

# Pioneer Junior-Senior High School

## Course Description Guide

2014-2015

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### **To Our Students**

The Pioneer High School Staff has put forth a great deal of effort to give you the necessary information needed to complete your schedule this year. The information in this guide should be useful in creating your schedule for next year. Because of the uncertainties of the ever-changing job markets of the future, we believe you should experience as many classes as possible to give yourself a better opportunity for the future. Therefore, no students will be allowed to have more than one study hall.

Since it is understood that a student and his/her parents may want to change the schedule before classes actually start, a student may change his/her schedule with parent approval up to two days prior to the start of classes. A student will be notified if there is a conflict with his/her schedule. If this occurs, the student needs to make an appointment with a counselor to resolve the conflict **prior** to the deadline for schedule changes.

### **Commission and Accreditation**

Pioneer Junior-Senior High School holds a first class commission from the Indiana State Department of Public Instruction and is a member of the North Central Association of Colleges and Secondary Schools, an organization which established America's highest educational standards. All students must meet certain requirements for a diploma, so our school must maintain high standards year after year to belong to this select organization.

### **Title IX Compliance**

#### **Nondiscrimination and Access to Equal Educational Opportunity**

Pioneer Junior-Senior High School does not discriminate on the basis of religion, race, color, national origin, gender, disability or age in educational program, which it operates either in employment therein or admission in any extracurricular activity thereto where required by Title IX. It is the policy of this corporation to provide an equal opportunity for all students to learn through the curriculum offered in this corporation regardless of race, color, creed, disability, religion, gender, ancestry, national origin, place of residence within the boundaries of the corporation, or social or economic background. The principal of Pioneer Junior-Senior High School, P. O. Box 547, Royal Center, IN 46978, is the coordinator of Title IX.

### **Due Process**

The Federal Constitution's 14<sup>th</sup> amendment prohibits a state from depriving a person of life, liberty, or property without due process of law. The public schools are arms of the state; hence, school officials are state agents. The Indiana Constitution guarantee is deemed "property", just like a house or a car. Pioneer Junior-Senior High School will provide all students with rights and privileges afforded them through their due process rights. Consequently, before a principal may deprive a student of his property right to attend school, due process must be afforded. Similarly, removal from school on misconduct grounds could seriously injure a student's reputation and cause him difficulty in gaining employment or admittance to other educational institutions, thus affecting his "liberty" interests under the 14<sup>th</sup> amendment. The lead case involving student liberty and property interest in regard to due process is *Goss V. Lopez*, 95 S.Ct. 729, decided by the Supreme Court in 1975.

## Graduation Qualifying Exam

To ensure students have mastered the basics before they graduate, students will need to pass the Algebra 1 and English 10 End of Course Assessments (ECAs). Students will take these tests after completing each of the aforementioned courses. Students who are taking the Integrated Math serious will take the test after completing Integrated II. Students must pass both exams to meet the graduation requirements to earn a diploma.

### English and Math End of Course Assessment (ECA) Policies

- Due to the English 10 ECA requirement, any student who fails a semester of English 9 will be required to make up the credit in summer school.
- If a student fails both semesters of English 9, he/she will be required to take two summer school sessions, if offered, after his/her freshman year. If two sessions of summer school are not offered, the student will be required to complete one credit after his/her 9<sup>th</sup> grade year and one following his/her 10<sup>th</sup> grade year.
- All second year high school students must be enrolled in a full-year of English 10.
- Any Algebra I student who does not pass the Algebra I ECA, but passes the course has the following options:
  - Retake Algebra I for No Credit
  - Enroll in Integrated Math I
  - Enroll in Math Lab Summer School, earn an elective credit, and retake the ECA following the summer school session.

### Seventh Semester Graduates

Pioneer students may graduate upon completion of seven semesters of attendance provided that all state and local requirements are met. After completing their work at the end of the seventh semester, those students who elect this program would be allowed to attend only those school functions and participate in only those activities open to the general public, with the exception of prom and graduation exercises.

## Graduation Requirements

**Core 40** (Effective for the class of 2016 and beyond; minimum of 40 credits\*\*)

English/Language Arts – 8 credits

Mathematics – 6 credits (in grades 9-12; Algebra I taken as an 8<sup>th</sup> grader will not count toward these 6 credits)

In Algebra I, Geometry, and Algebra II or  
Integrated Math I, II, & III

*Students must take a math or quantitative reasoning course each year in high school.*

Science – 6 credits

2 credits: Biology I

2 credits: Chemistry I, Physics I, or Integrated Chemistry-Physics

2 credits: any Core 40 science course

Social Studies – 6 credits

2 credits: US History

1 credit: U.S. Government  
1 credit: Economics  
2 credits: World History/Civilization or Geography/History of the World  
Directed Electives – 5 credits  
World Languages  
Fine Arts  
Career and Technical Education  
Physical Education – 2 credits  
Health and Wellness – 1 credit  
Electives\* - 6 credits (college and career pathways recommended)

\*Specifies the number of electives required by the state. High school schedules provide time for many more electives during the high school years. All students are strongly encouraged to complete a College and Career Pathway (selecting electives in deliberate manner) to take full advantage of career and college exploration and preparation opportunities.

\*\*Schools may have additional local graduation requirements that apply to all students. Students at Pioneer Junior-Senior High School must have 44 credits to graduate.

#### **Core 40 with Academic Honors** (minimum of 47 credits)

For the Core 40 with Academic Honors diploma, students must:

- Complete all requirements for the Core 40 diploma.
- Earn 2 additional Core 40 math credits (8 math credits (6 in high school; thus, Algebra I taken as an 8<sup>th</sup> grader will count toward the 8 required math credits)
- Earn 6-8 Core 40 world language credits (6 credits in one language or 4 credits each in two languages)
- Earn 2 Core 40 fine arts credits
- Earn a grade of a “C” or better in courses that will count toward the diploma.
- Have a grade point average of a “B” or better
- Complete **one** of the following:
  - Earn 4 credits in 2 or more AP courses and take the corresponding AP exams.
  - Earn 6 verifiable transcribed college credits in dual credit courses from priority course list.
  - Earn two of the following:
    - A minimum of 3 verifiable, transcribed college credits from the priority course list.
    - 2 credits in AP course and corresponding AP exams
    - 2 credits in IB standard level courses and corresponding IB exams
  - Earn a combined score of 1750 or higher on the SAT critical reading, mathematics, and writing sections and a minimum score of 530 on each.
  - Earn an ACT composite score of 26 or higher and complete written section.
  - Earn 4 credits in IB courses and take corresponding IB exams.

#### **Core 40 with Technical Honors** (minimum 47 credits)

For the Core 40 with Technical Honors diploma, students must:

- Complete all requirements for Core 40.

- Earn 6 credits in the college and career preparation courses in a state-approved College and Career Pathway and one of the following:
  - Pathway designated industry-based certification or credential or
  - Pathway dual credits from the lists of priority courses resulting in 6 transcribed college credits.
- Earn a grade of “C” or better in courses that will count toward the diploma.
- Have a grade point average of a “B” or better.
- Complete **one** of the following:
  - Any one of the options (A-F) of the Core 40 with Academic Honors
  - Earn the following scores or higher on WorkKeys; Reading for Information – Level 6, Applied mathematics – Level 6, and Locating Information – Level 5
  - Earn the following minimum score(s) on Accuplacer: writing 80, reading 90, math 75.
  - Earn the following minimum score(s) on Compass: algebra 66, writing 70, reading 80

## **Business Technology**

### **Accounting I 4524**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, THD Course

Students learn the lingo for accounting. From debits and credits to all the financial records, they would need to prepare for a business. This is a pre-requisite course for Accounting II.

### **Accounting II 4522**

Grades 11-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Accounting I

After a student has taken Accounting I and was very successful in doing so, they may take Accounting II. Again, they must have been very successful at Accounting I because Accounting II is an independent study course. The student will receive minimum guidance from the instructor because of the Accounting I and II courses being offered during the same period. The student is required to focus on each chapter to, in turn, do the work required.

### **Business and Personal Law 4560**

Grades 10-12

One Credit/One Semester

Core 40, AHD, and THD Course

Civil and criminal cases are covered. Usually the class tries a case with a jury, judge, etc. In the past, we have gone to an actual court case. Other items covered are marriage, divorce, torts, ethics, the court system, insurance protection, retirement and wills, buying, and renting.

### **Computer Applications 4530**

Grades 9-12

One Credit/One Semester

Core 40, AHD, and THD Course

Computer applications is a business course designed to provide students with instruction in computer hardware and software concepts including input and output devices, directory structure and management, operating systems, work processing, spreadsheets, database, graphics, and presentation software. The use of a Windows-based professional software suite is recommended. Additional concepts and applications dealing with desktop publishing, software integration, and Internet will be included as well as information about future technology trends. Instructional strategies may include computer/technology application, teacher demonstrations, collaborative instruction, interdisciplinary and/or culminating projects, problem-solving and critical thinking activities, simulations, and mini-baskets/in-basket projects. Content Standards and competencies defined. The Language Arts Standards Guide; Essential Skills for Indiana Students and ISTEP+ Assessment Proposed Language Arts Content Standards have been incorporated into Computer Applications. This course should be included as the component of all Indiana career clusters. Since keyboarding skills are necessary for many careers, this course is recommended as a core component for all career clusters. However, it is recommended that

touch keyboarding skills be taught in the middle school by a business education instructor. Students who have met basic keyboarding objectives should enroll in Computer Applications.

### **Personal Finance 4540**

Grades 9-12

One Credit/One Semester

Core 40, AHD, and THD Course

This course is offered to ninth through twelfth graders. Many life skills are taught in this course. Instruction is given and small individual or group projects are done to apply what students have learned. A few items discussed in personal finance are checking accounts, saving and investing, careers, budgeting, insurance, renting, etc. Some students are about to enter college, and this is a good helper class in many areas. They will experience.

## **Business Alternating Electives**

**The electives listed below will be offered during the 2013-2014 school year, alternating with Business Personal Law and Personal Finance the following year.**

**Purpose: To offer more electives to students**

### **Entrepreneurship 4566**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisite: Marketing or Business Foundations

Entrepreneurship is a specialized business course designed to enable to students to acquire the knowledge and develop the skills needed to effectively organize, develop, create, and manage their own business. Topics addressed include the assessment of entrepreneurial skills, the importance of business ethics, and the role of entrepreneurs in a free enterprise system. Students will develop a written business plan for a business of their choice. Instructional strategies may include a school-based enterprise, computer/technology applications, real and/or simulated occupational experiences, and projects available through the BPA/DECA programs of co-curricular activities.

### **Principles of Marketing 5914**

Grades 10-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisite: Computer Applications

Marketing is a business course that 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. Instructional strategies may include a school-based enterprise, computer/technology applications, real and/or simulated occupational experiences,

and projects focused on the marketing functions such as those available through the activities in DECA and BPA co-curricular programs.

## Century Career Center Classes

*Career and technical education will be offered to **juniors** and **seniors** who have sincere interests, need, and can profit from instruction. Each student must ultimately participate in the world of work. What he/she gains in general and vocational education will determine not only his/her relationship with him/herself, but his/her place in society. The student must be able to sell him/herself to an employer with a sellable skill. Career/Technical education is a tool, a means to an end.*

### **Art, Media and Communication**

#### **Commercial Art and Graphic Design I & II 5550**

Grades 11-12

Commercial Art and Graphic Design teaches a variety of visual art techniques for the design, layout, and illustrations for advertising, displays, promotional materials, and instructional manuals. Also covered is advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of methods used to design commercial products that impart information and ideas, along with peer critiques. Students develop design techniques using the latest software used in this field for computer graphics.

#### **Commercial & Digital Photography I & II 5570**

Grades 11-12

Digital Photography is a course that relates to all phases of camera use and electronic photographic editing and Adobe Photoshop. Instruction covers topics of composition and color dynamics, printing, and lighting techniques. Students will develop a portfolio of finished work reflecting personal and educational goals.

#### **Radio/TV Production I and II 5986 & 5992**

Grades 11-12

In this course, students will go further into communication, marketing, media, production, and technical tasks performed in radio, television, and telecommunications occupations. Emphasis is placed on career opportunities, production, promotion, announcing, broadcast equipment operation, news and sports casting, broadcast regulations and laws, and station organization. Instruction may include operation of the school radio station. On the television/video production side, emphasis is placed on career opportunities, production, editing, programming, promotion such as directing, wiring, video mixing, and editing, audio mixing and editing, camera operating and maintenance, news-casting and show hosting.

### **Business & Information Technology**

#### **3D Computer Animation I & II 5530**

Grades 11-12

3D Computer Graphic Animation prepares students to use computer applications and related visual and sound imaging techniques to create and manipulate images and information. The course includes instruction in two-dimensional and three-dimensional solid model creation,

sketching, and storyboarding, time and motion study, color and lighting studies, and camera positioning. Using current computer animation software that reflects industry standards, students should produce projects for commercial applications in one or more of the following areas: marketing; video production; internet design; electronic gaming; and education and training. Students will learn Drawing and Animation techniques on both the Windows and Mac platform with Flash 8 and 3D Maya Software.

### **IT Information Support and Services 5230**

Grades 11-12

Information Support and Services is a course that will prepare students for careers in business and industry dealing with support and services in information technology. Students will gain the necessary skills to implement computer systems and deploy software solutions, provide technical assistance, and manage information systems. Students will develop an understanding of IT professionalism. Students will pursue an IC<sup>3</sup> Certification in this Introductory Course. Certiport's Internet and Computing Core Certification (IC<sup>3</sup>®) is the ideal certification for anyone who wants to demonstrate critical computer and Internet skills valued in today's academic and professional environments. Because digital literacy is vital to the success in both of these endeavors, IC<sup>3</sup> is the perfect credential for both traditional and non-traditional students as well as employees.

### **Programming and Software Development I & II**

Grades 11-12

Information Technology: Programming and Software Development is a career and technical education business and information technology course that will prepare students for careers in business and industry as providers of software solutions. Students will learn to design, develop, test, document, implement, and maintain secure computer systems and software. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the "virtual workplace". Essential skill areas include but are not limited to: Computer System Architecture; Information Systems Analysis; Principles of Programming & Software Design. Students will also learn programming concepts using different software packages. They will design and develop test documents, and implement and maintain programs as well as work with the graphic creation and 3D modeling using Maya Software.

### **Sports Recreation & Entertainment Marketing 5984**

Grades 11-12

Sports, Recreation, and Entertainment Marketing develops understanding of the sporting event industry, its economic impact and products; distribution systems and strategies; pricing considerations; product/service management, and promotion. Planning is emphasized, and problem-solving situations are presented for which they must apply critical thinking skills. The class may research and work with the private sector and community to help market recreation and entertainment programs. Instructional strategies may include computer/technology applications, even planning, and real and/or simulated occupational experiences.

## **Web Page Design I & II 5232**

Grades 11-12

Interactive Media: Web Design is a career technical education business and information technology course that prepares students for careers in business and industry working with interactive media. Students will learn Web Design techniques on both the Windows and Mac platform with Macromedia Web Authoring Tools such as Dreamweaver 8, Fireworks 8 and Flash 8, as well as using HTML. It is a course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs.

## **Criminal Justice**

### **Criminal Justice I 5822**

Grades 11-12

This course introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports.

### **Criminal Justice II (Police Science and Law Enforcement) 5824**

Grade 12

Four Credits/Two Semesters

Core 40, AHD, and THD Course

This course introduces students to concepts and practices in controlling traffic as well as forensic investigation at crime scenes. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, chemistry as well as collection of evidence and search for witnesses, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information gathering activity and chain of custody procedures will also be reviewed.

## **Health Science**

### **Anatomy and Physiology 5276**

Grades 11-12

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

## **Community Health Services – C.N. A. 5282**

Grades 11-12

Introduction to Community Health Services further broadens students' knowledge of the many opportunities in health care. Varied instructional strategies and technologies will be used to introduce additional nursing assisting skills, home health care, hospice care, infant/child care, and community health. The course may be taught in collaboration with the State Certified CAN Program, a home health agency, and/or the local community health agency. Students will also develop and refine entry-level skills common to specific long-term health care careers. In a laboratory setting, students simulate health care experiences. During the extended clinical experience at a nursing home, students practice their skills in a real setting. Upon successful completion of the program, students are eligible to take the Indiana state test to become certified nursing assistants.

## **Health Careers I – Exploration 5272**

Grades 11-12

This course includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, an introduction to health care systems, anatomy, physiology, and medical terminology. Lab experiences are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course. Students explore various careers in the health industry and learn about the sciences needed in health related careers. They will intern in several allied health fields during the year.

## **Integrated Health Sciences 5294**

Grades 11-12

Integrated Health Sciences integrates biology concepts with those of health and health careers. Students learn structures and functions of living organisms and their interactions with the environment through laboratory and field investigations. Course content includes the function and processes of cells, tissues, organs, and systems of various species of living organisms. Health-related materials and activities for the course emphasize an understanding of medical and biological knowledge, the integration of anatomy/physiology and medical terminology. Students have the opportunity to gain exposure to First Aid and CPR. Completion of two semesters fulfills a student's health requirement.

## **Introduction to Medical Assisting 5213**

Grades 11-12

Introduction to Medical Assisting introduces students to some of the duties and responsibilities of administrative and clinical medical assistants. Course content focuses on basic skills that one might see performed in a doctor's office or out-patient facility. Various instructional strategies and technologies will be used to give students the opportunity to gain additional knowledge of anatomy, physiology, and medical terminology. The student will also have the opportunity to refine previously learned technical skills in addition to gaining additional competencies as they participate in simulated activities and procedures in the classroom.

## **Introduction to Pharmacy 5214**

Grades 11-12

Introduction to Pharmacy introduces students to the field of pharmacy and provides opportunity for exploration of career options within the discipline. Varied instructional strategies and technologies are used to help students gain insight into the roles and responsibilities of the pharmaceutical team, state and federal regulations, pharmaceutical agents, prescription processing, pharmacy maintenance, retail sales, and the impact of pharmaceuticals on the delivery of health care in society. Students will also learn the most common medications in current use with emphasis on classifications, uses, routes, or administration, dosages, interactions, incompatibilities, and side effects. The class will also address special precautions, legal aspects, patient education and preparation, and administration of medications.

## **Medical Law & Ethics 5296**

Grades 11-12

Students will be given an overview of law and ethics for allied health professionals functioning in a variety of health settings. Topical areas include: the legal system, standards and scope of care and practice, physician-patient relationships, standards of professional conduct, public duties, documentations, employment laws and practices, pertinent federal/state statutes, ethical codes and bioethical issues. The content will also provide an understanding of ethical and legal obligations to self, patients, and employer.

## **Medical Terminology 5274**

Grades 11-12

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal or written information. Students have the opportunity to acquire skills in interpreting medical records and communications accurately and logically. Materials should invite students to enjoy and be curious about words in their work and personal lives, thus serving as a foundation for enlarging personal vocabularies.

## **Personal & Commercial Services**

### **Advanced Career Information Internship 5256**

Grades 11-12

The professional career internship is designed to provide opportunities for students to explore careers that require additional degrees or certifications following high school. Emphasis is placed on applying skills developed through instruction and on learning new career competencies at the internship site. The experience is tailored to the unique goals and interests of the student and is considered a step toward fulfillment of the student's career plan. An agreement outlines the expectations of all parties: the intern, parent/guardian, site supervisor/mentor, internship supervisor, and the school. Internships may be paid or unpaid and include a classroom component.

### **Advanced Career Information Internship – Technical Theatre 5256**

Grades 11-12

The professional career internship in technical Theatre is an arranged internship in the McHale Auditorium. This internship is designed to provide opportunities for students to explore careers in the area of Technical Theatre that are based on the Indiana Academic Standards for Theatre. Students enrolled in this internship will be actively engaged in the process of designing, building, managing, and implementing the technical aspects of a production. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

### **Advanced Culinary Arts 5438**

Grades 11-12

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

### **Cosmetology (Off Campus) 5802**

Grade 12

Cosmetology includes classroom and practical experiences concerned with a variety of beauty treatment, including the beautification of hair and skin care. Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, bleaching, and fitting wigs; permanent waving; facials; manicuring; and hand and arm massaging. Scientific knowledge related to bacteriology, anatomy, hygiene, and sanitation will be emphasized. Additional instruction in the areas of small business (salon) management, record keeping, and customer relations should also be provided in this course. Instruction should be designed to qualify students for the licensing examination. Students will prepare and work toward the 1500 clock hours needed for preparation for the state certification exam. Students will be responsible to provide their own transportation and pay tuition at a reduced rate. Century Career center will provide tuition assistance.

## **Early Childhood Education I & II 5412**

Grades 11-12

This course prepares students for early childhood education and related careers that involve working with children from birth to 8 years (3<sup>rd</sup> grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of suggested topics. Major course topics include: career paths in early childhood education; promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings; developmentally appropriate practices of guidance and discipline; management and operation of licensed child care facilities or educational settings; child care regulations and licensing requirements; and employability skills. A standards-based plan for each student guides the laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Early Childhood Education teacher. Student laboratory/field experiences may be either school-based or “on-the-job” in community-based early childhood education centers or in a combination of the two.

## **ICE Interdisciplinary Cooperative Education 5902**

Grades 11-12

Cooperative Education is a unique educational strategy that combines on-the-job learning experiences with related classroom instruction in a career cluster/pathway directly related to a student’s academic preparation and career objectives. The philosophy of cooperative education recognizes that classroom learning provides only part of the skills and knowledge students will need to succeed in their professions or career clusters/pathways. By creating opportunities to learn in the workplace, schools can help students develop and refine occupational competencies (attitudes, skills, and knowledge) needed to enter and succeed in a profession or career cluster/pathway, adjust to the employment environment, and advance in occupations of their choices. The fundamental purpose of cooperative education is to provide students with opportunities to learn under real-work conditions. While participating in cooperative work experiences, students are actual employees of the hiring organization. These experiences must be related to student academic and career cluster/pathway goals. Ideally, students’ work assignments and areas of responsibility should broaden as they gain experience on the job and increased responsibilities should occur as further education and training are attained. Students will attend their home high school for ½ of the school day, work a minimum of 15 hours per week at an approved job site, and attend related classes.

## **Introduction to Culinary Arts 5438**

Grades 11-12

This course is especially appropriate for students with an interest in careers related to hospitality, tourism, and culinary arts. Topics include basic culinary skills in the foodservice industry, safety and sanitation, nutrition, customer relations and career investigation. Students are able to explore this industry and examine their own career goals in light of their findings. Laboratory

experiences that emphasize industry practices and develop basic skills are required components of this course.

## **Transportation**

### **Architectural Design I & II 5640 & 5652**

Architectural Design provides students with a basic understanding of the skills used by drafting technicians. Areas of study include lettering, sketching, proper use of equipment, and geometric constructions with an emphasis on multi-view drawings. This course includes the creation and interpretation of construction documents. Areas of emphasis include print reading, drawing, and the operation of a computer-aided design (CAD) system. Topics include 2D drawing commands, coordinate systems, editing commands, paper and model space, inquiry commands, layers, plotting, text, and basic dimensioning.

### **Automotive Collision Repair I & II 5514 & 5544**

Automotive Collision Repair Technology includes classroom and laboratory experiences concerned with all phases of the repair of damaged vehicle bodies and frames, including metal straightening; smoothing areas by filing, grinding, or sanding; concealment of imperfections; painting; and replacement of body components including trim. Instruction should also emphasize computerized frame diagnosis, computerized color-mixing, and computerized estimating of repair costs. Additional academic skills taught in this course include precision measurement and mathematical calibrations as well as scientific principles related to adhesive compounds, color-mixing, abrasive materials, metallurgy, and composite materials. Students will use Inter-Industry Conference on Auto Collision Repair (I-CAR) and Automotive Service Excellence/National Automotive Technicians Education Foundation (ASE/NATEF) standards.

### **Automotive Service Technology I & II 5510 & 5546**

Grades 11-12

Automotive Services Technology I is a one-year course that encompasses the sub topics of NATEF/ASE identified areas of Steering and Suspension and Braking Systems. Automotive Services Technology II is also a one-year course that encompasses the NATEF/ASE identified areas of Electrical Systems and Engine Performance. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, engine repair as time permits. These courses must meet the NATEF program certifications for the two primary areas offered in this course. They provide the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors. Both years will emphasize mathematical skills through precision measuring activities and cost estimation/calculation activities, along with scientific principles taught including the study of viscosity, friction, thermal expansion, and compound solutions.

### **Building Trades I & II 5580 & 5578**

Grades 11-12

Building Trades includes classroom and laboratory experiences related to the building, installation, maintenance, and repair of homes and other structures. Instruction covers cost estimating, cutting, fitting, finishing, use of hand and power tools, blueprint reading, and following technical specifications. Instruction in plastering, masonry, tile setting, dry wall installation, plumbing, residential wiring and roofing will also be covered. Students will develop precise measuring skills and an advanced understanding of volume and area calculations. Information is presented concerning materials, occupations, and professional organizations within the industry.

### **Building & Facilities Maintenance I & II 5592**

Grades 11-12

Building and Facilities Management prepares students to service commercial and institutional buildings. This course covers basic maintenance and repair skills related to air conditioning, heating, plumbing, electrical, and other mechanical systems. Classroom and laboratory experiences focus on all phases of the care and cleaning of buildings, fixtures, and furnishings including linoleum, plastic, terrazzo, tile and wood floors, rugs, and plastic, wood panel, paint, and synthetic wall coverings. Included is the use of hand and power tools and selection and use of professional supplies needed for care, repair, and maintenance.

### **Introduction to Building Trades 5580**

Grades 11-12

Students learn basic construction skills and processes. They will gain experience with foundations, rough carpentry, wiring, roofing, drywall installation and finishing, and siding. Students will be introduced to blueprint reading, applied math, basic equipment, safety, and construction careers.

## English

### **Advanced English/Language Arts, College Credit 1124**

Grade 11-12

One Credit/One Semester – May be offered for successive semesters

Core 40, AHD, and THD course

Prerequisites: English 9 and English 10 or other literature, language, composition, and speech courses or teacher recommendation.

Advanced English/Language Arts, college Credit, is an advanced course based on Indiana's Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts in Grades 11 and 12. This course title covers any English language and composition advanced course offered for credit by an accredited postsecondary institution through an adjunct agreement with a secondary school. It also covers any other postsecondary English language and composition course offered for dual credit under the provisions of the Indiana Code 511IAC 6-10: Rule 10 – Postsecondary Enrollment Program).

Example: Advanced English, CC/English 111/112 Ivy Tech

### **American Literature 11A 1020**

Grade 11

Two Credits/Two Semesters

Core 40, AHD, and THD course

This is a one-year course covering 17<sup>th</sup> and 21<sup>st</sup> century American literature. In-depth studies of the following types of literature are covered: the short story, drama, essay, poetry, and novel. Students are to write examples of the various types of literature, applying grammatical and mechanical skills. Vocabulary and grammar usage are also emphasized. Creative projects, independent research, and oral presentations are required. Two book tests with 80% accuracy from Reading counts are required per nine-week grading period.

### **English 9 1002**

Grade 9

Two Credits/Two Semesters

Core 40, AHD, and THD course with competencies defined

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

### **English 10 1004**

Grade 10

Two Credits/Two Semesters

Core 40, AHD, and THD course with competencies defined

English 10 is the study of grammar, vocabulary, literature (both classic and contemporary), and writing. Students experience various genres of literature, studying point of view, interpretation, literary terms, and recognizing relevance of literature to society. The students practice numerous styles of writing including persuasive, narrative, poetry, fiction, non-fiction, note taking, and outlining. The formal study of grammar, usage, spelling, and language mechanics is integrated into the study of writing. Students receive instruction and practice in the writing process including prewriting, drafting, revising, editing, and publishing. Students will also receive instruction on using the APA (American Psychological Association) style of writing used in research papers. Each student will write a persuasive paper using five different sources following the APA format. Speech will be taught as part of the English instruction, and students will make oral presentations employing technology, such as Power Point. In addition, students are required to read two books per nine-week grading period.

### **English 11 1006**

Grade 11

Two Credits/Two Semesters

Core 40, AHD, and THD course

This is a one-year course focusing on needs of students who plan on joining the work force either immediately after graduation or after a two-year vocational or technical training school. Reading and language arts skills are incorporated through correct grammar, usage, vocabulary, reading, writing, and expressing ideas verbally. Emphasis is placed on practical, hands-on activities. Two book tests with 80% accuracy from Reading Counts are required per nine-week grading period.

### **English 12 1008**

Grade 12

Two Semesters/Two Credits

Core 40 course

English 12 provides an atmosphere where students gain experience in reading, writing, and presenting, which prepares them to go into the work force or a technical school. Students read independently to develop a comprehension of the written word. They write papers which demonstrate their understanding of different audiences and purposes. They present speeches which demonstrate their ability to communicate effectively. Technology is used throughout the course to give students a means of more efficient presentation and research tools. Two book tests with 80% accuracy from Reaching Counts are required per nine-week grading period.

### **English Literature 12A 1030**

Grade 12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

English literature provides a chronological study of the major British authors and their works from the Anglo-Saxon period to the present. Students engage in reading, writing, and speaking both analytically and reflectively in an effort to prepare them for higher education. Students also participate in a senior project, which allows them the opportunity to demonstrate their ability to pool the skills they have mastered throughout their educational experience and will use in any

area of study they choose to pursue. Two book tests with 80% accuracy from Reading Counts are required per nine-week grading period.

### **Film Literature 1034**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: English 9 and English 10 or teacher recommendation

Film Literature 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. **FILM LITERATURE PROJECT:** Students complete a project, such as doing an historical timeline and bibliography on the development of film or the creation of a short-subject film, which demonstrates knowledge, application, and progress in the Film Literature course content.

### **Student Publications 1086**

Grades 10-12

One Credit/One Semester for successive semesters

School Yearbook Course

Prerequisites: completion of journalism or participation in summer workshop and instructor approval

This course provides the study of and practice in news gathering, interviewing, photography, note taking, and editing and publishing for print. The class provides practice and instruction in journalistic writing as well as design. Student publications adhere to the Associated Press Stylebook and Libel Manual. Desktop publishing, marketing skills, and photography skills, including darkroom techniques, will be included in the instruction. Students are expected to work outside of the classroom taking pictures of school events, completing layouts, completing interviews, and selling advertising. Assistance is provided for the advertising from a list of previous advertisers. Students plan, market, publish, and distribute their school publication.

### **Themes in Literature 1048**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: English 9 and English 10 or teacher recommendation

Themes in Literature is a study of universal themes, such as the journey of the hero, the trials of youth, the search for identity, and the other themes appropriate to the level and interests of students. The course may be limited to a few important related themes. Students examine representative works in various genres by authors of diverse eras and nationalities and the way themes may be treated differently in the works because of the cultural context. Students analyze how themes illuminate humanity's struggle to understand the human condition.

## Fine Arts Classes – Art, Foreign Language and Music

### Art

#### Art History 4024

Grades 9-12

One Credit/One Semester

Core 40 and AHD Course

No Prerequisite

This course is the chronological survey of painting, sculpture, and architecture as it reflects the cultures in which they were produced. A relationship will be made of the past art to the art being produced today. The students will learn how to look at art and appreciate art aesthetically. This survey will be taught with a text, prints, slides, and videos. Students taking Art History engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. In the areas of:

- Art History: students search for meaning and significance through a study of cultural and historical foundations of world art, which include ideas, beliefs, and values as reflected in works of art. Students classify major styles of art and artists and develop a foundation for understanding the historical progression of art.
- Art Criticism: students search for meaning and significance in works of art by analyzing common characteristics and interpretations across time and cultures and formulating interpretations of the work. Students continue to explore the work of the art critic.
- Aesthetics: students search for meaning and significance by:
  - Formulating evaluations of the work of art based on their personal questions about the nature of art.
  - Reflecting on the changing definitions of art throughout history
  - Assessing their own ideal and definitions of art in relation to the art community
  - Exploring the work of the aestheticism
- Production: students search for meaning and significance in art history by exploring studio techniques and processes related to the historic period

Additionally, students study works of art and artifacts including those produced by men and women of multiple cultural groups. Students also engage in:

- Historically relevant studio activities
- Exploring historical and cultural connections
- Writing about the process
- Making presentations about their research at regular intervals
- Working individually and in groups
- Finding direct correlations to other disciplines
- Exploring career options related to the study of art

Art museums, galleries, studios, and community resources are utilized

## **Ceramics 4040**

Grades 10-12

One Credit/One Semester

Core 40 and AHD Course

Prerequisites: Two and Three-Dimensional Art

This course is planned for each individual student desiring to work with the clay medium and learn a basic understanding of the materials and methods of creating ceramic objects. It will encompass proper preparations, slab construction, coil construction, wheel throwing, and glazing of the pieces. Students may need to purchase supplies for the class. Students in ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio-quality work. In the areas of:

- Art History: students search for meaning, significance, and direction in their work through an in-depth analysis of historical and contemporary ceramics from a variety of cultural groups identifying relationships between context, form, and function
- Art Criticism: students search for meaning, significance, and direction in their work by critically examining the relationships between context, form, function, and meaning in their own work and in historical and contemporary ceramic works.
- Aesthetics: students search for meaning, significance, and direction in their work by:
  - Formulating evaluations of historic and contemporary ceramic works
  - Responding to personal questions about the nature of art
  - Reflecting on their changing definitions of art
  - Assessing their ideas in relation to the art community
- Production: students search for meaning, significance and direction in their own work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork. They also use organizational principles and functions to solve specific visual problems, and they apply media, techniques, and processes with sufficient skill to communicate intended meaning.

Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and the firing processes. Additionally, student:

- Reflect upon the outcome of these experiences
- Explore cultural and historical connections
- Write about the process
- Make presentations about their progress at regular intervals
- Work individually and in groups
- Find direct correlations to other disciplines
- Explore career options related to ceramics

Art museums, galleries, studios, and community resources are utilized.

## **Drawing 4060**

Grades 10-12

One Credit/One Semester

Core 40 and AHD Course

Prerequisite: Introduction to Two-Dimensional Art

This course will give a good foundation for art majors. Still life, portraiture, nature, illustration, and figure drawing will be explored with various media, such as pencil, chalk, charcoal, ink, and crayon. Students may need to purchase supplies for the class in addition to class fees. Students in Drawing engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio-quality works. In the areas of:

- Art History: students search for meaning, significance, and direction in their work through an in-depth analysis of historical and contemporary drawings from a variety of cultural groups, identifying relationships between context, form, and function.
- Art Criticism: students search for meaning, significance, and direction in their work by critically examining the relationships between context, form, function and meaning in their own work and historical and contemporary drawings.
- Aesthetics: students search for meaning, significance, and direction in their work by:
  - Formulating evaluations of historic and contemporary drawings
  - Responding to personal questions about the nature of art
  - Reflecting on their changing definitions of art
  - Assessing their ideas in relation to the art community
- Production: students search for meaning, significance, and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork.

In addition, students:

- Use organizational principles and functions to solve specific visual problems
- Apply media, techniques, and processes with sufficient skill to communicate intended meaning
- Use a variety of media, such as pencil, chalk, pastels, charcoal, and pen and ink. Students at this level produce works for their portfolios, which demonstrate a sincere desire to explore a variety of ideals and problems. Students create drawings utilizing processes, such as sketching, rendering, contour, gesture, and perspective drawing.
- Students reflect upon the outcome of these experiences
- Students explore historical connections
- Students write about the process
- Students make presentations about their progress at regular intervals
- Students work individually and in groups
- Students find a direct correlation to other disciplines
- Students explore career options related to drawing
- Art museums, galleries, studios, and community resources are utilized.

### **Fine Arts Connections 4026**

Grade 12

One Credit/One Semester

Core 40 and AHD Course

Prerequisite: 5 credits of Art, recommendation of the Art Chairperson

This is the most advanced art course offered. It is to be taken by creative and talented art students nearing the end of their high school training. This class will emphasize further development of individual artistic talents and skills, creative thinking and problem solving, and experimentation with methods and media at a higher level. This course stresses the importance

of an art portfolio for college entrance. Each student enrolled will be expected to put together a collection of their own art work, prepared in various media and subject matter. Students will also explore careers in art for future reference. Students may need to furnish some materials. Students will enter their work in the LAA scholarship show as their final exam. In this course, students make connections between the experiences in the fine arts disciplines and those that encompass them in the area of Fine Arts Connections. Students have the opportunity to engage in related learning experiences that encompass art history, art criticism, aesthetics, and production across the disciplines of fine arts, including visual art, music, theatre, and dance. In the areas of:

- Art History: students search for meaning, significance, and direction in their work through an in-depth analysis of the cultural, social, political, and historical context of the arts at a given time, identifying relationships between context, form, and function.
- Art Criticism: students search for meaning, significance, and direction in their work by critically examining the relationships between context, form, function, and meaning in the various art disciplines of dance, music, art, and theatre.
- Aesthetics: students search for meaning, significance, and direction in their work by:
  - Formulating evaluations of works in the various art disciplines
  - Responding to personal questions about the nature of art
  - Reflecting on their changing definitions of art
  - Assessing their ideas in relation to the arts and community
- Production: students search for meaning, significance, and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork. Students also use organizational principles and functions to solve specific visual problems as well as apply media, techniques, and processes with sufficient skill to communicate intended meaning.

Further, students work towards culminating integrated arts experience, and they:

- Create related art works
- Reflect upon the outcome of these experiences
- Research cultural, social, political, and historical connections across the arts disciplines in a specific time
- Write about the process
- Make presentations about their research at regular intervals
- Work individually and in groups
- Find direct correlations to other disciplines
- Explore career options related to the arts in general

Art museums, galleries, performance halls, theaters, studios, and community resources are utilized.

### **Introduction to Two-Dimensional Art (L) 4000**

Grades 9-12

One Credit/One Semester

Core 40 and AHD Course

No Prerequisite

This course is a foundation of all other art courses. This is a survey course for those students who have a desire to gain general knowledge about art in one basic course. Students will learn the fundamentals of drawing, painting, relief, printmaking, crafts, and some art history. Students

taking Introduction to Two-dimensional Art engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that leads to the creation of portfolio quality works. In the area of:

- Art History: students search for meaning, significance in two-dimensional works of art and artifacts through in-depth historical study and analysis of artwork from a variety of cultures and time periods.
- Art Criticism: students search for meaning, significance, and direction in two-dimensional works by:
  - Critically examining current works and artistic trends
  - Exploring the role of the art critic in society
  - Exploring art criticism as a method of identifying strengths and limitations in student artwork.
- Aesthetics: students search for meaning, significance, and direction in two-dimensional works of art and artifacts by:
  - Attempting to respond to their personal questions about the nature of art
  - Reflecting on their own changing definitions of art
  - Assessing their ideas and definitions in relation to the art community in general
- Production: students search for meaning, significance and direction in their own work by producing works of art in a variety of two-dimensional media. At this level, students produce works for their portfolios that demonstrate a sincere desire to explore a variety ideals and problems

Additionally, students

- Create works of art
- Reflect upon the outcomes of those experiences
- Explore historical connections
- Write about the process
- Make presentations about their progress at regular intervals
- Work individually and in groups
- Find direct correlation to other disciplines
- Explore career options in visual art
- Identify ways to utilize and support art museums, galleries, studios, and community resources

### **Introduction to Three-Dimensional Art (L) 4002**

Grades 9-12

One Credit/One Semester

Core 40 and ADH Course

Prerequisite: Introduction to Two-Dimensional Art

This course provides an opportunity for students to work with a variety of media in the development of 3-dimensional forms. Students will experiment with materials such as plaster, wire, ceramics, jewelry, and found objects. Students taking Introduction to Three-Dimensional Art engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio-quality works in the areas of:

- Art History: Students search for meaning, significance, and direction in three-dimensional works of art and artifacts through in-depth historical study and analysis of artwork from a variety of cultures and time periods.
- Art Criticism: students search for meaning, significance, and direction in three-dimensional works of art and artifacts by:
  - Critically examining current works and artistic trends
  - Exploring the role of the art critic in society
  - Exploring art criticism as a method of identifying strengths and limitations in student artwork
- Aesthetics: students search for meaning, significance, and direction in three dimensional works of art and artifacts by:
  - Attempting to respond to their personal questions about the nature of art
  - Reflecting on their own changing definitions of art
  - Assessing their ideas and definitions in relation to the art community in general
- Production: students search for meaning, significance and direction in their own work by producing works of art in a variety of three-dimensional media. At this level, students produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideals and problems.

Additionally, students:

- Create works of art
- Reflect upon the outcomes of those experiences
- Explore historical connections
- Write about the process
- Make presentations about their progress at regular intervals
- Work individually and in groups
- Find direct correlation to other disciplines
- Explore career options in visual art
- Identify ways to utilize and support art museums, galleries, studios, and community resources

## **Painting 4064**

Grades 10-12

One credit/one semester

Core 40 and AHD Course

Prerequisite: Introduction to Two-Dimensional Art and Drawing

Students will learn to express themselves in mediums of oil, tempera, acrylic, and a watercolor paint. Still life, portraits, landscapes, and figures will be painted. Students may need to furnish their own canvas. Students taking Painting engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. In the area of:

- Art History: students search for meaning, significance, and direction in their work through an in-depth analysis of historical and contemporary paintings from a variety of cultural groups, identifying relationships between context, form, and function

- Art Criticism: students search for meaning, significance, and direction in their work by critically examining the relationships between context, form, function, and meaning in their own work and in historical and contemporary paintings
- Aesthetics: students search for meaning, significance, and direction in their work by formulating evaluations of historic and contemporary paintings, responding to personal questions about the nature of art, reflecting on their changing definitions of art, and assessing their ideas in relation to the art community.
- Production: students search for meaning, significance, and direction in their work by choosing and evaluating subject matter, symbols, and ideas that communicate intended meaning in their artwork.

In addition, students:

- Use organizational principles and functions to solve specific visual problems
- Apply media, techniques, and processes with sufficient skill to communicate intended meaning
- Use of variety of materials, such as mixed media, watercolor, oil, and acrylics, as well as techniques, such as stippling, gouache, wash, and impasto.

Students at this level produce works for their portfolios, which demonstrate a sincere desire to explore a variety of ideas and problems. Within this context, students:

- Create abstract and realistic paintings
- Reflect upon the outcome of these experiences
- Explore historical connections
- Write about the process
- Make presentations about their progress at regular intervals
- Work individually and in groups
- Find direct correlations to other disciplines
- Explore career options related to painting
- Art museums, galleries, studios, and/or community resources are utilized

## **Visual Arts Alternating Electives**

**These electives listed below will be offered during the 2013-2014 school year, alternating with art history and painting the following year.**

**Purpose: Allow more electives to students**

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

Grades 9-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: Introduction to Two-Dimensional Art

Advanced Two-Dimensional Art is a course based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio-quality works. Students may need to purchase supplies in addition to

the class fee. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources. This course furthers the foundations of two-dimensional art. Students will advance their skills previously learned of drawing, painting, relieve, and printmaking with a background of the history of these art productions.

### **Sculpture 4044**

Grades 10-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: Intro to Two-Dimensional Art and Intro to Three-Dimensional Art

This course is supplementing a general knowledge of creating three-dimensional pieces using a variety of media. This is a production course that will experiment with additive and subtractive sculpture with media, such as aluminum cans, balsa foam, and paper mâché. Students may need to purchase supplies in addition to the class fees. Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students in sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials, such as plaster, clay, metal, paper, wax, and plastic, students create portfolio-quality works. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

## **Music**

### **Advanced Concert Band 4170**

Grades 11-12

One Credit/One Semester

Prerequisite: Intermediate Concert Band

A full year course unless approved by the instructor

Advanced Concert Band provides students with a balanced comprehensive study of music through the concert band and marching band, which develops skills in the psychomotor, cognitive, and affective domains. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Ensemble and solo activities are designed to develop elements of musicianship including, but not limited to:

- Tone production
- Technical skills
- Intonation

- Music reading skills
- Listening skills
- Analyzing music

Experiences include, but are not limited to, improvising, conducting, playing by ear, and sight reading. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students also have opportunities to experience live performances by professionals during and outside of the school day. 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. Band repertoire must be of the highest caliber. Mastery of advanced wind band technique must be evident. Areas of refinement consist of advanced techniques, including, but not limited to: intonation, balance and blend, breathing, tone production, tone quality, technique, rhythm, sight-reading, and critical listening skills. Evaluation of music and music performances is included.

### **Intermediate Concert Band 4168**

Grades 9-10

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisite: None

A full year course unless approved by instructor

Students taking this course are provided with a balanced comprehensive study of music through the concert band and marching band, which develops skills in the psychomotor, cognitive, and affective domains. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Ensemble and solo activities are designed to develop elements of musicianship, including, but not limited to:

- Tone production
- Technical skills
- Intonation
- Music reading skills
- Listening skills
- Analyzing music
- Studying historically significant styles of literature

Experiences include, but are not limited to, improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students also have opportunities to experience live performances by professionals during and outside of the school day. 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. In addition, students perform, with expression and technical accuracy, a large and varied repertoire of concert band literature that is developmentally appropriate. Evaluation of music and music performances is included.

### **Advanced Chorus 4188**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Full year course unless approved by the instructor.

Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. The chorus may be composed of:

- Male chorus
- Female chorus
- Mixed chorus
- Any combination thereof

Activities create the development of quality repertoire in the diverse styles of choral literature that is appropriate in difficulty and range for the students. Instruction is designed to enable students to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Chorus classes provide instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the amount of time, outside of the school day, may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and music goals. Students must participate in performance opportunities, outside of the school day, that support and extend learning in the classroom. The choral repertoire must be of the highest caliber. Mastery of the basic choral technique must be evident. Areas of refinement include a cappella singing, sight-reading, and critical listening skills.

### **Intermediate Chorus 4186**

Grades 9-10

One Credit/One Semester

Core 40, AHD, and THD Course

Full year course unless approved by the instructor

Intermediate Chorus provides students with opportunities to develop musicianship and specific performance skills through ensemble and solo singing. The chorus may be composed of:

- Male chorus
- Female chorus
- Mixed chorus
- Any combination thereof

Activities create the development of quality repertoire in the diverse styles of choral literature that is appropriate in difficulty and range for the students. Instruction is designed to enable students to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Chorus classes provide instruction in creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. A limited amount of time, outside of the school day, may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and music goals. Students must participate in performance opportunities, outside of the school day, that support and extend learning in the

classroom. Choral repertoire should be developmentally appropriate. Additional emphasis is placed on sight-reading, critical listening skills, and vocal technique.

## **Foreign Language**

### **Spanish I 2120**

Grades 9-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Students greet one another, converse several times each week, ask and tell information including name, telephone numbers, and age. Instruction follows state and national standards for modern language in vocabulary usage across the curriculum. This course emphasizes simple terms with familiar vocabulary. Students see what they are learning in real-life contexts even as activities progress from easy to more challenging. Chapter vocabulary and topics are used to practice new structure points. Pairs of students do additional activities for more practice. Students learn present tense of both regular and irregular verbs. Games, piñata making, plays and listening exercises are all utilized to enhance learning.

### **Spanish II 2122**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisites: Spanish I

Review of greetings, descriptions, present imperfect, and preterit verb tenses in conversation, grammar activities, and literature enable smooth transition to intermediate Spanish. Students continue to ask and tell information with additional detail. Future, conditional, present progressive, and past progressive tenses ensure that students converse and read according to state standards. Use of imperative voice begins informally in Spanish I and formally continues.

### **Spanish III 2124**

Grades 11-12

Two Credits/Two Semesters

Core 40 and AHD Course

Prerequisites: Spanish I and II

Level III foreign language courses provide instruction enabling students to understand and appreciate other cultures by comparing social behaviors and values of people using the languages being learned. Students are willing to initiate and participate in discussions concerning these cultures. In addition, students are able to:

- Respond to factual and interpretive questions and interact in a variety of social situations, such as expressing regrets, condolences, and complaints, and using more than rote memory formula phrases
- Read for comprehension from a variety of authentic materials, such as advertisements in newspapers and magazines and cartoons and personal correspondence
- Read short literary selections of poetry, plays, and short stories
- Complete authentic forms and documents and take notes that require familiar vocabulary and structures

- Write paraphrases, summaries, and brief compositions
- Describe different aspects of the culture, using the foreign language where appropriate, including:
  - Major historical events
  - Political structures
  - Value systems
  - Visual arts
  - Architecture
  - Literature
  - Music
- Seek help in a crisis situation and participate appropriately at special family occasions, such as birthdays, weddings, funerals, and anniversaries (Goals 1-6).

### **Spanish IV 2126**

Grade 12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Spanish I, II, and III

Level IV foreign language courses enable students to participate in classroom and extra-curricular activities related to the language studied, such as presentations to the student body and to parent groups and taking leadership roles in language clubs. Students are willing to participate in conversations with native and advanced non-native speakers, either in their community or in the school. This course also enables students to:

- Respond to factual and interpretive questions, interact in complex social situations, and express opinions and make judgments.
- Give presentations on cultural topics including: traditions, historical and contemporary events, and major historical and artistic figures
- Paraphrase and restate what someone else has said
- Read for comprehension from a variety of longer authentic materials, such as newspapers and magazine articles, novels, and essays, as well as make judgments about what is read.
- Write well-organized compositions on a given topic
- Begin using the language creatively in writing simple poetry and prose (Goals 1-4)

Students are also:

- Aware of the relationship between various art forms in at least one major historical period
- Aware of the major literary, musical, and artistic periods and genres of at least one of the cultures in which the language is spoken
- Able to adjust speech appropriate to the situation and audience

Able to participate appropriately in a variety of specific circumstances which could include public meetings, attending concerts, and using public transportation (Goals 4-6)

## **Health and Physical Education**

### **Health**

#### **Health Education 3506**

Grades 9-12

One Credit/One Semester

Core 40, AHD, and THD Course

High school health education provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and wellbeing. This course includes the major content areas in a planned, sequential, comprehensive health education curriculum as expressed in the Indiana Health Education Standards Guide: 1) Growth and Development; 2) Mental and Emotional Health; 3) Community and Environmental Health; 4) Nutrition; 5) Family Life; 6) consumer Health; 7) Personal health; 8) Alcohol, Tobacco, and other Drugs; 9) Intentional and Unintentional Injury; and 10) Health Promotion and Disease Prevention. Students are provided with opportunities to explore the effect of health behaviors on an individual's quality of life. This course assists students in understanding that health is a lifetime commitment by analyzing individual risk factors and health decisions that promote health and prevent disease. Students are also encouraged to assume individual responsibility for becoming competent health consumers. A variety of instructional strategies, including technology, are used to further develop health literacy.

### **Physical Education**

#### **Physical Education I 3542**

Grade 9

One Credit/One Semester

Core 40, AHD, and THD

Physical Education I continues the emphasis on health-related fitness and developing the skills and habits necessary to the application of rules and strategies of complex difficulty in at least three of the following different movement forms:

1. Health-related fitness activities (cardio respiratory endurance, muscular strength and endurance, flexibility, and body composition)
2. Aerobic exercise
3. Team sports
4. Individual and dual sports
5. Gymnastics
6. Outdoor pursuits
7. Self-defense
8. Aquatics
9. Dance
10. Recreational games

Ongoing assessment includes both written and performance-based skill evaluations. Classes are coeducational unless the activity involves bodily contact or groupings are based on an objective standard of individual performance developed and applied without regard to gender. Adapted

physical education must be offered, as needed, in the least restricted environment and must be based on individual assessment. Swimming class for 9<sup>th</sup> grade students is part of the freshman year Co-Ed Physical Education class. Students are groups ability-grouped at the start of the school year and placed in one of three classes. Each group swims for 9 weeks, each semester, for a total of 18 weeks for the year.

Instruction is given in the 5 basic strokes; free style; backstroke, breaststroke, elementary backstroke, and sidestroke. Students will also learn basic drown proofing techniques, such as floating, treading water, surface diving, and survival swimming, as well as correct techniques for diving from the side of the pool and the diving board. Students will also be given the opportunity to participate in aquatic games that incorporate some or all of the basic swimming skills.

Students will be evaluated using several criteria: performance of the 5 basic strokes, underwater swimming, treading water, diving, surface diving, and speed and endurance swimming.

Freshman PE students also receive a daily participation grade of 4 points per day, based on tardies, dress, effort, and cooperation. Students may lose any or all of these points due to a deficiency in any of these areas.

Students that miss swimming for any reason are required to make up the missed exercise at the rate of 10 lengths per day missed. Students have the entire 6 weeks to make up lengths. If the lengths are not made up, the student will lose participation points and may fail for the 9 weeks, at the discretion of the instructor. Students will be required to dress in their regular PE clothes and participate in an alternate activity on those days they cannot swim.

## **Physical Education II 3544**

Grade 9

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisite: Physical Education I

Physical Education II emphasized a personal commitment to lifetime activity and fitness for enjoyment, challenge, self-expression, and social interaction. This course provides students with opportunities to achieve and maintain a health-enhancing level of physical fitness and increase their knowledge of fitness concepts. It includes at least three different movement forms without repeating those offered in Physical Education I. Movement forms may include:

1. Health-related fitness
2. Aerobic exercise
3. Team sports
4. Individual and dual sports
5. Gymnastics
6. Outdoor pursuits
7. Self-defense
8. Aquatics
9. Dance
10. Recreational games

Ongoing assessment includes both written and performance-based skill evaluations. This course will also include a discussion of related careers. Classes are coeducational unless the activity involves bodily contact or groups are based on an objective standard of individual performance developed and applied without regard to gender.

### **Elective Physical Education (L) 3560**

Grades 10-12

One Credit/One Semester

Core 40, AHD, and THD course

Prerequisite: Physical Education I and II

Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in specific areas. A minimum of two of the following should be included:

1. Health-related fitness activities (cardio respiratory endurance, muscular strength and endurance, flexibility and body composition).
2. Team sports
3. Individual or dual sports
4. Aquatics
5. Outdoor pursuits

It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Classes are coeducational unless the activity involves bodily contact or groupings are based on an objective standard of individual performance developed and applied without regard to gender. A maximum of six credits can be earned provided that there is no course or skill level duplication.

#### **The following are offered electives:**

##### **Elective Physical Education/Weights and Conditioning**

Advanced PE/Weight training is a class designed for students on athletic teams and/or students who are serious about improving their muscular strength, agility, flexibility, coordination and overall fitness through various conditioning routines. The class is conducted using the most up-to-date training techniques and demands a high level of physical exertion from the participants. Instruction is given on the proper lifting techniques, safety and spotting, core training, flexibility training, and agility and coordination development. Students rotate through several lifting stations and will be required to workout 4 days a week. Wednesdays are used for agility training, core training, and flexibility and coordination development involving non-weight room activities. The Wednesday workout may involve any or all of the following: Plyometrics, form running techniques, pool workouts, competitive relays and/or games, agility and coordination activities. \*Only those students that are interested in working towards achieving a very high level of fitness are encouraged to enroll in this class.

##### **Elective Physical Education/Aquatic Instructor Aide (Approval of Instructor Required)**

The Aquatics Aid class is designed to allow upper level high school students (grades 10-12) to interact with elementary students at all levels of swimming ability. Students will understand the importance of organization and proper supervision as it relates to water safety and instruction of young, inexperienced swimmers. Students need to have a basic understanding of lead up skills to actual stroke practice, as this is the primary focus of instruction for the elementary students. This is not a Life Guarding or Water Safety Instructor class; there are no certifications, but

students interested in pursuing these certifications are encouraged to take this class to develop their leadership and organizational skills. Responsibility, participation, and interactions with the elementary students will be the main criteria used to evaluate student performance. Safety is the number one concern, so students must display a level maturity and responsibility that is demanded for proper supervision and instruction. Students will be required to dress in appropriate swim wear and get in the water daily to demonstrate or lead practice of the lead-up skills. Non-dresses are not acceptable and may lead to withdrawal failure at the discretion of the instructor.

### **Advanced PE – Competitive Games Class**

This class builds on the skills developed in individual and team games from the junior high and 9<sup>th</sup> grade by placing students in various competitive situations that require team work, cooperation, strategy, and a high degree of exertion. Because of the physical demands of the class, requiring vigorous activity and full participation, only those students who are interested in achieving a very high level of fitness and skill competency should enroll. A great deal of time will be spent on overall conditioning, including running form, flexibility, agility, and coordination. Warm-up and pre-game-skill development activities will be strenuous to fully prepare students for the competitive nature of the individual and team games in which students will be required to participate. Team and individual games and competitions will be seasonally adjusted to reflect the high school extracurricular athletic schedule. (ie. Flag/touch football, soccer, volleyball, and cross country in the fall; basketball, swimming, and wrestling in the winter; and track and field, baseball, and softball in the spring). These are just some of the examples of competitive games in which students might participate.

\*As this is an advanced elective course, non-dresses and/or non-participation will not be tolerated and in excess may lead to the removal of the student and failing grade at the discretion of the instructor.

\*Students will be required to dress in “normal” workout clothes, and body piercing must be either covered or removed for participation in this class at the discretion of the instructor.

## Mathematics

The general goal of the mathematics curriculum is to produce a student who can reason logically, compute accurately, and solve the mathematical problems of everyday life. More specialized goals are to provide a basis for advanced study of mathematics and to provide courses necessary to meet the entrance requirements of institutions of higher education.

- It is recommended that a student take Algebra I, Geometry, and Algebra II in that order. With the approval of the guidance counselor and the mathematics department, Geometry and Algebra II can be taken simultaneously.
- The Integrated Math series combines the concepts of Algebra I, Geometry, and Algebra II. This course will be offered to the slower learner and will be taught at a pace that allows lower level students to succeed.
- It is strongly recommended that a student who fails second semester of Algebra I, Geometry, or Algebra II take the first semester over for no credit prior to retaking the semester that was failed.
- A student who is doing unsatisfactory work in Algebra I may be transferred to Integrated Math I during or at the end of the first nine weeks. This transfer may take place provided that: 1) the teacher believes the student is incapable of handling the material, 2) the parent of the student agrees to the transfer, 3) the size of the class to which the student is being transferred has been considered, and 4) the nine weeks grade is determined based on the percent of time spent in each class.
- With the exception of the above, any student withdrawing from any class after the first nine weeks of the semester should receive an F for the semester's grade.

### **Advanced Mathematics, College Credit 2544**

Grades 11-12

One Credit/One Semester – May be offered for successive semesters

Core 40, AHD, and THD course

Prerequisites: Algebra I, Geometry, and Algebra II (or completion of Integrated Math III)

Advanced Mathematics, College Credit is a title covering any advanced mathematics course offered for credit by an accredited postsecondary institution through an adjunct agreement with a secondary school or any other postsecondary mathematics course offered for dual credit under the provisions of 522 IAC 6-10.

Example: Advanced Mathematics, CC/Math 136 College Algebra Ivy Tech

Advanced Mathematics, CC/Math 137 Trigonometry Ivy Tech

### **Algebra I 2520**

Grades 9-12

Two Credits/Two Semesters

Core 40, AHD, and THD course

Algebra I provides a formal development of the algebraic skills and concepts necessary for students who will take other advanced college-preparatory courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. The concept of function is emphasized throughout the course. Topics include: properties of real numbers, solution sets, basic operations with polynomials,

solving quadratic equations and systems, use of exponents, and introductory topics from statistics and probability.

### **Algebra I (For Eighth Grade) 2520**

Prerequisite: 7<sup>th</sup> Grade Honors Math or B or higher each semester of Math 7

This course is the same as Algebra I for high school. Students will be allowed in on the recommendation of their 7<sup>th</sup> grade teacher and parent approval. The student must earn an A or B for both semesters to take geometry as a freshman. The students may repeat the course as a freshman if the grades are not high enough for Geometry. High School Credit will be given. A student may be returned to eighth grade math at the end of the first nine weeks if the teacher feels they are incapable of handling the material. If the student needs to be returned earlier, their graded will be based on work in both classes.

### **Algebra II 2522**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Algebra I and Geometry with a C- or better in both

Algebra II is a course which expands on the topics of Algebra I and provides further development of the concept of a function. The expanded topics of the course include the theorems and algorithms of algebra; polynomials and polynomial functions; rational exponents; the complex numbers, sequences, and series; the properties and graphs of conic sections; permutations and combinations; matrices; and exponential and logarithmic functions.

### **Calculus AP (Advanced Placement) 2526**

Grade 12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisites: Algebra I, Geometry, Algebra II, and Pre-calculus with a C- or higher each semester of pre-calculus

Calculus is a course which provides students with the content that has been established by the College Board. Generally, topics include limits, continuity, derivatives, definite integrals, and techniques of integration involving rational, trigonometric, logarithmic, and exponential functions. This course also includes applications of the derivative, the integral, and the theory of calculus. The use of graphing technology is required.

### **Discrete Mathematics 2530**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: Algebra I, Geometry, and Algebra II (or completion of Integrated Math III)

Discrete mathematics is an umbrella of mathematical topics. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Topics include counting techniques, matrices, recursion, graph theory, social choice, linear programming, and game theory. Technology, such as computers and graphing calculators, should be used frequently.

## **Geometry 2532**

Grades 9-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Algebra I with a C-or better or recommendation of the teacher

Geometry provides students with experiences that deepen the understanding of shapes and their properties. Deductive and inductive reasoning as well as investigative strategies in drawing conclusions are stressed. Properties and relationships of geometric figures include the study of geometric figures include the study of: angles, lines, planes, congruent, and similar triangles, trigonometric ratios, polygons, and circles and spatial drawings. An understanding of proof and logic is developed. Use of graphing calculators and computer drawing programs is encouraged.

## **Integrated Math I 2554**

Two Credit Course based on Indiana's Academic Standards for Integrated

Math I

Core 40 course with standards defined

The Integrated Mathematics series teaches the topics of Algebra I, Geometry, and Algebra II. The content is organized so that each course is taught at each level of the series. Integrated I introduces the Algebraic topics of expressions, equations, inequalities, systems of equations and graphing. The Geometric topics of coordinate geometry, similarity, area, solid geometry, and trigonometric ratios are presented. Inductive reasoning, probability, statistical graphs, and real world models are also emphasized.

## **Integrated Math II 2556**

Two Credits

Core 40 Course with Standards Defined

Integrated Mathematics II has a stronger geometric and reasoning emphasis. The student studies inductive and deductive reasoning, coordinate geometry in two and three dimensions, postulates and theorems in algebra and geometry. Formal and informal proofs are introduced as well as flow proofs. Algebra topics include those learned in Integrated Mathematics I and indirect variation, complex numbers, the binomial theorem and rational and cubic equations. Matrices, special right triangles, probability, Pascal's triangle and binomial experiments are also introduced.

## **Integrated Math III 2558**

Two Credits

Core 40 Course with Standards Defined

Integrated mathematics III continues the study of Algebra I, Geometry, and Algebra II. The study of functions includes radical, exponential, logarithmic, and inverse and trigonometric functions. Geometric topics taught in Integrated I and II are extended and circles are introduced. Also studied are sequences and series, polar coordinates, vectors and parametric equations. The probability and statistics topics include standard deviation, normal distribution, conditional probabilities and expected values. Discrete mathematics topics of algorithms, finite graphs and linear programming are also introduced.

**Pre-calculus/Trigonometry 2564**

Grades 11-12

Two Credits/Two Semesters

Core 40, AHD, and THD course

Prerequisites: Algebra I, Geometry and Algebra II (C- or higher in Algebra II or Integrated Math III)

Pre-calculus is an advanced mathematics course that covers a variety of topics necessary in preparing for calculus. Linear, quadratic, polynomial, exponential, and logarithmic relations and functions are developed algebraically and graphically. Trigonometric functions, equations, applications, and identities, as well as polar coordinates, complex numbers, and sequences and series are also studied. The use of graphing calculators is an integral part of the class with emphasis on problem solving and data analysis.

**Probability and Statistics 2570**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: Algebra I, Geometry, and Algebra II (or completion of Integrated Math III)

Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Topics include: descriptive statistics, probability, and statistical inference. 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 calculators and computer programs is encouraged.

## Miscellaneous Electives

### **Cadet Teaching 0502**

Grade 12

One Credit/One Semester for one or two semesters

Core 40, AHD, and THD elective course

This elective course provides students in grade 12 organized exploratory teaching experiences in Kindergarten through Grade 9. All teaching experiences should be preplanned by the high school Cadet Teaching Experience teacher-trainer and the cooperating teacher(s) who are interested in supervising prospective teachers and providing them with pre-training experiences in one or more classes. This course provides a balance of class work relating to:

- Classroom organization
- Classroom management
- The curriculum and instructional process
- Observations of teaching
- Instructional experiences

Study topics and background reading provide the cadets information concerning the teaching profession and the nature of the cadet teaching assignments. Evaluation is based upon the cadet teacher cooperation, day-to-day practical performance, and class work including a cadet's potential ability to teach. The total workload of the Cadet Teaching course is comparable to those for other subjects in the high school curriculum.

### **Peer Tutoring 0520**

Grades 11-12

One credit/One Semester for one or two semesters

Core 40, AHD, and THD elective course

Peer Tutoring provides high school students with an organized exploratory experience to assist students in kindergarten through grade twelve (K-12), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences to explore career options in related fields. Peer Tutoring experiences are preplanned by the teacher trainer and any cooperating teacher under whom the tutoring is to be provided. It must be conducted under the supervision of a licensed teacher. The course provides a balance of class work relating to the development of and use of: listening skills, communication skills, facilitation skills, decision-making skills, and teaching strategies.

## Science

### **Advanced Science, College Credit (Zoology) 3090**

Grades 11-12

Two Credit/Two Semester

Core 40, AHD, and THD Course

Advanced science, college credit is a title that covers any science course offered for credit by an accredited postsecondary institution through an adjunct agreement with a secondary school or any other postsecondary science course offered for dual credit under the provisions of 511 IAC 6-10.

### **Advanced Science, Special Topics (Genetics) 3092**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: A "C" or better in Biology I and Algebra I

During this one semester course, students will concentrate on one of the units in general biology - genetics. DNA, RNA, protein synthesis, mitosis, and meiosis will be reviewed and expanded upon. The biotechnology unit will cover aspects of this growing field, including genetically engineered products, gene therapy, and DNA fingerprinting. Problems involving the various patterns of inheritance will be solved by using pedigrees, Punnet squares, and the laws of probability. Emphasis is on human genetics. Genetic disorders will be studied along with genetic screening and counseling.

### **Advanced Science, Special Topics (Environmental Science) 3092**

Grades 11-12

One Credit/One Semester

Core 40, AHD, and THD Course

Prerequisites: A "C" or better in Biology I and Chemistry I

This course offers the opportunity to study various Earth processes and the interrelationships between human activities and the environment. Topics to be covered include energy consumption, sustainable resources, global warming, water and air pollution, waste management, impacts of deforestation on biodiversity, and other environmental changes occurring on both a local and global scale. The course will utilize group, lab and field experiences pertaining to energy conservation, chemical toxicology, river/stream systems, pond morphology, design of private water and sewage systems, evaluation of solar/wind power potential, solid waste/composting, and evaluating the distribution of environmental contaminants.

### **Anatomy and Physiology 5276**

Grades 11-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisites: Biology I (Required), Chemistry, Introduction to Health Care Systems (Recommended)

Anatomy and Physiology is a course in which students investigate and apply concepts associated with human anatomy and physiology. Concepts covered include the process of homeostasis and

the essentials of human function at the level of genes, cells, tissues, and organ systems. Students will understand the structure, organization, and function of the various components of the healthy human body in order to apply this knowledge in all health-related fields.

This course should include ample laboratory experiences that illustrate the application of the standards to the appropriate class, tissues, organs, and organ systems. Dissection is both appropriate and necessary. Students should be able to use basic laboratory equipment, such as microscopes, balances, and pipettes.

### **Biology I 3024**

Grades 9-12

Two Credits/Two Semesters

Core 40, AHD, and THD course

Students learn:

- Ecology – all organisms are interdependent with other organisms and the nonliving parts of their environment; the human population has an increasing effect on ecosystems; all energy in the biosphere originates from the sun and passes in and out of the living and non-living parts of the biosphere.
- Cells – all living things are made of cells, which are made of non-living materials; all activity in organisms originates at the cellular level.
- Genetics – the arrangement of molecules in DNA contributes to the variety of organisms on the planet; the sequences of molecules determines the shape of a protein, and consequently its function; genetic material passes from generation to generation through sexual reproduction by re-combinations of parental DNA; change in structures.
- Evolution – genetic diversity has increased since the beginning of life on this planet due to variations in DNA; these variations can accumulate gradually by physical separation of populations or rapidly by severe environmental changes; the more similar the amino acid sequences of two organisms, the more closely related they are.
- How Science is Done – scientists work in a variety of ways; a large body of evidence is required before an idea can be accepted as true, and even then it may take a long period of time for an idea to be accepted; examples of struggles of scientists include Louis Pasteur, Charles Darwin, Stephen Jay Gould, Rachel Carson, Farley Mowat, James Watson, Francis Crick, Rosalind Franklin, Gregor Mendel, and Louis Leakey.

### **Biology II 3026**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Biology I

Biology II is an advanced laboratory, field, and literature investigations-based course. Students enrolled in Biology II examine in greater depth the structures, functions, and processes of living organisms. Students also analyze and describe the relationship of Earth's living organisms to each other and to the environment in which they live. In this course, students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of the unifying themes of biology to biological questions and problems related to personal and community issues in the life sciences.

### **Biology AP (Advanced Placement) 3020**

Grades 11-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisites: Biology I and Chemistry I

Biology, Advanced Placement is a course based on the content established 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.

### **Chemistry I 3064**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Completion of Algebra I with a C or better and enrollment in Geometry or higher level math course

Chemistry I allows students to synthesize useful models of the structure of matter and the mechanisms of its interactions through laboratory investigations of matter and its chemical reactions. Students have opportunities to:

1. Gain an understanding of the history of chemistry
2. Explore the uses of chemistry in various careers
3. Cope with chemical questions and problems related to personal needs and social issues
4. Learn and practice laboratory safety

### **Chemistry II 3066**

Grades 11-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Chemistry I and Algebra II

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

### **Chemistry AP (Advanced Placement)**

Grade 12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisites: Chemistry I, Algebra II, and Pre-calculus/Trigonometry

Chemistry AP is a course based on the content established by the College Board. The content includes structure of matter: atomic theory and structure, chemical bonding, molecular models,

nuclear chemistry; states of matter: gases, liquids, solids, and solution; and reactions: reaction types, stoichiometry, equilibrium, kinetics, and thermodynamics. A comprehensive description of this course can be found on the College Board AP Central course Description web page at: <http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html>

### **Earth and Space Science 3044**

Grades 9-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

This class investigates the earth and its place in the universe – from the beginning of the universe and the formation of our solar system to the processes that formed our planet and the forces that have shaped it ever since. The interconnecting forces (gravity, radiation, matter, and energy) that link the objects in the universe and our planet are investigated using text, lab work, and other field work. Topics studied include rocks and minerals, Earth structure (internal), plate tectonics (mountain building, earthquakes, and volcanoes), hydrosphere (surface, underground, and atmosphere), weathering (transporting), Earth's atmosphere, astronomy (planetary motion, solar system, galaxies, stars, etc.), and geologic history. The history of Earth sciences and the people who helped advance them are also covered in the text as well as today's careers in the various fields of Earth sciences (meteorology, geology, etc.). How advances in the Earth sciences have impacted society is also studied.

### **Physics I 3084**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisites: Completion of Algebra I with a C or better

Physics I is a physics course in which students look conceptually at physics concepts and phenomena. Students study mechanics, waves, heat, light, electricity, magnetism, matter, energy, atoms, and subatomic physics. Students study these topics through exploration laboratory investigations, class discussions, class questions, and individual questions. Students are encouraged to make predictions about new situations based on their observations and study of physics concepts and phenomena. Students look at how physics related to Earth/Space Science, Chemistry, and Biology, as well as how many of the physics concepts were developed through history. Students also are given opportunities to see how physics is related to various careers as concepts are discussed in class.

### **Physics AP (Advanced Placement) 3080**

Grades 11-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Prerequisite: Physics I

This course follows the curriculum established by the College Board of AP Physics. The Course covers Newtonian Mechanics, Fluid Mechanics, Thermal Physics, Electricity, Magnetism, Waves, Optics, Atomic and Nuclear Physics. The course will also provide an opportunity for students to perform laboratory experiments in line with the course content. The culmination of the course will be the AP examination.

### **Science Research, Independent Study 3008**

Grades 10-12

Two Credits/Two Semesters

Core 40, AHD, and THD

Prerequisite: Two credits in Core 40 and AHD science coursework (this course may be taken concurrently with a Core 40/AHD science course)

Other requirements: Admission to the course will be further based on students' GPA and an application and interview process.

Science Research, Independent Study is a course that provides students with unique opportunities for independent, in-depth study of one or more specific scientific problems. Students develop a familiarity with the laboratory procedures used in a given educational, research, or industrial setting or a variety of such settings. Students enrolled in this course will complete a science fair project to be exhibited at a regional science fair and/or state science symposium, an end-of-course project, such as a scientific research paper, or some other suitable presentation of their findings.

## **Social Studies**

### **Economics 1514**

Grade 12

One Credit/One Semester

Core 40, AHD, and THD Course

Economics is the social studies course that examines the allocation of scarce resources and their alternative use for satisfying human wants. This course analyzes the economic reasoning used as consumers, producers, savers, investors, workers, voters, and government agencies make decisions. Key elements of this course include a study of scarcity and economic reasoning, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economics stabilization, and trade. Students will explain that because resources are limited, people must make choices in all aspects of daily life and demonstrate understanding of the role that supply, demand, prices, and profits play in a market economy. Students will examine the functions of government in a market economy and study market structures, including the organization and role of businesses. Students will understand the role of economic performance, money stabilization policies, and trade of the United States. While the economic way of thinking involved scientific tools and techniques, economics remains a social science, which endeavors to systematically study the behavior of people, institutions, and societies. Students will job shadow in a career area of their choice, participate in a stock market simulation, and complete a unit, involving opening a checking account.

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

Grade 9-12

Two Credits/Two Semesters

Core 40, AHD, and THD Course

Geography and History of the World is designed to enable students to use the geographic “way of looking at the world” to deepen their understanding of major global themes that have manifested themselves over time – for example, the origin and spread of world religions, exploration, conquest, imperialism, urbanization, and innovations and revolutions.

In Geography and History of the World, specific geographic and historical skills and concepts of historical geography are used to explore these global themes primarily, but not exclusively for the period of beginning in 1000 CE. The skills are grouped into five sets, each representing a fundamental step in a comprehensive investigative/inquiry procedure. They are forming research questions, acquiring information by investigating a variety of primary and secondary courses, organizing information by creating graphic representations, analyzing information to determine and explain patterns and trends, and presenting and documenting findings orally and/or in writing. The historical geography concepts used to explore the global themes in Geography and History of the World include change over time, origin, diffusion, physical systems, cultural landscapes, and spatial distribution and interaction. By using these skills, concepts and the processes associated with them, students are able to analyze, evaluate, and make predictions about major global developments. Geography and History of the world is designed to nurture perceptive, responsible citizenship, encourage and support the development of critical thinking

skills and lifelong learning, and to help prepare Indiana students for employment in the 21<sup>st</sup> Century.

### **Psychology 1532**

Grade 11-12

One Credit/One Semester

Core 40 and AHD Course

Psychology is a scientific study of mental processes and behavior. The standards have been divided into six content areas. These areas include Scientific Methods, Developmental, Cognitive, Personality, Assessment and Mental Health, Socio-cultural and Biological Bases of Behavior. In the Scientific Methods area, students will understand the development of psychology as a science by describing the scientific method, explaining research strategies, and identifying ethical issues. In developmental psychology, students will explain the process of how humans grow, learn, and adapt to their environment. In Cognitive aspects of psychology, students will understand how organisms adapt to their environment through learning, information processing, and memory. In Personality, Assessment and Mental Health topics, students will recognize that personality is the distinctive and relatively stable pattern of behaviors, thoughts, motives, and emotions that characterize an individual. They will also understand the factors that contribute to mental health, stress, and mental illness, and identify approaches for treatment of mental health problems. In Socio-cultural dimensions of behavior, students will understand the topics, such as conformity, obedience, perceptions, attitudes, and the influence of the group on the individual. In the Biological Bases of Behavior, students will investigate the structure, biochemistry, and circuitry of the brain and the nervous system to understand their roles in affecting behaviors. This course is recommended for academic seniors. Psychology as presented in this course is set for college freshman level. A research paper using APA format, presentations, and projects are required for this course.

### **United States Government 1540**

Grade 12

One Credit/One Semester

Core 40 and AHD Course

Prerequisite: United State History

United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Participation by citizens is stressed. Students will understand the nature of citizenship, politics, and government with an understanding of those rights and responsibilities. Students will develop an understanding of the Constitution and how it affects their lives. Students will defend positions on political issues with sound reasoning and evidence. Current issues as relating to the political system will be evaluated and discussed as they relate to the political system and process. All students must have taken United States History before taking this course.

## **United State History 1548**

Grade 11

Two Credits/Two Semesters

Core 40, AHD, and THD Course

United States History is a two-semester course, which builds upon concepts developed in previous studies of American History. Students in this course are expected to identify and review significant events, persons, and movements in the early development of the nation. After providing such a review, the course gives major emphasis to the interaction of key events, persons, and groups with political, economic, social, and cultural influences on state and national development in the late nineteenth, twentieth, and early twenty-first centuries. Students are expected to trace and analyze chronological periods and examine the relationship of significant themes and concepts in Indiana and United States History. They are expected to develop skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, and analysis and interpretation, and research that use primary and secondary sources found at local and state libraries, including electronic sources. Opportunities are given to develop inquiry skills by gathering and organizing information from primary source material and a variety of historical and contemporary sources, accounts, and documents that provide diverse perspectives. Investigation of themes and issues include cultural pluralism and diversity of opinion in American Society. Students should exercise their skills as citizens in a democratic society by engaging in problem-solving and civic decision-making in the classroom, school and community settings. Students are required to do considerable cooperative work, group projects, and assignments. A research paper using the APA format, oral and visual reports, will be required for completion of second semester.