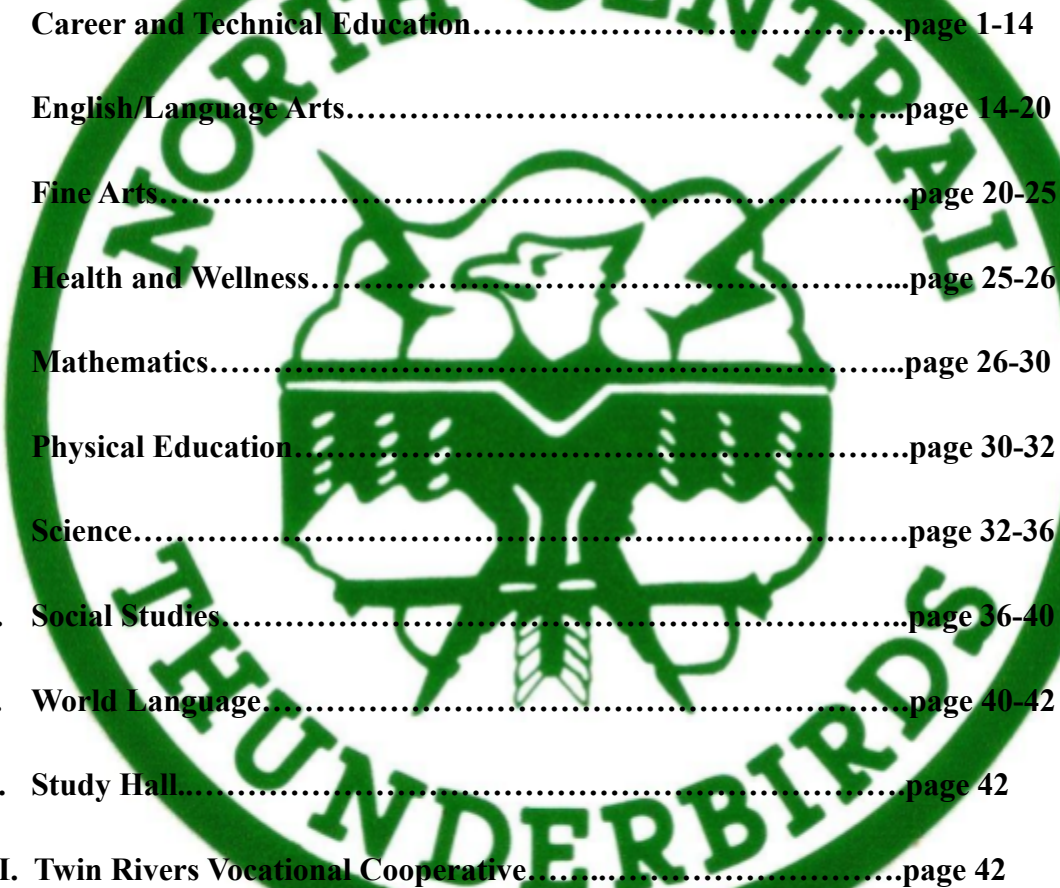


*North Central Jr/Sr High School  
Curriculum Guide*

Revised 2021



The logo is a large green circle containing a stylized bird with its wings spread, perched on an open book. The text "NORTH CENTRAL" is written in a semi-circle at the top, and "THE UNDERBIRDS" is written in a semi-circle at the bottom.

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\*Course offerings may vary from year to year. Not all courses may be available every semester/year.

## **I. Career and Technical Education (CTE) Introduction**

### **Junior High**

**0492.68 Middle School FACS** - is a part of the 9-weeks Rotation Class which prepares students to acquire personal skills and plan ways to transfer those skills to the workplace; investigate and assume appropriate individual and family roles; understand and apply concepts of balancing work and family; and acquire skills and attitudes that lead them to contribute to the good of the community and society.

- Grade 7, 8
- No Required Prerequisites
- 9-week rotation

**5364 Interpersonal Relationships** - 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.

- Grades 7, 8
- No Required Prerequisites
- 1 semester, 1 high school credit

**5394 Preparing for College and Careers** - Addresses the knowledge, skills and behaviors all students need to be prepared for success in college, career, and life. Topics addressed include twenty-first century life and career skills; exploration of personal aptitudes, interests, values and goals; planning and building employability skills; transferring school skills to life and work; and managing personal resources.

- Grades 7, 8
- No Required Prerequisites
- 1 semester, 1 high school credit

**0490.68 Middle School Engineering and Technology Education** - provides students with hands-on, problem-based learning opportunities that introduce the principles to develop, produce, use and assess products related to engineering and technology. Students additionally develop individual and teamwork skills to participate in society and the workplace. The four domains included in these standards are general engineering and technology concepts, engineering design and development, producing and using technology, and technology careers.

Activities should focus on content related to engineering and technology as a body of knowledge, using resources and actions to: (1) apply engineering design, (2) use processes to produce artifacts and systems. (3) use device tools and systems safely and appropriately, (4) and assess impacts on society and the environment. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

- Grades 7, 8
- No Required Prerequisites
- 9-week rotation

**0500 SEL - Social Emotional Learning** - students will develop a deeper understanding of themselves, their emotional health, responsibilities as a student and a citizen, and the importance of holding significant healthy relationships with others. This class will focus on health in all categories using exercises in self-reflection, coping skills, study habits, to provide a better foundation for lifelong health in the minds and bodies of students.

- Grades 7, 8
- No Required Prerequisites
- 9-week rotation

## **High School**

### **Career Cluster- Advanced Manufacturing**

**4784 Introduction to Manufacturing** - Introduction to Manufacturing is a course that specializes in how people use modern manufacturing systems through an introduction to manufacturing technology and its relationship to society, individuals, and the environment. This understanding is developed through the study of the two major technologies, material processing and management technology, used by all manufacturing enterprises. Students will apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students will investigate the properties of engineered materials such as: metallics, polymers, ceramics, and composites. After gaining a working knowledge of these materials, students will study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling.

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester, 2 credits maximum
- Qualifies as a quantitative reasoning course
- This course will be deactivated after the 2021-2022 school year.

**5610 Industrial Automation and Robotics I** - (AUTO ROB 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 exploration 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.

- Recommended Grade: 10-12
- Recommended Prerequisites: None
- Required Prerequisites: None
- Credits: 2-hour class, 2 semester course, 4 credit hours
- Counts as a directed elective or elective for all diplomas

**5612 Industrial Automation and Robotics II** - (AUTO ROB II) Industrial Automation and Robotics II, focuses on industrial robots, programming PLC's, automating cells, advanced programming, and designing/building task-oriented robots. Students will engage in active learning, critical thinking, and problem solving through advanced robotic procedures and processes. Students will learn industrial robotic programming languages, as well as strategies for improving efficiency through automation. Students will study basic computer numerical controlled (CNC) machining and will combine automation and CNC machining to perform common industrial tasks. They will also apply knowledge to real world situations to create working solutions.

- Recommended Grade: 11, 12
- Required Prerequisites: Industrial Automation and Robotics I
- Recommended Prerequisites: none
- Credits: 2-hour class, 2 semester course, 4 credit hours
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course

**7108 Principles of Advanced Manufacturing** - Principles of Advanced Manufacturing is a course that includes classroom and laboratory experiences in Industrial Technology and Manufacturing Trends. Domains include safety and impact, manufacturing essentials, lean manufacturing, design principles, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 2 credit hours
- Counts as a directed elective or elective for all diplomas

**7103 Advanced Manufacturing Technology** - 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 students for Certified Production Technician Testing through Manufacturing Skill Standards Council (MSSC).

- Recommended Grade: 10, 11, 12
- Required Prerequisites: Principles of Advanced Manufacturing
- Credits: 2 semester course, 2 semesters required, 2 credit hours
- Counts as a directed elective or elective for all diplomas, Dual Credit

**7106 Mechatronics Systems** - 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.

- Recommended Grade: 11, 12
- Required Prerequisites: Principles of Advanced Manufacturing, Advanced Manufacturing Technology
- Credits: 2 semester course, 2 semesters required, 2 credit hours, **Dual Credit**
- Counts as a directed elective or elective for all diplomas

### **Career Cluster - Agriculture**

**5008 Animal Science** - provides students with an overview of the animal agriculture industry. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study may be applied to both large and small animals. Topics covered in the course include: history and trends in animal agriculture, laws and practices relating to animal agriculture, comparative anatomy and

physiology of animals, biosecurity threats and interventions relating to animal and human safety, nutrition, reproduction, careers, leadership, and supervised agricultural experiences relating to animal agriculture. Animal Science introduces students to many careers in agriculture, and more specifically, animal science. These careers include but are not limited to: Animal Nutritionist, Animal Scientist, Embryo Technologist, Feedlot Specialist, Livestock Buyer, Livestock Geneticist, Livestock Producer, Meat Science Researcher, USDA Inspector, Veterinarian and Veterinary Nurse.

- Grades 9-12
- Required Prerequisites: None
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters requires, 2 credits maximum
- Elective for all diplomas; **Dual Credit** with IVY Tech Community College
- Fulfills a science course requirement for all diplomas

**5132 Horticultural Science** - is a two semester course that provides students with a background in the field of horticulture. Coursework includes hands-on activities that encourage students to investigate areas of horticulture as it relates to the biology and technology involved in the production, processing, and marketing of horticultural plants and products. Students are introduced to the following areas of horticulture science: reproduction and propagation of plants, plant growth, growth-media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest, greenhouse management, floral design, and pest management. Students participate in a variety of activities including extensive laboratory work usually in a school greenhouse.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas.
- Fulfills a Life Science or Physical Science requirement for the General Diploma

**5056 Introduction to Agriculture, Food and Natural Resources** - Introduction to Agriculture, Food and Natural Resources is a two semester course that is highly recommended as a prerequisite to and as a foundation for all other agricultural classes. Through hands-on learning activities, students are encouraged to investigate areas of agriculture. Students are introduced to the following areas of agriculture: animal science, plant and soil science, food science, horticultural science, agricultural business management, natural resources, agriculture power, structure, and technology, careers in agriculture, leadership, and supervised agricultural experience. An activity and project-based approach is used along with team building to enhance the effectiveness of the student learning activities.

- Recommended Grade: 9, 10

- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

**5136 Landscape Management I and II**- Landscape Management is a two semester course that provides the student with an overview of the many career opportunities in the diverse field of landscape management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures involved with landscape construction, the determination of maintenance schedules, communications and management skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers. Upon completion of the program, students have the opportunity to become Indiana Landscape Industry Certified through a state approved program.

Landscape Management prepares students for many careers in agriculture, and more specifically landscape management. These careers include but are not limited to: Botanist, Groundskeeper, Horticulturist, Landscape Designer or Architect, Landscape Supervisor, Nursery Worker, Parks Supervisor and Turf Care Specialist.

- Recommended Grade: 9-12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources, Horticultural Science
- Credits: 2 semester course, 2 semesters required, 1-3 credit(s) per semester, 6 credits maximum
- Counts as an elective or directed elective for all diplomas
- Qualifies as a quantitative reasoning course

### **Career Cluster - Arts, AV, Tech and Communications**

**5380 Introduction to Fashion and Textiles** - is a one or two semester course for students interested in academic enrichment or a career in the fashion, textile, and apparel industry. A project-based approach integrates instruction and lab experiences including application of the elements and principles of design; selection, production, alteration, repair and maintenance of apparel and textile products; product research, development, and testing; and application of technical tools and equipment utilized in the industry.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

## **Career Cluster - Business Management, Marketing and Finance**

**4512 Business Math** - a course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics, and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

- Recommended Grade: 10, 11
- Required Prerequisites: Algebra I
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an elective or directed elective for all diplomas
- Fulfills a Mathematics requirement for the General Diploma or Certificate of Completion only.
- Qualifies as a quantitative reasoning course

**4562 Principles of Business Management** - 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.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Business
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas, provides the opportunity for **dual credit** for students who meet post secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course

**5914 Marketing Fundamentals** - provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem-solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management.



- Recommended Grade: 10, 11,12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 semester required, 1 credit per semester
- Counts as a directed elective or elective for all diplomas, provides the opportunity for **dual credit** for students who meet post secondary requirements for earning dual credit and successfully complete the dual credit requirements for this course.
- Formerly Principles of Marketing

### **Career Cluster - Career and Technical Education**

**4540 Personal Financial Responsibility** - addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, savings, and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course

### **Career Cluster - Family and Consumer Sciences**

**5360 Advanced Child Development** - is for students who are interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from age 4 through age 8 (grade 3).

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Child Development
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas

**5362 Child Development** - is for students who are 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.

- Recommended Grade: 10, 11, 12

- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Directed elective or elective for all diplomas

## **Career Cluster - Health Sciences**

### **\*Health Science - Twin Rivers Career and Technical Education Center**

Location - Sullivan High School, Certifications (CNA, CPR),

- IVY Tech **Dual Credit** - 11 total credit hours
- Job shadowing available through Sullivan Community Hospital, Miller's Merry Manor, Cobblestone Crossings Health Campus, Sullivan County Animal Hospital, Sullivan Ambulance Services and many more

**5274 Medical Terminology** - (MED TERMS) Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 3 hour course2 semester course, 2 semesters required, 1 credit per semester, 3 credit hours
- Counts as a directed elective or elective for all diplomas

**5282 Health Science Education I** - (HLTH ED I) is a course designed to provide a foundation of skills development to specific health careers including; patient care, nursing care, dental care, animal care, medical laboratory, and public health. Students will also receive an introduction to healthcare systems, anatomy, physiology, and medical terminology. Laboratory experiences with industry applications are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self- analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade: 11,12

- Recommended Prerequisites: none
- Credits: 3 hour course, 2 semester course, 2 semesters required, 3 credit hours

**5284 Health Science Education II: Nursing** (HSE II NURS) - is an extended laboratory experience designed to provide students with the opportunity to assume the role of nurse assistant. Students have the opportunity to learn, and then to practice those technical skills previously learned in the classroom at qualified clinical sites while under the direction of licensed nurses. These sites may include extended care facilities, hospitals and home health agencies. Throughout the course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels of the healthcare field; an overview of the healthcare delivery systems, healthcare teams and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in a variety of healthcare settings. Additionally, students will build their essential job related skills such as providing appropriate personal care to patients; reporting necessary information to nursing staff; operating and monitoring medical equipment; teaching and assisting patients and families with the management of their illness or injury; and performing general health screenings. This course provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade: 11,12
- Required Prerequisites: none
- Recommended Prerequisites: Health Science Education I
- Credits: 3 hour course, 2 semester course, 2 semesters required, 1-3 credits per semester, 5 credits
- Counts as a directed elective or elective for all diplomas

**5276 Anatomy and Physiology** - is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, skeletal, muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields.

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

- Recommended Prerequisites: Biology
- Credits: 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a Core 40 Science course requirement for all diplomas

## **Career Cluster - Hospitality and Tourism**

**5346 Culinary Arts and Hospitality II** - is a two-hour, two semester course that prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing and current marketing trends.

- Recommended Grade: 11, 12
- Required Prerequisites: Culinary Arts and Hospitality I
- Recommended Prerequisites: none
- Credits: 2 hour class, 2 semester course, 4 credit hours
- Counts as a directed elective or elective for all diplomas

**5440 Culinary Arts and Hospitality I** - is a two-hour, two semester course that prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. 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 and techniques and applications.

- Recommended Grade: 10, 11,12
- Required Prerequisites: none
- Recommended Prerequisites: Nutrition and Wellness; Introduction to Culinary Arts and Hospitality
- Credits: 2 hour class, 2 semester course, 4 credit hours
- Counts as a directed elective or elective for all diplomas

## **Career Cluster - STEM**

**4794 Introduction to Design Processes** - is a course that specializes in modern design and engineering processes with a focus on creative problem solving in developing, testing, communicating, and presenting post-evaluation of products. Students use the design process to analyze research, develop ideas, and produce product solutions. This process gives a framework through which they design principles and elements for visual presentation. Designing aspects will also cover aesthetics, ergonomics, the environment, safety, and production. The design process is a core-learning tool for many courses enabling the student to solve problems in a

systematic, logical and creative manner. Students develop understanding of the way the process helps them think creatively and develop aesthetic ideas. The design process encourages the students to engage in higher level thinking to create solutions for many types of problems.

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

**4880 Computer in Design and Production** - is a course that specializes in using modern technological processes, computers, design and productive systems in the production of products and structures through the use of automated production systems. Emphasis is placed on using modern technologies and on developing career related skills for electronics, manufacturing, precision machining, welding and architecture career pathways. Students apply ingenuity using tools, materials, processes, and resources to create solutions as it applies in the electronics, manufacturing, precision machining, welding and architecture. The content and activities should be developed locally in accordance with available advanced technologies in the school. Course content should address major technological content related to topics such as: Architectural drawing and print design, design documentation using CAD systems; assignments involving the interface of CAD, CNC, CAM and CIM technologies; computer simulation of products and systems; publishing of various media; animation and related multimedia applications; 3-D modeling or products and structures; digital creation and editing of graphics and audio files; control technologies; and automation in the modern workplace.

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

**4803 Introduction to Computer Science** - is a one-semester course that provides an entry point into computer science. Through computational thinking and collaboration, students will learn the skills and processes needed to develop computer artifacts and basic coding. Data, security and intellectual property will also be explored. Students will develop an understanding of how computer science impacts their everyday lives and explore a variety of careers in the computer science field. This course is recommended for all freshmen (9th grade).

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas

## **Career Cluster - Transportation**

**4798 Introduction to Transportation** - Introduction to Transportation is an introductory course designed to help students become familiar with fundamental principles in modes of land, sea, air, and space transportation, including basic mechanical skills and processes involved in transportation of people, cargo, and goods. Students will gain and apply knowledge and skills in the safe application, design, production, and assessment of products, services, and systems as it relates to the transportation industries. Content of this course includes the study of how transportation impacts individuals, society, and the environment. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant transportation related activities, problems, and settings.

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

**5510 Automotive Services Technology I** - through both classroom and lab work students will learn the workings of the automotive industry. Students will understand and perform basic automotive maintenance and repair. The course will begin with shop safety training and proper tool and equipment usage. CDX (online curriculum) will be used to cover the eight main categories of automotive. Once the fundamentals are covered the class will transition to the shop to begin maintenance on vehicles. Students will also learn how to properly look up service information (repair information, VIN decoding and parts locations) through All Data Online, our service information system.

- Grades 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: Introduction to Transportation
- Credits: 3 hour class, 2 semesters, 6 credits maximum
- Counts as a directed elective or an elective for all diplomas

**5546 Automotive Services Technology II** - Automotive Services Technology II is a one year course that encompasses the sub topics of the NATEF/ASE identified areas of Electrical Systems and Engine Performance. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions/differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one-year offering must meet the NATEF program certifications for the two primary areas

offered in this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

- Recommended Grade: 12
- Required Prerequisites: Automotive Services Technology I
- Recommended Prerequisites: none
- Credits: 3 hour class, 2 semesters, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

## II. English/Language Arts

### Junior High

**0420.07 ELA 7** - students will develop their understanding of language, grammar, writing, literature, reading and speaking. Students will write for a variety of audiences and purposes, with attention shown to the conventions of grammar, spelling, punctuation, capitalization, and sentence structure. They will conduct research-based projects and create presentations. The students will also continue to develop skills in reading and comprehending a broad variety of literature. This will include applying appropriate reading strategies to enhance reading skills, developing vocabulary from contextual clues, identifying the author's purpose and the main idea of text, and making inferences when necessary.

- Grade 7
- No Required Prerequisites
- 2 semester course

**0420.08 ELA 8** - students will develop their understanding of language, grammar, writing, literature, reading and speaking. Students will write for a variety of audiences and purposes, with attention shown to the conventions of grammar, spelling, punctuation, capitalization, and sentence structure. Students will conduct research-based projects and create presentations. Students will develop skills in reading and comprehending a broad variety of literature. This will include applying appropriate reading strategies to enhance reading skills, developing vocabulary from contextual clues, identifying the author's purpose and the main idea of text, and making inferences when necessary.

- Grade 8
- No Required Prerequisites
- 2 semester course

**0420.07A ELA 7 Accelerated** - students in ELA 7 Accelerated receive integrated instruction emphasizing reading, writing, speaking and listening in interest- and age- appropriate content.

Students develop advanced skills and strategies in reading. They understand comparisons, such as analogies and metaphors, and they begin to use their knowledge of roots and word parts to understand science, social studies, and mathematics vocabulary. They read and respond to fiction selections, such as classic and contemporary literature, historical fiction, etc. Students develop advanced skills and strategies in language. They write or deliver longer research reports that take a position on a topic, and they support their positions by citing a variety of sources. They use a variety of sentence structures and modifiers to express their thoughts. They deliver persuasive presentations that state a clear position in support of an argument or proposal. Students also listen to literature read aloud to them and write independently for enjoyment.

- Grade 7
- No Required Prerequisites
- Class Placement Determination: NWEA scores, Ilearn scores, teacher recommendation, administration decision
- 2 semester course

**0420.08A ELA Accelerated** - students in ELA 8 Accelerated receive integrated instruction emphasizing reading, writing, speaking and listening in interest- and age-appropriate content. Students begin to study the history and development of English vocabulary. They begin to compare different types of writing as well as different perspectives on similar topics or themes. They evaluate the loggi of informational texts and analyse how literature reflects the backgrounds, attitudes, and beliefs of the authors. They read and respond to fiction selections, such as classic and contemporary literature, historical fiction etc. Students get ready for the language challenges of high school materials. They not only write or deliver research reports but also conduct their own research. They use subordination, coordination, noun phrases and other devices of English language conventions to indicate clearly the relationship between ideas. They deliver a variety of types of presentations and effectively respond to questions and concerns from the audience. Students also listen to literature read aloud to them and write independently for enjoyment.

- Grade 8
- No Required Prerequisites
- Recommended Prerequisite: ELA 7 Accelerated
- Class Placement Determination: NWEA scores, Ilearn scores, teacher recommendation, administration decision
- 2 semester course

**1002 English 9** - an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository



(informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

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

**1002H English 9 Honors** - students will develop their English/Language Arts skills through the study of language, literature, composition and oral communication. Students use literary interpretation, analysis, comparisons and evaluation to read and respond to representative works of historical and cultural significance in classic and contemporary literature balanced with nonfiction. Students use technology and online resources to write responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose.

- Recommended Grade: 9
- Required Prerequisites: ELA 8 with a grade of C or higher
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

**1004 English 10** - an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature with an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

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

**1004H English 10 Honors** - an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature with an appropriate level of complexity for this grade band. Students read a wide range of fiction, nonfiction, classic and

contemporary works to build an understanding of texts, themselves, and the cultures of the United States and the world: to acquire new information; to respond to the needs and demands of society and the workplace. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. As students write, speak, and listen, they employ a wide range of strategies as they write and apply knowledge of language structure, language conventions, media techniques, figurative language and genre to communicate effectively and to create, critique, and discuss writing. Likewise, students adjust their use of language to communicate effectively with a variety of audiences and for different purposes. Students develop critical thinking about the messages received and created by the media.

- Recommended Grade: 10
- Required Prerequisite: English 9 Honors (C or higher) English 9 (B+ or higher) and/or English 9 teacher recommendation
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

**1006 English 11** - an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on literature with an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

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

**1006H English 11 Honors** - an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on literature with an appropriate level of complexity for this grade band. Through the integrated study of literature, composition and oral communication, English 11 Honors students further develop their use of language as a tool for learning, thinking, and communicating. Students practice identifying, analyzing and composing with different elements, structures, and genres of written language. The *Composition I* component of language arts requires students to write for various audiences and purposes while also developing and strengthening skills in research, annotation, and essay writing. The

*Literature* component focuses on reading and comprehending a broad variety of literature and applying appropriate reading strategies to enhance reading skills and literary appreciation.

- Recommended Grade: 11
- Required Prerequisites: English 10 Honors (C or higher), English 10 (B+ or higher, teacher recommendation)
- 2 credit course, 1 credit per semester, **Dual Credit**
- Fulfills an English/Language Arts requirement for all diplomas

**1008 English 12** an integrated English course based on the Indiana Academic Standards for English/Language Arts for Grades 11- 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

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

**1008H English 12 Honors** - an integrated English course based on the Indiana Academic Standards for English/Language Arts for Grades 11- 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. English 12 Honors is an AP level Dual Credit course. Students will engage in a study of language, literature, composition and communication focusing on both nonfiction and fiction literature as a level of complexity equal that of a college course. Students will annotate, analyze, compare, and evaluate a variety of texts, both classic and modern. Students will study and apply advanced grammar skills. Students will write textual responses, a variety of essays, and creative pieces. Students will also engage in the research process with the culminating project being an 8-12 page research paper. The fall Dual Credit course is *Composition II* (3 credit hours). The spring Dual Credit course is *Introduction to Literature* (3 credit hours). Students will also take the AP Literature and Composition exam in May.

- Recommended Grade: 12
- Required Prerequisite: Composition I (C or higher), English 11 Honors (C or higher)
- Credits: 2 semester course, 1 credit per semester, **Dual Credit** (6 college credit hours)
- Fulfills an English/Language Arts requirement for all diplomas

## **Journalism and Media Studies**

**1086 Digital Media** - a course based on the High School Journalism Standards and the Student Media Standards, encompasses the study of Journalism. Students work on high school media staff so that they may prepare themselves for career paths in journalism, communications, writing, or related fields. Students will evaluate the impact of the First Amendment relevant to the development of freedom of speech and an independent press in the United States, evaluate and analyze journalistic developments in the independent press, and analyze the function or role of scholastic journalism in secondary schools in the United States. Students will review and apply knowledge of legal and ethical principles related to the functioning of journalism and specifically related to the following areas: censorship and obscenity, copyright, libel and slander, prior review, retraction, FERPA, student expression, confidentiality, and fabrication. Students will discuss ideas for yearbook coverage with others and will develop coherent and focused content ideas that demonstrate well-researched information that is appropriate for their audience. Students will develop newsworthy, journalistic content while adhering to legal and ethical standards for scholastic journalism. Students will demonstrate an understanding of the research, organizational, and drafting strategies in the journalistic content creation process. Students will produce media within an established production cycle, meeting deadlines and following style manual guidelines for consistency. Students will analyze, evaluate, and critique their own work and that of others as they improve future media based on feedback. Students will understand the organization, economics, and management of media staff and will explore career paths and further educational opportunities in journalism. Course Objectives/Demonstrated Competencies: Students will plan, develop, edit, and publish a 144 page school yearbook.

- Recommended Grade: 10, 11, 12
- Recommended Prerequisites: Completion of ELA 9 Honors, Art/Computer Teacher recommendation
- 2 semester course, 1 credit per semester

## **Reading: Informational Text**

**1034 Film Literature** - a course based on the Indiana Academic Standards for English/Language Arts, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present.

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

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

## **Speech Studies**

**1076 Speech** - a course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multimedia presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same Standard English conventions for oral speech that they use in their writing.

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

## **Writing and Composition Studies**

**1092 Creative Writing** - a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, students demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, the purposes for writing, and the style of their own writing.

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

**1094 Expository Writing** - a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the various types of informational writing intended for a variety of different audiences. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation

- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

### III. Fine Arts

#### Junior High

**0442.68 Advanced Band** - is based on the Indiana Standards for Middle School instrumental Music. Students are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade: 7, 8
- Required Prerequisites: none
- Recommended Prerequisites: none

**0410.68 Visual Arts** - students will learn the foundations for visual arts including Principles and Elements of Art, Traditional Art making Disciplines (drawing, painting, ceramics, mixed media etc.) through various cultural and historical means. Students will also learn technique and vocabulary essential to understanding how to view all types of art, talk about and discuss all types of art, and how to evaluate their experiences making and interacting with art, art history, students search for meaning, significance, and direction in two-dimensional works of art and artifacts through an in-depth historical study and analysis of artwork from a variety of cultures and time periods.

- Recommended Grade: 7, 8
- Required Prerequisites: none
- Recommended Prerequisites: none

**0444.68 Vocal Music** - is based on the Indiana Academic Standards for Middle School Choral Music. Students develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to

understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade - 7, 8
- Required Prerequisites - none
- Recommended Prerequisites - none

## **High School**

**4188 Advanced Chorus (Ambassadors)** - is the top auditioned choral ensemble and is based on the Indiana Academic Standards for High School Choral Music. Students in Ambassadors develop musicianship and specific performance skills through ensemble and solo singing. The class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom. Students interested in becoming an Ambassador must audition. The content of the audition is to be assigned by the instructor. While it is stated that one year of Beginning Chorus is required in order to be an Ambassador, rare exceptions may be made based on a student's audition and individual circumstances.

- Recommended Grade: 10, 11, 12
- Required Prerequisite: 1 year of Beginning Chorus
- Recommended Prerequisite: 1 year of Beginning Chorus, Junior High Vocal Music

**4182 Beginning Chorus** - Beginning Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

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

- Recommended Prerequisites: Junior High Vocal Music

**4160 Beginning Concert Band** - Beginning Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in the performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Junior High Advanced Band

**4206 Music History and Appreciation** - Music History and Appreciation is based on the Indiana Academic Standards for Music and standards for this specific course. Students receive instruction designed to explore music and major musical styles and periods through understanding music in relation to both Western and Non-Western history and culture. Activities include analyzing and describing music; evaluating music and music performances; and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

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

**4006 Advanced Three Dimensional Art** - is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Three-Dimensional Art, and expand on: aesthetic/artistic theory discussion and vocabulary, more complex and challenging techniques and mediums, more philosophical and difficult prompts within artmaking and students will explore the critique and exhibition process within galleries.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)



- Credits: 2 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

**4004 Advanced Two Dimensional Art** - is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Two-Dimensional Art and expand on: aesthetic/artistic theory, discussion and vocabulary, more complex and challenging techniques and mediums, more philosophical and difficult prompts within artmaking and students will explore the critique and exhibition process within galleries.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

**4040 Ceramics** - is a course based on the Indiana Academic Standards for Visual Art. Students in Ceramics will build on skills learned in 3D Art and expand on: aesthetic/artistic theory, discussion and vocabulary, more complex and challenging techniques within and focusing on ceramics, more philosophical and difficult prompts within artmaking and students will explore the critique and exhibition process within galleries.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

**4002 Introduction to Three Dimensional Art** - is a course based on the Indiana Academic Standards for Visual Art. Students will learn the basics of color theory, art elements and principles, and other tools for creating a variety of art. Students will explore a wide range of 3D Art techniques (Ceramics, Paper Cuts, Plaster Carving, Textiles etc) and situational prompts. Students will sometimes be given aesthetic/hypothetical problems or prompts to solve through artmaking, art criticism, art history discussion and research.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

**4000 Introduction to Two Dimensional Art** - is a course based on the Indiana Academic Standards for Visual Art. Students will learn the basics of color theory, art elements and principles and other tools for creating a variety of art. Students will explore a wide range of 2D art techniques (drawing, painting, collage, printmaking, mixed media pieces) and situational prompts. Students will sometimes be given aesthetic/hypothetical problems or prompts to solve through artmaking, art criticism, art history discussion or research.

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

**4044 Sculpture** - is a course based on the Indiana Academic Standards for Visual Art. Students will build on skills learned in Introduction to 3D, and expand on: aesthetic/artistic theory discussion and vocabulary, more complex and challenging techniques within and focusing on ceramics, more philosophical and difficult prompts within artmaking and students will explore the critique and exhibition process within galleries. Student work will focus on large scale sculpture, combining multiple large elements.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and contents standards are utilized.

- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

## IV. Health and Wellness

### Junior High

**0452.68 Health and Wellness** - is a course in which students will become knowledgeable about what constitutes physical, mental/emotional and social wellness. Healthful living will affect students in all areas of their lives. This course will give students the skills and positive attitudes they need to make informed decisions to promote their own lifelong health and well-being.

- Grades 7, 8
- No required prerequisites
- 1 semester each year

**3506 Health and Wellness Education** - Health and Wellness, a course based on Indiana's Academic Standards for Health and Wellness and provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts); determine personal values that support health behaviors; develop group norms that value a healthy lifestyle; develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, comprehensive health education curriculum. Priority areas include: promoting personal health and wellness, physical activity, and healthy eating; promoting safety and preventing unintentional injury and violence; promoting mental and emotional health, a tobacco- free lifestyle and an alcohol- and other drug-free lifestyle; and promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: 8th grade health education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills the Health and Wellness requirement for all diploma types

## V. Mathematics

## Junior High

**0430.07B Pre-Algebra (7)** - Students will be able to perform and solve real world mathematical problems using proportional relationships; perform operations on rational numbers; apply an understanding of the coordinate plane; draw, construct, describe, and analyze geometrical figures and the relationships between them. They will also apply properties of operations in the context of algebraic expressions and equations.

- Grade 7
- No required prerequisites
- 2 semester course

**0430.08C Pre-Algebra (8)** - Students will be able to perform and solve real world problems involving proportional reasoning and linear functions and the relationship between the two; compare and model functions; demonstrate and understanding of congruence and similarity; apply the Pythagorean Theorem and other properties of geometric figures. Students will also extend their understanding of statistics and probability by investigating patterns of association in bivariate data.

- Grade 8, Advanced 7
- No required prerequisites
- 2 semester course

## High School

**2520 Algebra I** - Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of six strands: Real Numbers and Expressions; Functions; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. These critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students will also engage in methods for analyzing, solving, and using quadratic functions. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: None
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas

- Students pursuing Core 40, Core 40 with Academics Honors, or Core 40 with Technical Honors diploma should receive credit for Algebra I by the end of Grade 9

**2522 Algebra II** - Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Algebra II is made up of seven strands: Complex Numbers and Expressions; Functions; Systems of Equations; Quadratic Equations and Functions; Exponential & Logarithmic Equations and Functions; Polynomial, Rational, and Other Equations and Functions; and Data Analysis, Statistics, and Probability. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: Algebra I
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Algebra II/Integrated Mathematics III requirement for all diplomas

**2562 AP Calculus AB** - AP Calculus AB is a course based on the content established and copyrighted by the College Board. AP Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

- Recommended Grade: 12
- Required Prerequisites: Pre-Calculus: Algebra, Pre-Calculus: Trigonometry (at least a C-)
- Credits: 2 semester course, 1 credit per semester; **Dual Credit**
- Counts as a Mathematics Course for all diplomas
- Qualifies as a quantitative reasoning course

**2532 Geometry** - Geometry formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Seven critical areas comprise the Geometry course: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and

Three-dimensional Solids. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Algebra I (at least a D-)
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

**2564 Pre-Calculus (Algebra)** - Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 11, 12
- Required Prerequisites: Algebra II and Geometry (at least a C- in both classes)
- 1 semester course, 1 credit per semester; **Dual Credit**
- Fulfills a Mathematics course requirement for all diplomas

**2566 Pre-Calculus (Trigonometry)** - provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. We Students will advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 11, 12

- Required Prerequisites: Algebra II and Geometry (at least a C- in both classes)
- 1 semester course, 1 credit per semester; **Dual Credit**
- Fulfills a Mathematics course requirement for all diplomas

**2546 Probability and Statistics** - Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Probability and Statistics are made up of three strands: Data Analysis; Experimental Design; and Probability. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing technology and computer programs is encouraged. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: Algebra I
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

**2550 Quantitative Reasoning** - Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real-world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: None
- Recommended Prerequisites: Algebra I, Algebra II
- 2 semester, 2 credit class
- Fulfills a Mathematics course requirement for all diplomas

## **VI. Physical Education**

## Junior High

**0450.68 Physical Education** - will provide students with developmentally appropriate learning opportunities with meaningful content and instruction. Students will develop health-related fitness, physical competence, cognitive understanding and positive attitudes about physical activity that promotes a healthy and physically active lifestyle. Students will participate in a wide variety of activities that include individual activities and team sports including lifetime sports. Students will learn team building skills, game strategies, fundamentals, equipment manipulation, safety measures, good sportsmanship, proper etiquette and the rules of a variety of physical activities.

- Grades 7, 8
- No required prerequisites
- 1 semester class

## High School

**3560 Elective Physical Education** - Elective Physical Education, a course based on selected standards from Indiana's Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation.

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



**3560FITN Elective Physical Education, Fitness for Life** - Elective Physical Education, a course based on selected standards from Indiana's Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness.

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

**3542 Physical Education I** - Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness.

Ongoing assessment includes both written and performance- based skill evaluation.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Grade 8 Physical Education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas, a PE Waiver is available through completion of an interscholastic sport (See Guidance)

**3544 Physical Education II** - Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Physical Education I
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas, a PE Waiver is available through completion of an interscholastic sport (See Guidance)
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.

## VII Science

### Junior High

**0460.07 Science 7** - Students in grade 7 understand that energy cannot be created or destroyed, but only changed from one form into another or transferred from place to place. Students understand energy in relationship to solids, liquids, gases and heat transfer. Students describe how earth processes have shaped the topography of the earth and have made it possible to measure geological time. Students understand the natural processes of the earth and understand how the earth is constantly changing. Students understand the cellular structure of living organisms, from single-celled to multicellular. The science and engineering processes as well as engineering opportunities are integrated with content throughout the course. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

- Grade 7
- No Required Prerequisites
- 2 semester course

**0460.08 Science 8** - Students in grade 8 understand how atomic structure determines chemical properties and how atoms and molecules interact. Students explain how the water cycle and air movement are caused by differential heating of air, land, and water and how these affect weather and climate. Students understand that natural and human events change the environmental conditions on the earth. Students Elementary and Middle Level Subject Descriptions understand

the predictability of characteristics being passed from parent to offspring. Students will understand how a particular environment selects for traits that increase survival and reproduction by individuals bearing those traits. Students evaluate the evidence of evolution and relationships/categorization among organisms. The science and engineering processes as well as engineering opportunities are integrated with content throughout the course. Along with the current academic standards for this subject, the Science/Technical Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

- Grade 8
- No Required Prerequisites
- 2 semester course

## **High School**

**5008 Animal Science** - provides students with an overview of the animal agriculture industry. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study may be applied to both large and small animals. Topics covered in the course include: history and trends in animal agriculture, laws and practices relating to animal agriculture, comparative anatomy and physiology of animals, biosecurity threats and interventions relating to animal and human safety, nutrition, reproduction, careers, leadership, and supervised agricultural experiences relating to animal agriculture. Animal Science introduces students to many careers in agriculture, and more specifically, animal science. These careers include but are not limited to: Animal Nutritionist, Animal Scientist, Embryo Technologist, Feedlot Specialist, Livestock Buyer, Livestock Geneticist, Livestock Producer, Meat Science Researcher, USDA Inspector, Veterinarian and Veterinary Nurse.

- Grades 9-12
- Required Prerequisites: None
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters requires, 2 credits maximum
- Elective for all diplomas; **Dual Credit** with IVY Tech Community College
- Fulfills a science course requirement for all diplomas

**5276 Anatomy and Physiology** - is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integumentary, skeletal, muscular, and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the

various components of the healthy body in order to apply this knowledge in all health related fields.

- Recommended Grades: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites; Biology I
- Credits: 2 semester course, 2 credits
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a science course requirement for all diplomas

**3020 AP Biology/IVY Tech BIO 105** - is a course based on the content established and copyrighted by the College Board. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties.

- Recommended Grades: 11, 12 (must be a senior to receive **Dual Credit**)
- Required Prerequisites: Biology I, Chemistry I, Pass the Accuplacer Exam
- 2 semester course, 1 credit per semester (**5 hours College Credit**)
- Counts as Science course for all diplomas
- Qualifies as a quantitative reasoning course

**3060 AP Chemistry/IVY Tech CHEM 105** - is a course based on the content established and copyrighted by the College Board. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics.

- Recommended Grade: 12 (**Dual Credit**)
- Required Prerequisites: Chemistry I, Algebra II, Pre-Calculus (concurrent enrollment or completion, Pass the Math Accuplacer Exam
- 2 semester course, 1 credit per semester, (**5 hours College Credit**)
- Counts as a Science Course for all diplomas
- Qualifies as a quantitative reasoning course

**3024 Biology I** - is a course based on the following core topics: cellular structure and function, matter cycles and energy transfer; interdependence; inheritance and variation in traits; evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grades: 9, 10
- Required Prerequisites: none

- Recommended Prerequisites: none
- Credits: 2 semester course, 2 credits
- Fulfills the Biology requirement for all diplomas

**3064 Chemistry I** - is a course based on the following core topics: properties and states of matter; atomic structure and the Periodic Table; bonding and molecular structure; reactions and stoichiometry; behavior of gases; thermochemistry; solutions; acids and bases. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. Instruction 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.

- Required Grades: 11, 12
- Required Prerequisites: Algebra II
- Personal Requirement: Scientific Calculator
- Credits: 2 semester course, 1 credit per semester
- Fulfills a Science (physical) course requirement for all diplomas
- Qualifies as a Quantitative Reasoning course

**3044 Earth and Space Science** - is a course focused on the following core topics: universe; solar system; Earth cycles and systems; atmosphere and hydrosphere; solid Earth; Earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding the scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grades: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Science course requirement for all diplomas

**3108 Integrated Chemistry and 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. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grades: 10, 11, 12

- Required Prerequisite: Algebra I
- Personal Requirement: Students must provide a calculator
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Science (physical) course requirement for all diplomas
- Qualifies as a quantitative reasoning course

**3084 Physics I** - s a course focused on the following core topics: constant velocity; constant acceleration; forces; energy; linear momentum in one dimension; simple harmonic oscillating systems; mechanical waves and sound; simple circuit analysis. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.

- Recommended Grades: 11, 12
- Required Prerequisites: Algebra II, Geometry
- Personal requirement: Scientific Calculator
- Credits: 2 semester course, 1 credit per semester, **Dual Credit**
- Counts as an elective for all diplomas
- Fulfills a Science (physical) course requirement for all diplomas
- Qualifies as a quantitative reasoning course

## VIII Social Studies

### Junior High

**0470.07 Social Studies 7** - Students in grade 7 explore the history, geography, government, economic systems, current issues, and cultures of the Eastern World with an emphasis on: (1) Asia, (2) Africa, (3) the Middle East, (4) the Pacific Islands, (5) Australia, and (6) New Zealand. Learning experiences for students in grade 7 should help them to make the transition from concrete information to abstract ideas, concepts, and generalizations. In-depth studies provide greater understanding of environmental influences on economic, cultural, and political institutions. Opportunities to develop thinking and research skills include reading and interpreting maps, graphs, and charts. Decision-making and problem-solving activities should include the following: (1) identifying problems, issues and questions; (2) information gathering; (3) hypothesizing; and (4) evaluating alternative solutions and actions. Along with the current academic standards for this Elementary and Middle Level Subject Descriptions subject, the History/Social Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

- Grade: 7

- No Required Prerequisites
- 2 semester Course

**0470.08 Social Studies 8** - Students in grade 8 focus on United States history. This study begins with a brief review of early history, including the Revolution and Founding Era, and the principles of the United States and Indiana constitutions, as well as other founding documents and their applications to subsequent periods of national history and to civic and political life. Students then study national development, westward expansion, social reform movements, the Civil War, and the Reconstruction Period. Students examine major themes, issues, events, movements, and figures in United States history through the Reconstruction Period (1877) and explore relationships to modern issues and current events. Along with the current academic standards for this subject, the History/Social Studies Content Area Literacy Standards are incorporated with the expectation of a continuum of reading and writing skills development.

- Grade: 8
- No Required Prerequisites
- 2 semester Course

**1512 Current Problems/Issues/Events**: - is a course that looks into the significant problems and issues of our time. A number of different resources are used in this class (possibly including local and national newspapers, internet media, social media, among others) to stay informed of events around the world. Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems or issues selected will have contemporary historical significance and will be studied from the viewpoint of the social science disciplines.

- Recommended Grades: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit
- Counts as an elective for all diplomas
- Fulfills a social studies requirement for a General Diploma

**1514 Economics** - Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

- Recommended Grade: 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit
- Counts as an elective for all diplomas
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors
- Qualifies as a quantitative reasoning course (NOTE: Economics will no longer be considered a quantitative reasoning course beginning with the 2025 cohort.)
- Fulfills a Social Studies requirement for the General Diploma only

**1518 Indiana Studies** - is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included, and 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.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

**1540 United States Government** - provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. Analysis of how the United States interacts with other nations and the government's role in world affairs is included in this course. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

- Recommended Grades: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester



- Fulfills Government requirement for all diplomas

**1542 United States History** - is a two-semester course that builds upon concepts developed in previous studies of US History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in US History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time. Through the examination of this material, the motives which have guided our nation's development are discovered. The student thus discovers the foundations on which their present society is based.

- Recommended Grade: 11 (is required of all Grade 11 students in the state of Indiana)
- Required Prerequisite: Grade 8 Social Studies
- Credits: 2 semester course, 1 credit per semester
- Fulfills the US History requirement for all diplomas

**1542H United States History Honors** - is a course that builds upon concepts of US History and emphasizes national development from prehistory into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students identify and analyze 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 prehistory through the present as they relate to life in Indiana and the United States. Students trace and analyze chronological periods and examine the significant themes, causes and effects, and concepts in US History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand specific topics of the cause for changes in the nation over time.

- Recommended Grade: 11
- Required Prerequisite: Grade 8 Social Studies
- Recommended Prerequisite: C or higher in previous honors courses
- Credits: 2 semester course, 1 credit per semester - **Dual Credit** (3 credit hours per semester)

**1548 World History and Civilization** - emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in

different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

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

## **IX World Languages**

**2120 Spanish I** - is a basic introduction to the Spanish language and culture. Using stories, videos, conversation, and other means; students will learn phrases and skills that they can build upon in later Spanish classes. Some of these skills include: introduction of self and others, reading short stories in present tense, listening as others speak in the target language, writing short descriptions in the target language, telling time, identifying pronouns and using these groups to conjugate verbs in present tense. Culturally students will be introduced to similarities and differences in various Hispanic countries, various famous persons of Hispanic origin and the history of Hispanic celebrations. Students will be able to use a basic understanding of the Spanish language to read, write and listen about various topics that share information about Hispanic culture.

- Recommended Grades: 8, 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Advanced ELA 8 for 8th graders, teacher recommendation, administration approval
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

**2122 Spanish II** - a continued study of the Spanish language and culture. Using stories, videos, conversation and other means: students will learn phrases and skills that they can build upon in later Spanish classes. Some of these skills include: introduction to conjugation of verbs in the past tense, reading short stories or novels written in basic Spanish, building upon previously learned verbs to listen and write pieces in the target language. Culturally, students will continue to learn similarities and differences in various Hispanic countries, various famous persons of

Hispanic origin and the history of different Hispanic celebrations. Students will be able to use an extended understanding of the Spanish language to read, write and listen about various topics that share information about Hispanic culture.

- Recommended Grades: 9, 10, 11, 12
- Required Prerequisites: Spanish I (grade C or higher)
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

**2124 Spanish III** - a continued study of the Spanish language and culture. Using stories, videos, conversation and other means: students will learn phrases and skills that they can build upon in active Spanish classes. Some of these skills include: focus on Spanish conversation, listening to a native speaker in true conversation, introduction to conjugation of verbs in the future tense and others, writing large paragraphs, and reading short novels in the target language. Culturally students will continue to learn similarities and differences in various Hispanic countries, various famous persons of Hispanic origin and the history of different Hispanic celebrations. Students will be able to use an extended understanding of the Spanish language to read, write and listen about various topics that share information about Hispanic culture.

- Recommended Grades: 10, 11, 12
- Required Prerequisites: Spanish I and Spanish II (Grade C or Higher)
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World language requirement for the Core 40 with Academic Honors Diploma

**2126 Spanish IV** - is an application study of basic Spanish language. Students in Spanish IV will use information learned in previous years to help facilitate a Spanish I class. Students may be asked to create activities, bell ringers, or games that teach younger students the language. Students may be required to lead class discussions or introduce topics in the target language for all other students. Students will also be required to have “spontaneous” graded conversations with the teacher in the target language to show competency. Students will be able to use an extended understanding of the Spanish language to read, write, listen and speak in the target language with other individuals.

- Recommended Grades: 11, 12
- Required Prerequisites: Spanish I, Spanish II and Spanish III (Grade C or higher), teacher/administration approval
- Suggested Prerequisite: desire to learn Spanish at a collegiate level
- Credits: 2 semester course, 1 credit hour per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World language requirement for the Core 40 with Academic Honors Diploma

## **X Study Hall**

**9001 Study Hall** - No credit. Allows students to study and complete homework for classes.

## **XI Twin Rivers Vocational Cooperative**

**IVY Tech Dual Credit Programs in cooperation with Twin Rivers** - these are dual credit high school/college courses open only to juniors and seniors. An application is required for all programs.

See [twinriversarea.org](http://twinriversarea.org) for a complete list of available courses

Questions: See Mr. Ryan Gilman [gilmanr@nesc.k12.in.us](mailto:gilmanr@nesc.k12.in.us) or Mr. Brandon Small [bsmall@twinriversarea.org](mailto:bsmall@twinriversarea.org)