variety of electrodes in the flat, horizontal and vertical positions. Emphasis will be placed on developing the basic skills necessary to comply with AWS industry standards.

Gas Welding Processes(Plymouth)

Length: Year Credits: 2 (1 periods) Grade: 11, 12

Gas Welding Processes is designed to cover the operation of Gas Metal Arc Welding (MIG) equipment. This will include all settings, adjustments and maintenance needed to weld with a wire feed system. Instruction on both short-arc and spray-arc transfer methods will be covered. Tee, lap, and open groove joints will be done in all positions with solid, fluxcore, and aluminum wire. Test plates will be made for progress evaluation. Schools may choose to offer the course as a comprehensive MIG Welding course or a combination of introductory MIG and TIG Welding operations.

Dual Credit Courses at Triton Jr.-Sr. High School

Below you will see the dual credit classes that Triton Jr-Sr High School currently offers. Triton requires that students have at least a C in the preceding level of the class or departmental approval for enrollment into one of these dual credit courses. Shaded areas indicate classes on Indiana's Priority Dual Credit List which count for Academic Honors Diploma or Technical Honors Diploma requirements.

Triton Jr-Sr High School Dual Credits Offered through IVY TECH COMMUNITY COLLEGE

Triton Courses	Ivy Tech Courses (Credit Hrs)	Prerequisite Requirements
English 12 Honors (Grade 12)	ENGL 215 -Rhetoric and Argument (3)	Completion of ENGL 111-English Composition with C or higher.
Adv. Speech COMM 101 (Grade 12)	COMM 101 -Fundamentals of Public Speaking (3)	Writing: ACT 17, PSAT 26, SAT 27, Accuplacer NG 257 Reading: ACT 18, PSAT 25, SAT 25, Accuplacer NG 257
English 11 Honors/ Adv Eng 11 CC (Grade 11)	ENGL 111 - English Composition (3) ENGL 206 -Intro to Literature (3)	Writing: ACT 17, PSAT 26, SAT 27, Accuplacer NG 257 Reading: ACT 18, PSAT 25, SAT 25, Accuplacer NG 257
US History Honors **This will not be for dual credit in '22-'23**	HIST 101 - Survey of American History I (3) HIST 102 - Survey of American History II	Writing: ACT 17, PSAT 26, SAT 27, Accuplacer NG 257 Reading: ACT 18, PSAT 25, SAT 25, Accuplacer NG 257
US Government Honors	POLS 101 - Introduction to American Government and Politics (3)	Writing: ACT 17, PSAT 26, SAT 27, Accuplacer NG 257 Reading: ACT 18, PSAT 25, SAT 25, Accuplacer NG 257
AP Calculus AB	MATH 211 -Calculus I (4)	Math: Accuplacer NG 286 (AAF) or successful completion of MATH 136 and MATH 137
Pre-Calculus Honors	MATH 136 -College Algebra (3)	Math: ACT 24, PSAT 27, SAT 550, Accuplacer 74 (Elementary Algebra)
Trigonometry Honors	MATH 137 - Trigonometry with Analytic Geometry (3)	Math: ACT 24, PSAT 27, SAT 550, Accuplacer 74 (Elementary Algebra)
Earth Space Science II **This course will not be offered in '22-'23**	SCIN 100 - Earth Science (4)	Writing: PSAT 26, Accuplacer NG 257 Reading: PSAT 25, Accuplacer NG 257 Math: Accuplacer NG 237, PSAT 24.5
Adv Life Science, Animals	AGRI 107 - Advanced Animal Science (3)	None; Successfully complete class with C or above
Agribusiness Management **This course will not be offered in '22-'23**	AGRI 102 - Agricultural Business and Farm Management (3)	None; Successfully complete class with C or above
Animal Science **Offered again in '23-'24**	AGRI 103 - Animal Science (3)	None; Successfully complete class with C or above
Plant & Soil Science	AGRI 105 - Plant and Soil Science (3)	None; Successfully complete class with C or above
Criminal Justice I	CRIM 101 - Introduction to Criminal Justice Systems (3)	Writing: ACT 17, PSAT 26, SAT 27, Accuplacer NG 257 Reading: ACT 18, PSAT 25, SAT 25, Accuplacer NG 257
Criminal Justice II	CRIM 103 - Cultural Awareness (3)	Writing: ACT 17, PSAT 26, SAT 27, Accuplacer NG 257 Reading: ACT 18, PSAT 25, SAT 25, Accuplacer NG 257

*List includes anticipated dual credit for next year.