# Mt. Vernon Senior High School Course Selection and Curriculum Planning Guide

2024-2025



"EXPECT EXCELLENCE"

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# **GRADUATION REQUIREMENTS**

# **Graduation Pathways**

With the passage of Graduation Pathways, students are now able to individualize their graduation requirements to align to their postsecondary goal. No longer must all students fit into the same academic mold, but rather, they can choose the options that best meet their postsecondary needs and aspirations.

Students can create pathways that serve their educational interests and prepare them for postsecondary educational and career opportunities. Overall, this policy ensures that students are truly prepared to be successful in whatever they want to pursue after high school. Students must satisfy at least one option from each of the three areas in order to graduate.

Graduation Requirements	Graduation Pathway Options
High School Diploma     (Students must complete the course requirements of <i>one</i> of the diploma types in column two. See pp. 3-5 for diploma requirements.)	<ul> <li>Core 40 designation</li> <li>Academic Honors designation</li> <li>Technical Honors designation</li> <li>General designation.</li> </ul>
2) Learn and Demonstrate Employability Skills (Students must complete at least one of the options in column two. See pp. 5-6 for employability skills requirements.)	Learn employability skills standards through locally developed programs. Employability skills are demonstrated by one the following:  • Project-Based Learning Experience  • Service-Based Learning Experience  • Work-Based Learning Experience
3) Postsecondary-Ready Competencies (Students must complete at least one of the options in column two.)	<ul> <li>Honors Designation: fulfill all requirements of either the Academic or Technical Honors designation</li> <li>ACT: College-ready benchmarks (18 in English or 22 in Reading; 22 in Math or 23 in Science)*</li> <li>SAT: College-ready benchmarks (480 EBRW; 530 Math)*</li> <li>ASVAB: Earn at least a minimum AFQT score of 31 to qualify for placement into one of the branches of the US military</li> <li>State- and Industry-recognized Credential or Certification</li> <li>Federally-recognized Apprenticeship</li> <li>Career-Technical Education Concentrator is a student who earns a C average in three courses (6 credits) within a particular career pathway. See page 7 for a list of Career Pathways offered at MVHS.</li> <li>AP/IB/Dual Credit/Cambridge International courses or CLEP Exams: Must earn a C average or higher in at least three courses</li> <li>Locally Created Pathway that meets the framework from and earns the approval of the State Board of Education.</li> </ul>

# **DIPLOMA REQUIREMENTS**

All students must earn a minimum of 46 credits in order to meet the approved graduation requirements of Mt. Vernon Senior High School.

Students will have the option of choosing between four diplomas: General, Core 40, Core 40 with Academic Honors, or Core 40 with Technical Honors. Core 40 is the recommended high school curriculum for all students. All but the general diploma have the criteria for meeting the Core 40 Diploma as a part of their requirements. Students choosing to earn a General Diploma must have parents or guardians sign a form agreeing to give the students permission to do so.

# **GENERAL DIPLOMA**

Required Subjects	Credits	
Language Arts (English 9, 10, 11, 12)	8	
Social Studies		
U.S. History	2	
Economics	1	
Government	1	
Any other Social Studies elective	2	
Mathematics		
Algebra	2	
Any other Mathematics course <sup>a</sup>	2	
Note: Students are required to earn two (2) credits in a math course or a quantitative reasoning (QR) course during their junior or senior year. Courses meeting the QR requirement are on page 5.		
Science		
Biology	2	
Any other Science course	2	
Physical Education	2	
Health and Wellness <sup>b</sup>	1	
Technology Competency <sup>C</sup>	2	
Personal Financial Responsibility	1	
Total Required Credits	28	
Total Elective Credits	18	
Total Required for Graduation	46	

<sup>&</sup>lt;sup>a</sup>Algebra I Lab only counts as a mathematics credit for the General Diploma.

<sup>&</sup>lt;sup>b</sup>The Health and Wellness credit may be waived if a student's program includes three (3) credits from the following: Family and Consumer Science Courses: Adult Roles and Responsibilities, Child Development, Human Development and Family Wellness, Interpersonal Relationships, or Nutrition and Wellness.

<sup>&</sup>lt;sup>c</sup>Courses meeting the Technology Competency are listed on page 4.

# **INDIANA CORE 40 DIPLOMA**

Required Subjects	Credits	
Language Arts (English 9, 10, 11, 12)	8	
Social Studies		
World History and Civilization or Geography and History of the world	2	
U.S. History	2	
Economics	1	
Government	1	
Mathematics		
Algebra I	2	
Algebra II	2	
Geometry	2	
Note: Students must take a math course or a quantitative reasoning (QR) course each year. Courses meeting the QR requirement are on page 5.		
Science		
Biology I or Honors Biology I	2	
Chemistry I, Physics I, or Integrated Chemistry/Physics	2	
Any other Core 40 Science course	2	
Physical Education	2	
Health and Wellness <sup>a</sup>	1	
Technology Competency <sup>b</sup>	2	
Personal Financial Responsibility	1	
Total Required Credits	32	
Total Elective Credits	14	
Total Required for Graduation	46	

<sup>&</sup>lt;sup>a</sup>The Health and Wellness credit may be waived if a student's program includes three (3) credits from the following: Family and Consumer Science Courses: Adult Roles and Responsibilities , Child Development, Human Development and Family Wellness, Interpersonal Relationships, or Nutrition and Wellness.

# **COURSES MEETING THE TECHNOLOGY COMPETENCY**

Computer Science Essentials Computer Science Principles Digital Applications and Responsibility Interactive Media Principles of Digital Design Technical Theatre I,II

<sup>&</sup>lt;sup>b</sup>Courses meeting the Technology Competency are listed below.

# COURSES MEETING THE QUANTITATIVE REASONING REQUIREMENT

Advanced Life Science: Foods (5072) Agribusiness Management (5002) Business Math (4512) Chemistry I (3064) Chemistry II (3066) Computer Science I (Essentials) (4801) Economics (1514) Integrated Chemistry & Physics (3108) Personal Financial Responsibility (4540) Physics I (3084)

# **CORE 40 WITH ACADEMIC HONORS**

In addition to the requirements for the Core 40 Diploma, students must also meet the following requirements:

- 1. Earn two (2) additional Core 40 mathematics credits
- 2. Earn six (6) credits in one World Language or four (4) credits each in two World Languages
- 3. Earn two (2) Core 40 fine arts credits
- 4. Earn a grade of "C" or above in courses that will count toward the diploma
- 5. Have a grade point average of "B" (3.0) or above
- 6. Complete one of the following:
  - a. Earn four (4) credits in two (2) or more Advanced Placement courses and take corresponding AP exams
  - b. Earn six (six) verifiable transcripted college credits in dual credit courses
  - c. Earn two (2) credits in AP course and take corresponding AP exam and earn three (3) verifiable transcripted college credits in dual credit courses
  - d. Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence based reading and writing section
  - e. Earn an ACT composite score of 26 or higher and complete written section
  - f. Earn four (4) credits in International Baccalaureate courses and take corresponding IB exams

# **CORE 40 WITH TECHNICAL HONORS**

In addition to the requirements for the Core 40 Diploma, students must also meet the following requirements:

- 1. Earn six (6) credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
  - a. Pathway designated industry-based certification or credential
  - b. Pathway dual credits from the approved dual credit list resulting in six (6) transcripted college credits
- 2. Earn a grade of "C" or better in courses that will count toward the diploma
- 3. Have a grade point average of a "B" (3.0) or better
- 4. Complete one of the following:
  - a. Any one of the options (A F) of the Core 40 with Academic Honors
  - b. Earn the following scores or higher on WorkKeys: Reading for Information Level 6, Applied Mathematics Level 6, and Locating Information Level 5.
  - c. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.
  - d. Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80.

<sup>\*</sup>Several SICTC courses also count as quantitative reasoning courses.

# **EMPLOYABILITY SKILLS REQUIREMENTS**

As part of the Employability Skills Requirements students must fulfill requirements for Project-Based Learning, Service-Based Learning or Work-Based learning.

# Project-Based Learning Requirements:

To fulfill the Project-Based Learning employability standard a student must have a signed verification from a teacher or sponsor and then be approved by the school's Graduation Pathway Committee. Eligible projects must contain the following elements:

- Addresses a meaningful problem
- Sustained inquiry
- Authenticity
- Reflection
- · Critique and Revision
- A final product

# Service-Based Learning Requirements:

To fulfill the Service-Based Learning employability standard a student must have a signed verification from a teacher, coach, or sponsor that they achieved the following:

- Met the requirements of a service-based club for 3 years or
- Met the requirements of 2 service-based clubs for 2 years or
- Met the requirements of an athletic team for 3 years or
- Met the requirements of 2 athletic teams for 2 years or
- Met the requirements of marching band for 3 years or
- Met the requirements of choir for 3 years or
- Met the requirements for either the play or musical for 2 years or
- Met the requirements for the play and musical for 1 year or
- Participated in an out-of-school service organization approved by the school's Graduation Pathway Committee.

# Work-Based Learning Requirements:

To fulfill the Work-Based Learning employability standard a student must have a signed verification from an employer or teacher that they achieved the following:

- Minimum of 100 hours of employment with one employer or
- Completed the school's Biology III program or
- Completed the school's Work-Based Learning course or
- Completed one year at the Southern Indiana Career and Technical Center or
- Completed the Construction Trades I and/or II course or
- Completed one year at the Southern Indiana Career and Technical Center or
- · Completed the JAG program requirements or
- Completed the school's Peer Facilitating Course

# **MVHS CAREER PATHWAYS**

MVHS has implemented a variety of career pathways to prepare students for career and post-secondary opportunities after graduation. Completion of one of the career pathways listed below will fulfill the Postsecondary-Ready Competency requirement of Graduation Pathways. Students must earn a minimum GPA of 2.0 in the pathways courses. (Additional career pathways can be completed by attending the SICTC.)

# Agriculture Education

# Ag Mechanical and Engineering

- Principles of Agriculture
- Agriculture Power, Structures, and Technology
- Agriculture Structures Fabrication and Design

# Agriscience - Plants or Animals

- Principles of Agriculture
- Animal Science or Plant and Soil Science
- Food Science; Advanced Life Science, Animals; Advanced Life Science, Plants and Soils; Advanced Life Science: Foods

# Horticulture

- Principles of Agriculture
- Horticulture Science
- Greenhouse and Soilless Production

# Veterinary Science

- Principles of Veterinary Science
- Veterinary Science
- Advanced Life Science, Animals

# Business, Marketing, and Information Technology

# Accounting

- · Principles of Business Management
- Accounting Fundamentals
- Advanced Accounting

# Digital Design

- Principles of Digital Design
- Digital Design Graphics
- Professional Photography and Videography

# Marketing and Sales

- · Principles of Business Management
- Marketing Fundamentals
- Strategic Marketing

# Family & Consumer Sciences

# **Culinary Arts**

- Principles of Culinary and Hospitality
- Nutrition
- Culinary Arts

# **Education Careers**

- Principles of Teaching
- Child and Adolescent Development
- Teaching and Learning

# Science

# Biomedical Sciences & Technology

- Principles of Biomedical Sciences
- Human Body Systems
- Medical Interventions

# **Technology Education**

# Construction Trades - Carpentry

- Principles of Construction Trades
- Construction Trades: General Carpentry
- Construction Trades: Framing and Finishing

# Welding Technology

- Principles of Welding Technology
- Shielded Metal Arc Welding
- Gas Welding Processes

# **POSEY COUNTY SPECIAL SERVICES**

The Mt. Vernon Senior High School curriculum includes well developed programs for students with learning disabilities, mild mental handicaps, and emotional handicaps. The instructional program for each student is individually designed through specialized testing by the school psychologist and in consultation with the special services staff, regular classroom teachers, counselors, school administrators and parents. The progress and placement of each student is reviewed at least once each year through an annual case review.

# **FRESHMAN ACADEMY**

The Freshman Academy is a yearlong program that provides instruction in the areas of Algebra I, English 9, and Geography/History of the World. To increase engagement and success, incoming freshmen are connected to a select team of teachers who will work collaboratively and use instructional strategies to specifically address their students' individual needs. Students will attend academy classes everyday with peers who have similar class schedules and teachers. It is the mission of the Freshman Academy to make a smooth transition into high school and meet the rigorous standards implemented at Mount Vernon Senior High School. The Academy is designed to provide a solid foundation for future academic success in the core subjects of English, Mathematics, and Social Studies. The program provides the traditional ninth grade curriculum that meets both state and district standards. Academy teachers are committed to fostering a personal learning community while establishing relevancy and relationships within each academic area.

# **GUIDELINES AND RECOMMENDATIONS FOR COURSE SELECTIONS**

# Class Load Required

**All students must be in class for 8 periods.** Course selection should exceed the minimal requirements in the number and difficulty of credits. Students should keep their options open even though they feel they have arrived at a specific career choice. The difficulty of classes taken in high school is as important as grade point average; therefore, it is important to continue into the advanced level of skill-development classes.

# Course Drop/Add Policy

Dropping a class to enroll in another class may be approved up to and through the second official attendance record meeting of the class the student wishes to drop. Class changes within the same discipline (ex. Algebra to Pre-Algebra), after consultation between the counselor, teacher, parent/guardian and student, may occur beyond the third meeting of the course drop/add deadline.

Requests to drop a class for a study center may be made to the Counseling Department no later than the end of the sixth week of the semester without the penalty of a withdrawal/failure. Requests will be considered only if the student is currently enrolled in one (1) study center or less at the time of the request.

A student enrolled in an honors-level class may transfer to the same course on a non-honors level up until the last day of the first nine weeks of the semester without penalty. Any transfer beyond this date will result in the student receiving a withdrawal/failure (WU) grade for the semester.

# Course Retake Procedures

Students may be permitted to retake courses to improve low grades with teacher approval and available space. The following guideline should be considered:

- Previous grades will not be replaced or removed from the transcript and will continue to count in GPA and class ranking.
- Students can retake courses to restore Core 40 with Academic Honors diploma eligibility (all grades C or better.) However, these courses will still be governed by the above procedure. (i.e., they will not replace prior grades.)
- Retake grades will count in GPA and class rank computation.
- Course must be retaken in a regular classroom setting.

# Online Classes

Mt. Vernon Senior High School accepts credits earned through accredited programs. These classes may be taken to make up classes failed or for enrichment in subject areas not available at MVHS. Families are responsible for all costs associated with correspondence courses. See a counselor for more information.

# Civil Rights Policy

The following civil rights policy is adhered to for class enrollments as well as all other functions at Mt. Vernon Senior High School. "It is the policy of the MSD of Mt. Vernon to conform to the laws of the United States and not to discriminate with regard to one's race, color, religion, national origin, sex, age, ancestry, marital status, or handicap.

### Standardized Tests

Many colleges require students to take a college entrance exam to be admitted. College admission offices must compare students. Colleges use standardized tests as an indicator of the student's preparation for college classes and to evaluate how successful they may be in college.

All students will take the school-day SAT during their junior year. There is no cost to the student for this exam.

The PSAT is given in October each year. All freshmen, sophomores, and juniors will take the PSAT. Juniors with exceptional PSAT scores may be eligible for National Merit Scholarships and other scholarships available through the College Board.

# **FINE ARTS ACADEMY**

# Academy Description

The Fine Arts Academy is comprised of award winning students and faculty in music, theatre, and the visual arts. A commitment to academic excellence and the belief that through the arts, students find lifelong fulfillment is at the core of our teaching philosophy. Students are provided opportunities in instrumental and vocal music, musical theatre, acting, technical theatre, and traditional and digital visual arts. Upon graduation, students will be prepared for post-secondary endeavors and arts-related careers. The Fine Arts Academy provides the opportunity for students to participate in numerous events each year to further students' skills and artistic talents.

Mission Statement: "STUDENTS ARE AS UNIQUE AS THE ART THEY CREATE"

The Fine Arts Academy at Mt. Vernon Senior High School believes a student's education is enriched by experiences in the arts; because of their interdisciplinary nature, the arts influence all areas of academic study.

We believe an environment that acknowledges and empowers creative expression in its varied forms also fosters personal growth, maturity, and responsibility. The Fine Arts Academy provides an artist-scholar environment that addresses a variety of learning styles.

We believe the arts provide an opportunity for lifelong learning and participants in the arts are among the best representatives of our school and community.

# **COUNSELING PROCEDURES FOR COURSE SELECTION**

Current 9th, 10th, and 11th Grade Students

In late November, the course selection process for the next school year will begin. Four-year graduation plans will also be reviewed at this time. The steps and approximate dates for student scheduling are as follows:

A. November – February: Review course options and requirements with students. Counselors will meet with student to explain the online course request option. Individual conferences will be scheduled as needed to assist students in finalizing subject choices for both semesters of the upcoming school year. Parents/guardians of all students are invited to be present with the student for an enrollment conference. Ninth grade students will be making a tentative four-year plan for the remainder of high school.

- B. March May: After subject choices have been finalized, subject requests are counted and a master schedule of classes will be made for the upcoming school year. At this time a student may be contacted by his/her counselor to make an alternate choice due to insufficient enrollment in one of the classes selected or because two classes which were selected are offered the same period.
- C. August 1: Course schedules are available on Skyward. Students can request changes to their schedule.
- D. Beginning of School: Students will be given the opportunity to drop/add courses during the first four (4) days of school only. (See other drop/add policies on page 7)
- E. December: Students are given the opportunity to make limited changes on subject choices for Semester 2 if class sizes permit.

# Current 8th Grade Students

In February or March, high school counselors will meet with 8th grade students to facilitate course selections for the freshman year. A parent night will also held to give information on classes available and to answer any questions about class selections that parents or students may have. Parents/guardians are encouraged to contact the junior or senior high counselors to discuss subject choices for their son or daughter.

# INDIANA HIGH SCHOOL ATHLETIC ELIGIBILITY

To be eligible to participate in high school athletics according to standards adopted by the Indiana High School Athletic Association (IHSAA), a student must:

- 1. Be currently enrolled in at least six (6) full credit subjects. The IHSAA recognizes all subjects at Mt. Vernon High School as full credit subjects except freshman physical education when taken for the second time.
- 2. Have passed five (5) full credit subjects in the previous grading period if enrolled in seven (7) or fewer full credit subjects.
- 3. Have passed six (6) full credit subjects in the previous grading period if enrolled in eight (8) full credit subjects.

Semester grades take precedence in determining athletic eligibility.

# DIVISION I ACADEMIC REQUIREMENTS

To study and compete at a **Division I school**, you must earn 16 NCAA-approved **core-course credits**, earn a corresponding test score\* that matches your **core-course GPA** and submit your

final transcript with proof of graduation to the Eligibility Center.

# **CORE-COURSE REQUIREMENTS**

Earn 16 NCAA-approved core-course credits in the following areas:













4 years

3 years

2 years

1 year

2 years

4 years

For Division I, 10 of your 16 NCAA-approved core-course credits must be completed before the start of your seventh semester, including seven in English, math or science.

# QUALIFIER

As a Division I qualifier, you may practice, compete and receive an athletics scholarship during your first year of full-time enrollment at an NCAA Division I school.

- » Earn 16 NCAA-approved core-course credits in the right areas.
  - Complete 10 of your 16 NCAA-approved core-course credits, including seven in English, math or science, before the start of the seventh semester.
- Complete your 16 NCAA-approved core-course credits in eight academic semesters or four consecutive academic years from the start of ninth grade.
- » Earn a corresponding test score that matches your core-course GPA (minimum 2.3) on the Division I Sliding Scale.\*
- » Submit your final transcript with proof of graduation to the Eligibility Center.

# ACADEMIC REDSHIRT

As a Division I academic redshirt, you may practice during your first regular academic term and receive an athletics scholarship during your first year of full-time enrollment but may NOT compete during your first year of enrollment. You must pass either eight quarter or nine semester hours to practice in the next term.

- » Earn 16 NCAA-approved core-course credits in the right areas.
- » Earn a corresponding test score that matches your core-course GPA (minimum 2.0) on the Division I sliding scale.\*
- » Submit your final transcript with proof of graduation to the Eligibility Center.

<sup>\*</sup> More information regarding the impact of COVID-19 and test scores can be found at on.ncsa.com/COVID19\_Spring2023.





# DIVISION II ACADEMIC REQUIREMENTS

To study and compete at a Division II school, you must earn 16 NCAA-approved core-course credits, earn a corresponding test score\* that matches your core-course GPA and submit your final transcript with proof of graduation to the Eligibility Center.

# **CORE-COURSE REQUIREMENTS**

Earn 16 NCAA-approved core-course credits in the following areas:











ADDITIONAL COURSES (Any area listed to the left, world language or mondectring religion/philosophy)

3 years

2 years

2 years

3 years

2 years

4 years

# QUALIFIER

As a Division II qualifier, you may practice, compete and receive an athletics scholarship during your first year of full-time enrollment at an NCAA Division II school.

- » Earn 16 NCAA-approved core-course credits in the right areas.
- » Earn a corresponding test score that matches your core-course GPA (minimum 2.2) on the Division II sliding scale.\*
- » Submit your final transcript with proof of graduation to the Eligibility Center.

# PARTIAL QUALIFIER

If you have not met all of the Division II academic standards, you will be deemed a partial qualifier. As a partial qualifier, you may practice and receive an athletics scholarship, but may NOT compete, during your first year of full-time enrollment at an NCAA Division II school.

\* More information regarding the impact of COVID-19 and test scores can be found at on.ncaa.com/COVID19\_ Spring2023.







# **AGRICULTURE EDUCATION**

No agricultural background or experience is needed to enroll in Principles of Agriculture or Principles of Veterinary Science. Students are not required to join Future Farmers of America when enrolled in these two principles courses.

# PRINCIPLES OF AGRICULTURE (7117)

G7117A-G7117B

Grades 9-11

2 Credits (Full Year)

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

Prerequisite: None

# PRINCIPLES OF VETERINARY SCIENCE (7280) Grades 9-11

G7280A-G7280B 2 Credits (Full Year)

Principles of Veterinary Science is a two-semester course that provides students with an overview of the small and large animal veterinary industry which includes companion, food, and exotic animals. Principles of Veterinary Science will cover skills common to specific veterinary career topics such as animal care, veterinary assistant, veterinary technician, and veterinarian. Students will learn foundational veterinary knowledge for large and small animals which includes practical lab skills and common office practices.

Prerequisite: None

#### ADVANCED LIFE SCIENCE: FOODS (5072) G5072-G5073 2 Credits (Full Year) **Grades 11-12**

Advanced life Science: Foods is a two semester course that provides students with hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. This interdisciplinary science course integrates biology, chemistry, and microbiology in the context of foods and the global food industry.

Prerequisites: Principles of Agriculture, Food and Natural

Resources, Nutrition and Wellness, Biology, Chemistry or Integrated Chemistry/Physics

#### ADVANCED LIFE SCIENCE, ANIMALS (5070) G5070-G5071 Grades 11-12 2 Credits (Full Year)

Advanced life Science, Animals provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to history and trends in animal agriculture as related to animal welfare, husbandry, diseases and parasites, laws and practices relating to handling, housing, environmental impact, global sustainable practices of animal agriculture, genetics, breeding practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture.. **Prerequisites:** Principles of Agriculture or Principles of

Veterinary Science

#### **AGRIBUSINESS MANAGEMENT (5002)** G5002-G5003 **Grades 10-12** 2 Credits (Full Year)

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

Prerequisite: Principles of Agriculture.

### AGRICULTURE POWER, STRUCTURE AND TECHNOLOGY (5088) Grades 10-12

G5088-G5089 2 Credits (Full Year)

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

Greenhouse and Soilless Production provides an overview of

GREENHOUSE AND SOILLESS PRODUCTION (7114) G7114A-G7114B

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

Prerequisite: Principles of Agriculture

#### AG STRUCTURES FABRICATION AND DESIGN (7112) G7112A-G7112B **Grades 10-12** 2 Credits (Full Year)

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

Prerequisite: Principles of Agriculture

### ANIMAL SCIENCE (5008) Grades 10-12

G5008-G5009 2 Credits (Full Year)

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

Prerequisite: Principles of Agriculture

# FOOD SCIENCE (5102) **Grades 11-12**

**Grades 10-12** 

G5102-G5103 2 Credits (Full Year)

2 Credits (Full Year)

Food Science is a two semester course that provides students with an overview of food science and its importance. Introduction to principles of food processing, food chemistry and physics, nutrition, food microbiology, preservation, packaging and labeling, food commodities, food regulations, issues and careers in the food science industry help students understand the role that food science plays in securing a safe, nutritious and adequate food supply. A project-based approach is utilized along with laboratory, team building and problem solving activities to enhance student learning, leadership development, and career opportunities in the area of food science.

Prerequisite: Principles of Agriculture

### **HORTICULTURE SCIENCE (5132) Grades 10-12**

G5132-G5133 2 Credits (Full Year)

Horticulture Science is a two semester course designed to give students a background in the field of horticulture and its many career opportunities. It addresses the biology and technology involved in the production, processing and marketing of plants and its products. Topics covered include: reproduction and propagation of plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest and pest management. Students participate in a variety of activities to include extensive laboratory work usually in a school greenhouse, leadership development, and learning about career opportunities in the area of horticulture science.

Prerequisite: Principles of Agriculture

# NATURAL RESOURCES (5180) Grades 10-12

G5180-G5181 2 Credits (Full Year)

Natural Resources is a two semester course that provides students with a foundation in natural resources. Hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife and safety. Prerequisite Principles of Agriculture

PLANT AND SOIL SCIENCE (5170) Grades 10-12

G5170-G5171 2 Credits (Full Year)

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

Prerequisite: Principles of Agriculture

### **VETERINARY SCIENCE (7281) Grades 10-12**

G7281A-AG7281B 2 Credits (Full Year)

G5228

Veterinary Science is a two semester course that provides students with an in-depth look at the care, handling and maintenance of small animal species. The topics of the importance of small animals in our lives, the economic importance of the small animal industry, career opportunities and the skills needed for employment will be discussed in preparation for postsecondary education, employment in the job market, and personal growth.

Prerequisite: Principles of Veterinary Science

# Other Agriculture Courses Not Currently Offered

CTSO LEADERSHIP DEVELOPMENT **IN ACTION (5237)** Grades 10-12

G5237-G5238 2 Credits (Full Year)

Leadership Development in Action is a project-based course in which students integrate higher order thinking, communication, leadership, and management processes to conduct Career and Technical Student Organization (CTSO) leadership projects at local, state or national level. Each student will create a vision statement, establish standards and goals, design and implement an action plan and timeline, reflect on their accomplishments, and evaluate results. Authentic, independent application through CTSO student-directed programs or projects, internship, community based study, or in-depth laboratory experience is required. Research and development, interdisciplinary projects, and/or collaboration with postsecondary faculty, community agencies or organizations are appropriate approaches Membership in an Indiana recognized CTSO is required. Service learning experiences are highly recommended. Achievement of applicable Career and Technical Education (CTE), academic, and employability competencies will be documented through a required student portfolio. Prerequisites: A sequence of courses relevant to the student's

area of concentration; or permission of instructor by an application process

Note: May be taken an additional 2 semesters for 2 more credits

### LANDSCAPE MANAGEMENT (5136) **Grades 10-12**

G5136-G5137 2 Credits (Full Year)

Landscape Management is a two semester course that provides the student with an overview of the many career opportunities in the diverse field of landscape management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures of landscape construction, the determination of maintenance schedules, communications and management skills necessary in landscape operations and the care and use of equipment utilized by landscapers. Students will also participate in leadership development, career exploration activities in the area of landscape management.

Prerequisite: Horticulture Science

SUPERVISED AGRICULTURAL EXPERIENCE (5228) **Grades 11-12** 2 Credits (Full Year)

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students should experience and apply what is learned in the classroom, laboratory and training site to real-life situations. Students work closely with their agricultural science and business teacher(s), parents and/or employers to get the most out of the SAE program. This course can be offered each year as well as during the summer session. SAE may be offered as a Cooperative Education Program. Curriculum content and competencies should be varied so that school year and summer session experiences are not duplicated. Prerequisite: Introduction to Agriculture, Food and Natural Resources

#### SUSTAINABLE ENERGY ALTERNATIVES (5229) G5229-G5230 2 Credits (Full Year) **Grades 11-12**

Sustainable Energy Alternatives is a two semester course that broadens a student's understanding of environmentally friendly energies. In this course students will use a combination of classroom, laboratory, and field experiences to analyze, critique, and design alternative energy systems. Class content and activities center on renewability and sustainability for our planet. Topics covered in this course include the following types of alternative energies: solar, wind, geothermal, biomass and emerging technologies. Leadership development, and career exploration opportunities in the field sustainable energy are also included.

Prerequisite: None

# **BUSINESS, MARKETING, AND INFORMATION TECHNOLOGY**

# ACCOUNTING FUNDAMENTALS (4524) Grades 10-12

B4524-B4525 2 Credits (Full Year)

Accounting Fundamentals introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making.

Prerequisite: Principles of Business Management

# ADVANCED ACCOUNTING (4522) Grades 11-12

B4522-B4523 2 Credits (Full Year)

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for various forms of business ownership using double-entry accounting covered in Accounting Fundamentals, including an emphasis on payroll accounting. Topics covered include calculating gross pay, withholdings, net pay, direct deposits, journalizing payroll transactions and preparing individual earnings records and payroll registers. Emphasis is placed on applying Generally Accepted Accounting Principles through hands-on practice with popular commercial accounting software packages that are currently used in business.

Prerequisite: Principles of Business Management, Accounting Fundamentals

### Business Math (4512) Grades 10-12

B4512-B4513 2 Credits (Full Year)

Business Math is a business course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing and management. Instructional strategies should include simulations, guest speakers, tours, internet research and business experience. Recommended Prerequisite: Algebra 1

# COMPUTER SCIENCE ESSENTIALS (4801) Grades 9-12

B4801A-B4801B 2 Credits (Full Year)

With emphasis on computational thinking and collaboration, this year-long course provides an excellent entry point for students to begin or continue the PLTW Computer Science K-12 experience. Computer Science Essentials will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence.

In Computer Science Essentials, students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice. They'll apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

Computer Science Essentials helps students create a strong foundation to advance to Computer Science Principles, Computer Science A, and beyond.

Prerequisite: None

# PLTW COMPUTER SCIENCE PRINCIPLES (7183) B7183A-B7183B Grades 10-12 2 Credits (Full Year)

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. *Computer Science Principles* helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation.

PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment.

Prerequisite: Computer Science Essentials

# CYBERSECURITY (7179) Grades 11-12

B7179A-B7179B 2 Credits (Full Year)

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

**Prerequisite:** Computer Sciencé Essentials, Computer Science Principles

# DIGITAL APPLICATIONS AND RESPONSIBILITY (4528) B4528-B4529 Grades 9-12 2 Credits (Full Year)

Digital Applications and Responsibility prepares students to use technology in an effective and appropriate manner in school, in a job, or everyday life. Students develop skills related to word processing, spreadsheets, presentations, and communications software. Students learn what it means to be a good digital citizen and how to use technology responsibly. Students expand their knowledge of how to use digital devices and software to build decision-making and problem-solving skills. This course exposes students to both Windows and Mac operating systems.

Prerequisite: None

### DIGITAL DESIGN GRAPHICS (7141) Grades 10-12

B7141A-B7141B 2 Credits (Full Year)

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

Prerequisite: Principles of Digital Design

# INNOVATION AND OPEN SOURCE LEARNING (0590) B0590-B0591 Grades 11-12 2-6 Credits (Full Year)

Innovation and Open Source Learning is a paperless elective course that combines media technology skills with the meaningful exploration of community and global issues. Students will gain valuable experience in graphic design, video editing, innovative applications and presentation platforms as they explore what it means to be an innovator. Each unit will culminate several projects that will allow students to use their creativity to benefit our school, community, or world. This is a project-based and pass on-driven course intended to cultivate leadership skills and a mindset of growth and innovation. Students will utilize digital communication tools such as social media platforms and blogs to share their progress and connect with community members, experts and learners around the globe. There are no prerequisites for the course, but an application is required and class size is limited.

**Prerequisite:** Application and instructor and/or committee approval.

# INTERACTIVE MEDIA (5232)

B5232-B5233

**Grades 11-12** 

2 Credits (Full Year)

Interactive Media prepares students for careers in business and industry working with interactive media products and services which includes the entertainment industries. This course

emphasizes the development of digitally generated or computerenhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace". Topics to be covered include graphic design, computer animation, web design, and programming, including video game programming. Prerequisite: Digital Applications and Responsibility or Digital Design.

# JOBS FOR AMERICAN GRADUATES (JAG) (0509) MU0509-MU0510 Grades 11-12 2 Credits

Jobs for America's Graduates (JAG) is a state-based, national non-profit organization dedicated to preventing dropouts among young people who are most at-risk. JAG's mission is to keep young people in school through graduation and provide work-based learning experiences that will lead to career advancement opportunities or to enroll in a postsecondary institution that leads to a rewarding career. JAG students receive adult mentoring while in school and one year of follow-up counseling after graduation. The JAG program is funded through grants provided by the Indiana Department of Workforce Development.

# MARKETING FUNDAMENTALS (5914) B5914-B5915 Grades 10-12 2 Credits (Full Year)

This course provides a basic introduction to the understanding and importance of marketing. It covers career development in marketing fields and involvement in DECA, an association of marketing students. Emphasis is placed on job skills necessary to both secure and advance in jobs in marketing. In addition, the basic understanding of the profit motive, the channels of distribution (marketing) and the economic understanding of the modified free enterprise system are covered. Selected marketing case analyses are done all year. A sales promotion and/or advertisement project is also required in the second semester. The DECA chapter is a vital part of the marketing program. It includes meetings and competitive events on the local, district, state and national levels.

Prerequisite: None

# MARKETING IN HOSPITALITY & TOURISM (5982) B5982 Grades 12 1 Credit (Semester)

Marketing in Hospitality and Tourism is a specialized marketing course that develops student understanding of marketing in the hospitality, travel, and tourism industry. Students gain experiences marketing -information, management, pricing, product/service management, promotion, and selling in the hospitality, travel and tourism industry.

Prerequisite: Principles of Marketing

# PERSONAL FINANCIAL RESPONSIBILITY (4540) B4540 Grades 11-12 1 Credit (Semester)

Personal Financial Responsibility is a business course that focuses on personal financial planning as well as the identification and management of personal finance resources to aid students in building skills in decision making, goal setting, identifying sources of income, saving and investing, budgeting, banking services, income tax return prep, credit management, consumer protection laws, insurance, buying vs. renting a house, and buying vs leasing a car. Instructional strategies include iPad use, guest speakers, online simulations, internet research and field trips.

This course is a graduation requirement.

Prerequisite: None

# PRINCIPLES OF BUSINESS MANAGEMENT (4562) B4562-B4563 Grades 10-12 2 Credits (Full Year)

Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

Prerequisite: None

# PRINCIPLES OF DIGITAL DESIGN (7140) B7140A-B7140B Grades 9-12 2 Credits (Full Year)

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

Prerequisite: None

# PROFESSIONAL PHOTOGRAPHY AND VIDEOGRAPHY (7136) Grades 11-12

B7136A-B7136B 2 Credits (Full Year)

Professional Photography & Videography further develops advanced camera skills and photographic vision. The course introduces special techniques and digital processes while refining printing and processing skills. It will also emphasize good composition and the use of photography as a communication tool. Students will also learn the basics of planning, shooting, editing and post-producing video and sound.

**Prerequisites**: Principles of Digital Design, Digital Design Graphics

# SPORTS & ENTERTAINMENT MARKETING (5984) B5984 Grade 12 1 Credit (Semester)

The Sports & Entertainment Marketing class is a specialized marketing course that develops a student's understanding of the Sporting Event Industries, their economic impact and products; distribution systems and strategies; pricing considerations; product/service management and promotions.

Prerequisite: Principles of Marketing

# STRATEGIC MARKETING (5918) B5918-B5919 Grades 11-12 2 Credits (Full Year)

This course expounds the teaching introduced in the junior level class. There are numerous marketing cases and practices which make this a meaningful experience in study. It is recommended that students be a member of DECA, an association of marketing students, and participate at the District and possibly the State and National levels of competition if they win their respective competitive events. This course requires a marketing research project and individualized marketing projects during the second semester.

Prerequisite: Principles of Marketing with a "C" average or above, or instructor approval

# WORK BASED LEARNING CAPSTONE (5974) B5974-B5975 Grade 12 2-4 Credits (2 periods/1 or 2 Semesters)

Mt. Vernon High School's *Work Based Learning Capstone* program is designed to give students the opportunity to apply the concepts, skills, and dispositions learned in previous coursework in a career pathway of their interest, to help prepare students for college and career. A training plan is developed by the student, school coordinator, and supervising organization to guide the student's work based learning experiences and assist in evaluating achievement and performance. The student offered this experience must possess a unique sense of responsibility, maturity, and inquisitiveness. The student will spend a minimum of four-six hours per week working at an area business under the direction of an experienced, knowledgeable, mentor/supervisor. The student will also spend time in a classroom setting and compile an electronic career portfolio. Students will be required to keep a log of his/her experiences.

Prerequisite: Application and instructor approval

# **ENGLISH/LANGUAGE ARTS**

ENGLISH 9 (1002) E1002-E1003 2 Credits (Full Year) Grade 9

English 9 covers a semester of intensive grammar and composition. The class is designed to reinforce and improve language arts skills in writing, reading and communication. Students will develop their writing skills through process writing, editing and technology. Students will also read and interpret literature for writing and speaking purposes. In Semester II, students are introduced to a wide variety of literature. In addition to reading and interpreting the literature, students will learn how to write responses and how to identify literary forms and concepts. Students will study different genres of reading and writing and demonstrate oral competencies in various speaking situation, both formal and informal. A vocabulary study will be integrated with the study of fiction, nonfiction, poetry and drama. Students will develop their writing skills through editing and grammar review.

Prerequisite: None

### Honors English 9 (1002) Grade 9

E1002H-E1003H 2 Credits (Full Year)

Students will engage in an intensive level of grammar, composition and literature studies aimed at helping them prepare for further advanced English and college studies. The focus will be on the refinement of writing, both creative and analytical, speaking, listening and critical thinking skills through exploration of ideas, themes and issues in literature. In addition to numerous other short stories, poems and novels, the students will read, reflect on and analyze novels and plays. Students will also be required to read and analyze additional pieces of literature independently. Intensive vocabulary study will be integrated with composition as well as in the analysis of fiction, nonfiction, poetry, and drama. Students will further develop their writing skills through editing and grammar review. Expectations for quality of written and analytical work will be greater than a standard English

Prerequisite: A "B" average in English and an interest in accepting an accelerated workload.

#### E1004-E1005 ENGLISH 10 (1004) Grade 10 2 Credits (Full Year)

English 10 is a continuation of disciplines covered in previous courses. Consideration is given to a variety of literature genres and also various writing strategies. Students will respond critically, reflectively, and imaginatively to the literature and practice distinguishing among the different types of contents and purposes language can hold, for example, logic, opinion, ideology, point-of-view. I5236n addition, students will read both for instruction and pleasure. Speaking and listening skills will be studied and applied, with a variety of speeches being presented. Students will study the writing process from prewriting through publishing. **Prerequisite**: None

#### Honors English 10 (1004) E1004H-E1005H Grade 10 2 Credits (Full Year)

This is a year-long course that covers a variety of literary genres (e.g., short stories, novels, plays, poems, essays) and writing strategies. Students will express themselves creatively and thoughtfully through a variety of writings (e.g., journals, essays, timed writings), class discussions, speeches and independent and group projects. Throughout the year, emphasis will be placed on vocabulary development and proper grammar and mechanics usage. Students will be challenged to analyze the use of literary devices within texts, as well as incorporating similar devices into their own writing. Expectations for the quality of written and analytical work will be higher than those of a standard English 10

Prerequisite: A "B" average in English and an interest in accepting an accelerated workload.

#### ENGLISH 11 (1006) E1006-E1007 Grade 11 2 Credits (Full Year)

This is a year-long course that explores various writings from American literature, including short stories, poems, plays, novels, and essays. Students will be required to relate the ideas and philosophies in the texts to historical and current events. Throughout the year, emphasis will be placed on vocabulary development, proper grammar and mechanics usage, and strong composition skills. Students will have the opportunity to express themselves through a variety of writings (e.g., journals, essays,

timed writings), class discussions, speeches and independent and group projects

Prerequisite: None

#### Honors English 11 (1006) E1006H-E1007H Grade 11 2 Credits (Full Year)

This is a year-long course designed for the advanced collegebound student who excels in English. Honors English 11 is a survey course, beginning with the writing of American literature from the colonial period to the present. Relating the ideas and philosophy in the selections to historical and current events is required. Students will be required to do extensive reading of different genres, including short stories, essays, novels and plays. Students will write frequently and will be responsible for perfecting grammar and composition skills. The study of vocabulary will last all year and students will write essays and research papers Students will be required to take part in class discussions and develop critical and creative thinking skills. Major projects, performance and writing assignments will take the place of traditional daily grades.

Prerequisite: A "B" average in English and an interest in accepting an accelerated workload.

#### English 12 (1008) E1008-E1009 Grade 12 2 Credits (Full Year)

This is a year-long course that covers British and World Literature. Semester 1 covers the Anglo-Saxon period through the Renaissance. Semester II covers the Restoration to the present. Literary analysis, formal speaking, group work and vocabulary development are stressed. Students will have the opportunity to express themselves through journals, essays and other writings. Such works as Beowulf, The Canterbury Tales, and Macbeth will be discussed. Students will relate the ideas and philosophy in each unit to historical and current events is essential. Prerequisite: None

### **ADVANCED ENGLISH 12** COLLEGE CREDIT (1124) Grade 12

E1008H-E1009H 2 Credits (Full Year)

This course has been developed to challenge college-bound seniors who excel in English. Students will be introduced to different genres of literature and writing as they read and critique selected short stories, essays, poems, plays, and novels. Writing assignments will include individual and group research projects which will emphasize correct research procedures, outside reading, and class presentations. Students will be encouraged to think independently as they work cooperatively in groups. In addition, they will learn to analyze their writing and edit to improve content, style, and grammar. Vocabulary will be generated from course content. Semester and yearlong projects will be a significant portion of the overall grade. Mid-term graduates may not enroll in this course.

Prerequisite: A "B" average in English and an interest in accepting an accelerated workload. English staff recommendation.

Dual Credit: A student enrolled in Advanced English/Language Arts, College Credit will also have the opportunity to be simultaneously enrolled in a USI class, Rhetoric and Composition 1: Critical Thinking (English 101) for 3 credits.

#### **CONTEMPORARY LITERATURE (1054)** 1 Credit (Semester) Grade 11-12

A modern world literature anthology (writings from 1960's to the present) is the basis of this course, although additional novels, poems, plays, and essays will be studied. Writing skills are emphasized. Relating written ideas and philosophies to historical and current events is integral. This one semester course may substitute for one semester of English 12. The course is open to iuniors and seniors. A student planning a midvear graduation should consider taking this course during the junior year.

Prerequisite: An interest in reading

# **CREATIVE WRITING (1092)**

E1092 1 Credit (Semester)

Grades 10-12

Creative Writing will provide students an opportunity to combine literary creativity with the discipline of written communication. Students will become familiar with the standard literary elements of prose and poetry and be taught to use them in their own writing. A portfolio is a requirement. Students will revise, proofread, and edit papers. Students will write daily, completing timed writings, journals, and assignments from the text and other sources.

Prerequisite: English 9

ETYMOLOGY (1060) E1060 Grades 10-12 1 Credit (Semester)

The goal of this course is to help strengthen vocabularies for application to reading, writing and speaking. Successful completion of this course will improve verbal skills on critical college entrance exams such as the ACT and SAT. Students receive instruction in the derivation of English words and word families focusing on Latin and Greek roots, as well as resources for etymological study. The course also provides a study of the connotative and denotative meanings of words in a variety of contexts. Students will increase writing skills by creating compositions developed around vocabulary and language study. Further development of oral communication skills is enhanced through a variety of activities.

Prerequisite: English 9

JOURNALISM I (1080) Grades 9-12

E1080 1 Credit (Semester)

This class is designed to introduce interested students to journalism and the printed mass media. It serves as an excellent starting point for those wanting to be on a journalism staff. Areas of study and practice will include the following: photography, news writing, feature writing, sports writing, editorial writing, layout design, and the practical use of the InDesign and Photoshop programs used in yearbook and newspaper publication **Prerequisite**: None

STUDENT MEDIA (1086) Grades 9-12 E1086-E1087 2 Credits (Full Year)

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

**Prerequisite**: Good writing skills, computer, and/or photography skills. Journalism I is required.

# **FAMILY AND CONSUMER SCIENCE**

Three credits in Family and Consumer Science may replace the health requirement for graduation. The three credits may be chosen from the following courses:

- 1. Child Development and Parenting
- 2. Human Development and Family Wellness
- 3. Interpersonal Relationships
- Nutrition and Wellness
- 5. Adult Roles and Responsibilities

# ADULT ROLES AND RESPONSIBILITIES (5330) F5330 Grades 11-12 1 Credit (Semester)

This class is designed to develop the basic skills necessary for surviving away from the family home. Emphasis is on clothing selection and care, food preparation and nutrition, and selection and care of the home. Students who have previously had more than two semesters of Family and Consumer Science classes are not eligible to take this class. Students may be required to complete at home applications for each unit.

Prerequisite: None

ADVANCED CHILD DEVELOPMENT (5360) F5360 Grades 10-12 2 Credits Maximum (Semester)

Advanced Child Development builds on the foundations set in Child Development. Issues and topics include growth and development, theories, practices, and health and wellness. Students will integrate the process of thinking, communication, leadership and management in order to apply Child Development knowledge and skills. Students will incorporate and analyze current professions and ethical standards associated with the care of children.

Prerequisite: Child Development

ADVANCED LIFE SCIENCE: FOODS AG5072-AG5073
Grades 11-12 2 Credits (Full Year)

Advanced life Science: Foods is a two semester course that provides students with hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. This interdisciplinary science course integrates biology, chemistry, and microbiology in the context of foods and the global food industry.

**Prerequisites:** Introduction to Agriculture, Food and Natural Resources, Nutrition and Wellness, Biology, Chemistry or Integrated Chemistry/Physics

CHILD AND ADOLESCENT DEVELOPMENT (7157) F7157A-F7157B Grades 10-12 2 Credits (Full Year)

Child and Adolescent Development examines the physical, social, emotional, cognitive, and moral development of the child from birth through adolescence with a focus on the middle years through adolescence. Basic theories of child development, biological and environmental foundations of development, and the study of children through observation and interviewing techniques are explored. The influence of parents, peers, the school environment, culture and the media are discussed. An observation experience up to 20 hours may be required for completion of this course.

Prerequisite: Principles of Teaching

CHILD DEVELOPMENT AND PARENTING (5362) F5362
Grades 10-12 F5362
1 Credit (Semester)

This course is designed to assist students in understanding children and in preparing for parenthood. The physical, social, emotional and intellectual development of children is studied from conception through birth up to three years old. Special emphasis is given to the constructive disciplining of children. Students will participate in the "Baby Think It Over" project, an electronic interactive doll, or prepare a written paper on an aspect of teen parenting.

Prerequisite: None

**CONSUMER ECONOMICS (5334)** 

F5334

Grades 9-12 1 Credit (Semester)
Consumer Economics concerns the management process and

how it relates to consumer behavior. This course is designed to aid youth in the market place. Consumer practices related to food, shelter, clothing, transportation and recreation will be explored. **Prerequisite**: None

#### **HUMAN DEVELOPMENT AND FAMILY WELLNESS (5366) Grades 10-12** 1 Credit (Semester)

This course is based on the premise that each of us wants to have control over our future role as a family member. We need to understand others and ourselves. This course will examine the personal relationships, including the roles men and women play in establishing and maintaining a healthy family. This course is designed to prepare men and women for their role as a family member, wage earner, spouse and parent (all typical roles of an adult in the 21st Century.) Students will learn to coordinate these roles while learning how to handle the stress of these responsibilities.

Prerequisite: None

#### HOUSING AND DESIGN FOUNDATIONS (5350) F5350 **Grades 11-12** 1 Credit (Semester)

This course covers the choices available in home selection Students will study art principles and the selection of furnishings and accessories. Treatments available for walls, floors, and windows will also be included. Home and business field trips are included. Decorating a dream home is a semester project. Prerequisite: None

#### **INTERPERSONAL RELATIONSHIPS (5364)** F5364 Grades 9-12 1 Credit (Semester)

This course is designed to help the teenager understand and cope with all aspects of getting along with others. The areas of relationships being studied include families, peers, dating, friendship, authority figures, communication, conflict, developing a positive self-concept, goal setting, value identification and decision making.

Prerequisite: None

#### **NUTRITION AND WELLNESS (5342)** F5342 Grades 9-12 1 Credit (Semester)

This class includes planning of nutritious, attractive meals, the proper use, care, and cleaning of equipment, understanding food preparation terminology, the ability to interpret and follow a recipe, safety in the kitchen, getting the most for money spent on food, and food preparation skills. The foods prepared will include fruits, vegetables, meats, eggs, breads, cheese, salads and milk desserts.

Prerequisite: None

### PEER TUTORING (0520) **Grades 11-12**

F0520-F0521 2 Credits (Full Year)

This one year course is designed to allow students who are interested in helping others on a one-to-one basis in a facilitative atmosphere. Students will study listening, communication and facilitating techniques. Students will first provide these services at the elementary level. Admission will be on a selection basis through an application process. Students who have taken Interpersonal Relationships, Psychology, Child Development and Parenting, or who have had experience working with people through Student Council, Sunday school, camp counseling, etc. are encouraged to apply for consideration.

Prerequisite: 2.0 G.P.A. and application

#### PRINCIPLES OF CULINARY & HOSPITALITY (7173) F7173A-F7173B 2 Credits (Full Year) Grades 9-12

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

Prerequisite: None

#### PRINCIPLES OF TEACHING (7161) F7161A-F7161B Grades 9-12 2 Credits (Full Year)

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

Prerequisite: None

#### **TEACHING AND LEARNING (7162)** F7162A-F7162B **Grades 10-12** 2 Credits (Full Year)

Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.

Prerequisite: Principles of Teaching

# FINE ARTS - MUSIC

#### VM4188-VM4189 **ADVANCED CHORUS (4188)** Grades 9-12 2 Credits (Full Year) Students taking Advanced Chorus develop musicianship and

specific performance skills through ensemble and solo singing. The chorus may be composed of (1) male chorus, (2) female chorus, (3) mixed chorus or any combination thereof. Activities create the development of a quality repertoire in the diverse styles of choral literature 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. Students have the opportunity to experience live performances by professionals during and outside of the school day. 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 the learning in the classroom. The choral repertoire must be of the highest caliber. Mastery of basic choral technique must be evident. Areas of refinement include a cappella singing, sightreading, and critical listening skills.

Prerequisite: Beginning Chorus and/or instructor approval

#### **ADVANCED CONCERT BAND (4170)** FA4170-FA4171 Grades 9-12 2 Credits (Full Year)

Those enrolled in band will participate in the marching and concert bands. Advanced Concert Band provides students with a comprehensive study of music through concert band repertoire. This repertoire develops skills in psychomotor, cognitive and affective domains. Course work is designed to enable students to connect, examine, imagine, define, try, extend, refine and integrate music study into other subject areas. Ensemble and individual activities are designed to develop elements of musicianship including, but not limited to: tone production, technical skills, intonation, sight reading skills, listening skills, analyzing music and studying a wide variety of styles of literature. Experiences include, but are not limited to sight reading, playing by ear, clapping and counting and performance. Students must perform a wide variety of repertoire: large ensemble, chamber ensembles and solo with expression and technical accuracy. Evaluation of music and performance is provided through adjudicated and non-adjudicated performance venues. Band is a co-curricular activity and as such requires time outside the normal school day. **Note:** Dropping this course requires approval of the band instructor.

Prerequisite: Marching Band

# ADVANCED TECHNICAL THEATRE (4252) TT4252-TT4253 Grades 10-12 2 Credits (Full Year)

Advanced Technical Theatre is a continuation of Technical Theatre. Students participating in the course will further their understanding of costuming, makeup, scenic design, lighting and sound design and execution, stage and house management, advertising, script analysis and will complete a comprehensive individual design project each semester. Students will participate on class crews and are encouraged to participate in extracurricular school productions. Students will also comprise the production staff and crew for the MVHS performing Arts Center and will assume leadership roles within technical theatre including the mentoring of Beginning Technical Theatre students. Students will also gain an understanding of the interdisciplinary aspects of technical theatre as regards language arts, mathematics, social studies, science and various technologies. Additionally, students will gain an understanding of career opportunities within theatre and entertainment technology and further their understanding of the importance of audience development and the role of community support in theatre. Students will participate on class crews and will be encouraged to participate in extracurricular school productions.

**Prerequisite:** A minimum of a "C" average in Beginning Technical Theatre, and maintenance of a "C" average in Advanced Technical Theatre for continuing in the class for successive semesters.

**Note:** Two hours of lab time per 9 weeks is required in addition to regular class time.

# AUXILIARY (FLAGS)

Grades 9-12 (Nine Weeks)

Those enrolled in auxiliary will participate during the marching band season and winter guard. The marching band will perform at all home football games, several Saturday contests and parades. Auxiliary is co-curricular in that considerable time and effort beyond the daily class period is required. Auxiliary members must be enrolled in a fourth period study hall for the entire semester. During the first nine weeks color guard members will be assigned to band and return to the study hall upon completion of the marching band season. Auxiliary is a non-credit class, but credit can be earned by participating in concert band during the second quarter.

# BEGINNING CHORUS (4182)

VM4182

Grades 9-12 1 Credit (Fall Semester)

Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. The chorus may be composed of (1) male chorus, (2) female chorus, (3) mixed chorus, or any combination thereof. Activities in this class create the development of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine and integrate music study into other subject areas. Chorus classes provide instruction on creating, performing, conducting, listening to, and analyzing, in addition to focusing on the specific subject matter. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students have the opportunity to experience live performances by professionals during and outside of the school day. 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. Specific classroom activities include vocal production techniques, music theory and sight-reading. Students must participate in performance opportunities, outside of the school day, that support and extend the learning in the classroom

Prerequisite: None

# CHORAL CHAMBER ENSEMBLE (4180) (Full Year) Grades 9-12

VM4180-VM4181 2 Credits

Student musicianship and specific performance skills in this course are enhanced through specialized small group instruction. The activities expand the repertoire of a specific genre. Chamber ensemble classes provide instruction in creating, performing, listening to, and analyzing music in addition to focusing on specific subject matter. Instruction designed to enable students to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students have the opportunity to experience live performances by professionals during and outside of the school day. 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. Class activities will also include sight reading and music theory. Students must participate in performance opportunities outside of the school day that support and extend the learning in the

Prerequisite: Students must audition.

# DANCE CHOREOGRAPHY (4142) Grades 9-12

FA4142 1 Credit

Learning activities in choreography are sequential and systematic and allow students to express themselves. A wide variety of materials and experiences are used in order to provide students with the knowledge, skills, and appreciation of the multi-styled and multicultural dance expressions. Choreographic activities provide students opportunities to participate in roles as a soloist, a choreographer or leader, and in a subject role. Students also explore a wide variety of choreographic philosophies as well as administrative and media skills necessary for the promotion and documentation of works to be performed. Students experience and learn to use appropriate terminology to describe, analyze, interpret, and critique dance compositions by professional individuals or companies.

Note: Course may be repeated.

# INSTRUMENTAL ENSEMBLE – PERCUSSION ONLY (4162) Grades 9-12

FA4162-FA4163 2 Credits (Full Year)

This course will provide an extensive study of the percussion family of instruments as well as percussion chamber music. Members of the instrumental ensemble class will learn the music for the Advanced Concert Band as well as how to properly play all of the percussion instruments. We will focus on rudiments, note reading, pitch identification and proper playing techniques. Students will be required to attend all after school rehearsals and performances. Students will also be required to perform a solo on either a mallet instrument or battery percussion instrument at the ISSMA Solo and Ensemble Contest.

**Prerequisite:** Students must have had a minimum of three years of instruction in band or private lessons. This class is for percussionists *only* and director approval is required.

### INTERMEDIATE CHORUS (4186) Grades 9-12

VM4186-VM4187 2 Credits (Full Year)

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

Prerequisite: None

# JAZZ ENSEMBLE (4164) Grades 9-12

FA4164-FA4165 2 Credits (Full Year)

Students taking the course will develop musicianship and idiom specific performance abilities through group and individual study, as well as performance of a variety of instrumental jazz music. The course will include history, formative and stylistic elements of jazz. These skills will be developed through improvisation, arranging, listening, analyzing and performance. Course work is designed to enable students to connect, examine, imagine. define, try, extend, refine and integrate music study into other subject areas. Students will have the opportunities to experience live performances outside of class time. A number of public performances will serve as a culmination of daily rehearsal and study. Students must participate in performance opportunities outside the school day that will support and extend classroom learning.

Prerequisite: Must have experience on the following instruments: saxophone, trumpet, trombone, guitar, bass or percussion. This is an auditioned ensemble.

# **MUSIC HISTORY AND APPRECIATION (4206)** Grades 10-12 (4206)

FA4206 1 Credit (Semester)

Music Appreciation affords students an opportunity to explore music through listening and the study of music history. Music to be surveyed will include baroque, classic, romantic and twentieth century. Additionally, music of American composers will be featured. Some prior experience with music is recommended but not required. This course will be offered on a two-year rotation with Applied Music.

Prerequisite: Previous music study is beneficial.

# MUSIC THEORY AND COMPOSITION (4208) **Grades 10-12**

FA4208 1 Credit (Semester)

Music Theory offers students experiences in part-writing, analysis, and the development of aural skills. The study of "common practice" harmony and melodic construction is supplemented by study of theory as applied to popular music. Some prior experience in music is recommended. This course will be offered on a two-year rotation with Applied Music.

Prerequisite: Previous music study is required.

# MUSICAL THEATRE (0518)

#### Grades 9-12 1 Credit (Spring Semester)

Musical Theatre students will examine the history and form of musical theatre through the performance and study of the history of musical theatre and its place in today's society. Students will participate in staging, choreographing, rehearsing and performing an original or existing musical work. The class will 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. Prerequisite: Audition and teacher approval required.

# **TECHNICAL THEATRE (4244)** Grades 10-12

TT4244-TT4245 2 Credits (Full Year)

Technical Theatre is a broad-based course designed to give students an overall view of the various elements of the craft. Students will attain an understanding of the technical aspects of theatrical production through "hands-on" experience. Areas to be studied include lighting design and execution, scenic design and execution, set construction techniques, scenic painting, rigging, stage make-up, costuming, sound reinforcement, stage and house management, advertising and script analysis. Students will also gain an understanding of the interdisciplinary aspects of technical theatre as regards language arts, mathematics, social studies, science and various technologies, Additionally, students will gain an understanding of career opportunities within theatre and entertainment technology and further their understanding of the importance of audience development and the role of community support in theater. Students will participate on class crews and will be encouraged to participate in extracurricular school productions.

Prerequisite: None

**Note:** Two hours of lab time per 9 weeks is required in addition to regular class time.

# THEATRE ARTS I (4242)

**TA4242** 

Grades 9-12 1 Credit (Semester)

Theatre Arts I combines the history of theatre, the study of styles of world drama, the reading of famous plays, and all aspects of drama production (design of set, costuming, stage terms, makeup, lighting, acting, and direction.) Spelling and vocabulary assignments will be given weekly. Students may take this class more than once, but they will be expected to complete additional work for credit.

Prerequisite: An interest in drama and theatre

# THEATRE ARTS II (4242)

**TA4243** 

### Grades 9-12

1 Credit (Semester)

Students in Theatre Arts II will create, perform, analyze, and critique dramatic performances. Since the focus is on production, students will be involved in the preparation, rehearsal and performance of plays in the classroom. Students will put the concepts learned in Theatre Arts I into action by participation in advanced theatre production. Materials will consist of one-act or short plays. Theatre Arts II productions may be performed for the student body and the community in convocations and/or evenings, when time and scheduling permit.

Prerequisite: Students must have successfully completed Theatre Arts I earning a grade of "C" or higher.

# THEATRE PRODUCTION (4248)

TT4248

# **Grades 11-12**

1 Credit (Semester)

Students will receive instruction in the areas of lighting, scenic and costume design including historical aspects, drawing, drafting, model making and realization of their work either in models or stage. Students will learn hand and Computer Aided Drafting sketching, color rendering, model making and allied skills related to design. Students will demonstrate an understanding of the historical and artistic background of each area of expertise. It is recommended that students enroll for successive semesters.

# FINE ARTS — VISUAL

# **ADVANCED PLACEMENT STUDIO ART**

AP Studio Art is a Full Year course based on the content established by the College Board. Portfolios are designed for motivated students who are seriously interested in the practical experiences of art. AP Studio Art is not based on a written exam; instead, students submit portfolios to the College Board for evaluation in early May. The AP program is a cooperative endeavor that helps high school students complete college-level courses and permits colleges to evaluate, acknowledge, and encourage that accomplishment through the granting of appropriate credit and placement. Students may take all three AP Studio Art Portfolios.

### The course is divided into the following disciplines:

### AP Studio Drawing (4048) **Grades 11-12**

VA4048-VA4049 2 Credits (Full Year)

The AP Studio Drawing Portfolio is designed to address a very broad interpretation of drawing/painting issues and media. Rendering and mark-making are stressed along with composition, creativity, risk-taking and developing your unique student voice. Students are encouraged to take Drawing I & II and/or Painting I & II prior to AP Drawing.

Prerequisite Introduction to Two-Dimension Art and Instructor

approval

# **AP STUDIO 2D ART (4050)**

VA4050-VA4051 2 Credits (Full Year)

Grades 11-12 2 Credits (Full Year The AP Two-Dimensional Design Portfolio is intended to address a very broad interpretation of two-dimensional design issues. This type of design involves purposeful decision-making about how to use the elements and principles of art in an integrative way Composition, creativity, risk-taking and developing your unique student voice will be stressed. The 2-D Portfolio may include drawing, painting, computer graphics, photography, collage, mixed media, or other two-dimensional media. Students are encouraged to complete 2-3 years of visual art courses that correspond with the medium they will focus on for this portfolio. Prerequisite: Introduction to 2D Art and/or Digital Design and Instructor approval

### **AP STUDIO 3D ART (4052) Grades 11-12**

VA4052-VA4053 2 Credits (Full Year)

The AP Three-Dimensional Design Portfolio is intended to address a broad interpretation of sculptural issues in depth and space. A variety of approaches to representation, abstraction, and expression may be part of the student's portfolio. This course will challenge students to make purposeful decisions about space, media, and techniques as well as stressing creativity and risktaking while developing their unique student voice. The 3-D Portfolio may include sculpture, ceramics, mixed-media, jewelry, 3-D generated computer graphics, or other three-dimensional media. Students are encouraged to take Ceramics I & II and/or Advanced 3-D Art (Sculpture) I & II or other appropriate courses prior to AP 3D.

Prerequisite: Introduction to 3D Art & Instructor approval

### ADVANCED 2D ART (4004) Grades 9-12

VA4004-VA4005 1-2 Credits (1 or 2 Semesters)

Students in Advanced 2D Art build on the sequential learning experiences of Introduction to 2D Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources. Prerequisite: Introduction to 2D Art

#### VA4006-VA4007 ADVANCED 3D ART/SCULPTURE I-II (4006) 1-2 Crédits (1 or 2 Semesters) Grades 10-12

Students will experience a wide variety of sculptural mediums. techniques and styles including wire, found objects, papiermache, ceramics and more. Students will develop their skills of observation, perceptual awareness, expression and problem solving to produce portfolio quality works. Students will explore the creative possibilities of surface decoration, form, occupied/unoccupied space, and craftsmanship. Students will study art history, art criticism, aesthetics, critique, and production as related to three-dimensional arts and ceramics. Students interested in taking AP Studio Art 3D are strongly encourage to take this course. This course will be offered every-other year. Prerequisite: Introduction to 3D Art

# CERAMICS I-II (4040)

VA4040-VA4041

Grades 10-12 1-2 Credits (1 or 2 Semesters)

Students will learn the basic terms, tools, and techniques of working with ceramic clay. Functional and sculptural objects will be created using a variety of hand building techniques and the pottery wheel. Students will explore the creative possibilities of surface decoration, form, occupied/unoccupied space, and craftsmanship while developing their skills of observation, perceptual awareness, and problem solving to produce portfolio quality works. Students will study art history, art criticism, aesthetics, critique, and production as related to threedimensional arts. Students interested in taking AP Studio Art 3D are strongly encourage to take this course. Prerequisite: Introduction 3D Art

### DIGITAL DESIGN

For Digital Design/Photography, please see the Business, Marketing, and Information Technology Department course listing.

# DRAWING I-II (4060) Grades 10-12

VA4060-VA4061 1-2 Credits

Students will develop their skills of observation, perceptual awareness, problem solving, expression and drawing while working with a variety of subjects from photographs and life. In this course students will utilize a range of styles, mediums and techniques related to drawing to produce portfolio quality works. Students will study art history, art criticism, aesthetics, critique. and production as related to drawing. Students interested in taking AP Studio Art 2D/Drawing are strongly encourage to take this course.

Prerequisite: Introduction to 2D Art

# INTRODUCTION TO 3D ART (4002) Grades 9-12

VA4002 1 Credit (Spring Semester)

This course introduces the elements and principles of design concepts that serve as a foundation of all sculptural works of art. Students will be introduced to a variety of media and techniques ranging from ceramics, cardboard, wire, mixed media and more. Students will engage in experiences that encompass art history, art criticism, aesthetics, critique, and art production leading to portfolio quality works. The goal of this course is to prepare students for advanced levels of high school visual art courses, career opportunities, post-secondary academic endeavors and lifetime activities. Students are encouraged to take Introduction to Two-Dimensional Art and Introduction to Three-Dimensional Art together. This course is required for all Ceramic/3-D/Sculpture/AP 3D courses. This course will fulfill half of the Core 40 and AHD requirement.

Prerequisite: None

# INTRODUCTION TO 2D ART (4000)

**VA4000** 

Grades 9-12 1 Credit (Fall Semester) This course introduces the elements and principles of design

concepts that serve as a foundation of all works of art. Students will be introduced to a variety of media and techniques ranging from basic drawing skills, painting, mixed media, perspective, still life and more. Students will engage in experiences that encompass art history, art criticism, aesthetics, critique, and art production leading to portfolio quality works. The goal of this course is to prepare students for advanced levels of high school visual art courses, career opportunities, post-secondary academic endeavors and lifetime activities. Students are encouraged to take Introduction to Two-Dimensional Art and Introduction to Three-Dimensional Art together. This course is required for all Drawing/Painting/AP 2D/Drawing courses. This course will fulfill half of the Core 40 and AHD requirement.

Prerequisite: None

# PAINTING I-II (4064) **Grades 10-12**

VA4064-4065 1-2 Credits (1 or 2 Semesters)

Students will experience a wide variety of painting mediums, techniques and styles while developing their skills of observation, perceptual awareness, expression and problem solving to produce portfolio quality works. Students will work with a variety of subjects from photographs and life. Students will study art history, art criticism, aesthetics, critique, and production as related to painting. Students interested in taking AP Studio Art 2D/Drawing are strongly encourage to take this course.

Prerequisite: Introduction to 2D Art

# **HEALTH/PHYSICAL EDUCATION**

# HEALTH AND WELLNESS EDUCATION (3506) Grades 9-12

P3506

1 Credit (Semester)

Students will be exposed to health and wellness information using technology to access reputable health websites and current data and information about health and wellness. Students will evaluate their current health behaviors as they learn about health and wellness practices/habits that promote health. Units will include: Total Health and Wellness, Taking Charge of your Health, Physical Fitness, Nutrition, Goal setting and decision making, Communication and CPR. All units are aligned to Indiana's Health and Wellness standards.

Prerequisite: None

PHYSICAL EDUCATION (3542) Grades 9-12 (Co-Ed) P3542-P3543 2 Credits (Full Year)

The focus of this class is the promotion of health-related physical FB, SOC, VB, BB, WR, BA, SB, Flag FBfitness and exposure to a wide variety of activities including soccer, volleyball, basketball, floor hockey, net games, weight training, softball and tennis. Students are evaluated using current physical fitness standards and tests. Students regularly participate in physical activities and monitor their health-related physical fitness progress. Class grade is based on participation, skills tests and written work. As part of participation, students dress out daily with any neat, clean shorts

and top and supportive tennis shoes. Unexcused absences and failure to dress out and participate for 4 days results in failure for that grading period.

Prerequisite: None

### **ELECTIVE PHYSICAL EDUCATION**

ADVANCED PE – OFFICIATING (3560) Grades 11-12 P3560O-P3561O 2 Credits (Full Year)

This course will cover the introductory skills and concepts needed to officiate various levels of youth sports. Sports taught may

include football, soccer, volleyball, basketball, wrestling, baseball, softball, and flag football

Prerequisite: Basic Physical Education

ADVANCED PE - WEIGHTLIFTING (3560)

P3560F-P3561F P3560F-P3561M

Grades 10-12 2 Credits (Full Year)

This class uses the "Bigger, Faster, Stronger" weightlifting program. Students learn training techniques to promote their sport performance and their fitness. Core lifts that are emphasized; bench press, squat, push press, power clean, thrusters, incline bench, towel bench, and box squat. Auxiliary lifts are also included. Students are exposed to a training stimulus that helps them become faster and stronger. Class grade is based on skills tests and participation. As part of participation, students dress out daily with any neat, clean shorts and top and supportive tennis shoes. Unexcused absences and failure to dress out and participate for 4 days result in failure for that grading period.

Prerequisite: Basic Physical Education

### ADVANCED PE - TEAM SPORTS (3544) Grades 10-12

P3544-P3545 2 Credits (Full Year)

The focus of this class is the promotion of physical fitness and skill development in a wide variety of activities. Current physical fitness standards are used to monitor health-related physical fitness. Skill rubrics will be used to evaluate game and fitness skills. Intramural activities will include flag football, flickerball, volleyball, basketball, floor hockey, softball, tennis, powerball games, and soccer. Class grade is based on participation, skill tests, skill rubrics and written tests. As part of participation, students dress out daily with any neat, clean shorts and top and supportive tennis shoes. Unexcused absences and failure to dress out and participate for 4 days result in failure for that grading period.

Prerequisite: Basic Physical Education

# **MATHEMATICS**

Four credits of mathematics are required for graduation and students are encouraged to continue in the math sequence as long as they are successful (making C's or better.) Some state universities require students to have taken 8 semesters of mathematics while in high school. Sufficient mathematical preparation enhances success in higher education and broadens career choices.

# **EVERYDAY ALGEBRA I WITH MATH LAB (2516, 2520)**

M2516-M2517/M2520E-M2521E 4 Credits (Full Year)

Algebra I is a full-year course which provides a formal development of the algebraic skills and concepts necessary for students to successfully complete the Core 40. The instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. Topics include properties of real numbers, solving linear equations and inequalities, graphing linear and quadratic functions, systems of linear equations and inequalities, basic operations with polynomials, solving quadratic equations, exponents, and introductory topics in statistics and probability. This course will meet every day in our block schedule. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Note: 2 credits in Algebra I and 2 credits in Math Lab

ALGEBRA I (2520) Grades 9-12 M2520-M2521 2 Credits (Full Year)

Algebra I is a full-year course which provides a formal development of the algebraic skills and concepts necessary for students who will take geometry and other college-preparatory mathematics courses and successfully complete the Core 40. The instructional program in this course provides for the use of

algebraic skills in a wide range of problem-solving situations. Topics include properties of real numbers, solving linear equations and inequalities, graphing linear and quadratic functions, systems of linear equations and inequalities, basic operations with polynomials, solving quadratic equations, exponents, and introductory topics in statistics and probability. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. (Core 40)

Prerequisite: Pre-Algebra

MATH LAB (2560) Grade 9 M2560-M2561 2 Credits (Full Year)

Math Lab is a full-year transitional course which provides the mathematical background, skills and thinking processes necessary for successful completion of Algebra. Topics include whole numbers, integers, rational numbers and their applications. Number theory, ratios, proportion, percent, probability, equations, inequalities, graphing, square roots, and appropriate geometric concepts are also included. The instructional program of this course provides for the understanding and use of these concepts as well as their application through appropriate problem solving situations. This course invites the exploration of mathematics beyond arithmetic.

Prérequisite: None

**Note:** Counts as elective credit for all diploma types

# ALGEBRA II (2522) Grades 10-12

M2522-M2523 2 Credits (Full Year)

Algebra II is a full-year course which expands on the topics of Algebra I and provides further development of the concept of a function. Expanded topics of this course include the theorems and algorithms of algebra, polynomials and polynomial functions, rational and irrational exponents, complex numbers, sequences and series and systems of equations and inequalities. Counting principles are introduced and probability is further developed. Matrices are included along with exponential and logarithmic functions. Students are encouraged to have a graphics calculator (TI-84+). The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite: Algebra I

# EVERYDAY ALGEBRA II WITH MATH LAB (2522, 2560)

M2522E-M2523E/M2560A-M2561A

# **Grades 10-12**

4 Credits (Full Year)

### (See Description for M2522-M2523)

Everyday Algebra II with Math Lab is intended for the student who passed Algebra I, but who struggled to master the concepts covered, and wants to complete the requirements of the Core 40 Diploma. All concepts covered in Algebra II will be covered in this course. The Math Lab portion of the course will provide the student with the individualized instruction and practice time needed to support the successful completion of Algebra II. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite: Algebra I

Note: 2 credits in Algebra II and 2 credits in Math Lab

# Honors Algebra II (2522) Grades 10-12

M2522H-M2523H 2 Credits (Full Year)

Honors Algebra II is a full-year course which expands on the topics of Algebra I and provides further development of the concept of a function. Expanded topics of this course include the theorems and algorithms of algebra, polynomials and polynomial functions, rational and irrational exponents, complex numbers, sequences and series, and systems of equations and inequalities. Counting principles are introduced and probability is further developed. Matrices are included along with exponential and logarithmic functions. This course is intended for those students who are pursuing the Academic Honors Diploma. All concepts covered in Algebra II will be covered in this course. The students in this course will be expected to obtain a deep understanding of the concepts covered and to apply them in solving rigorous problems. This course is intended for those students who are pursuing the Academic Honors Diploma. (Core 40) Students are expected to have a graphing calculator (TI-84+). The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite: Strong preparation in Honors Geometry

# **GEOMETRY (2532) Grades 10-12**

M2532-M2533 2 Credits (Full Year)

Geometry is a full-year course that will use deductive and inductive reasoning as well as investigative strategies in drawing conclusions. Properties and relationships of geometric entities include the study of angles, lines, planes, congruent triangles, similar triangles, polygons, circles, and spatial drawings and relationships. Estimation and measurement topics are integrated throughout the course. Construction of geometric figures, perimeter, area, and volume are covered. This course develops an understanding of the need for proof and the use of logic in developing proof. Those students who complete Geometry will have experience in writing proofs. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students

experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. (Core 40)

Prerequisite: Successful completion of Algebra I & Algebra II

### HONORS GEOMETRY (2532) M2532H-M2533H Grades 9-10 2 Credits (Full Year)

Honors Geometry is a full-year course that stresses the use of deductive and inductive reasoning as well as investigative strategies in drawing conclusions. Properties and relationships of geometric entities include the study of angles, lines, planes, congruent triangles, similar triangles, polygons, circles, and spatial drawings and relationships. Estimation and measurement topics are integrated throughout the course. Construction of geometric figures, perimeter, area, and volume are covered. This course develops an understanding of the need for proof and the use of logic in developing proof. Those students who complete Honors Geometry will have experience in writing proofs in a variety of styles. Problem solving and recognizing algebra/ geometry interrelationships are important parts of this course. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. (Core 40) Prerequisite: Strong Algebra I background.

# PRE-CALCULUS/TRIGONOMETRY (2564, 2566) M2564D & M2566D Grades 11-12 2 Credits (Full Year)

Pre-Calculus/Trigonometry blends the concepts and skills that must be mastered before enrollment in a calculus course. The course includes the study of relations and functions, exponential and logarithmic functions, trigonometry in triangles, trigonometry functions, trigonometric identities and equations, polar coordinates and complex numbers, sequences and series, and data analysis. Students are expected to have a graphing calculator (TI-84+). The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**Prerequisite:** Honors Algebra II with a grade of "C" or higher is highly recommended

**Dual Credit:** A student enrolled in this course has two opportunities to enroll in dual credit through USI. The student can simultaneously enroll for 4 credits in College Algebra (Math 111) for Semester I and for 3 credits in Trigonometry (Math 112) for Semester II.

# STATISTICS ADVANCED PLACEMENT (2570) M2570-M2571 Grades 11-12 2 Credits (Full Year)

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: (1) exploring data: describing patterns and departures from patterns (2) sampling and experimentation: planning and conducting a study, (3) anticipating inference: estimating population parameters and testing hypotheses. The use of a graphing calculator and computer software is required. Students are expected to have a graphing calculator (TI-84+). Students in this course will be required to take the Advanced Placement Statistics Exam. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Beginning in the 2019-2020 school year, students may be required to pay a fee for an unused exam if he/she drops Statistics AP.

Prerequisite: Algebra II with grade C or higher

# CALCULUS AB ADVANCED PLACEMENT (2562) Grade 12 2 Credits (Full Year)

AP Calculus is a full-year course which provides students with the content established by the College Board. Calculus is primarily concerned with an intuitive understanding of the concepts of calculus and experience with its methods and applications. General topics include limits, continuity, derivatives, definite integrals, and techniques of differentiation and integration involving rational, trigonometric, logarithmic, and exponential functions. The course also includes applications of the derivative, the integral, and theory of calculus. Students enrolled in this class

are required to take the Advanced Placement Calculus AB Examination. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Beginning in the 2019-2020 school year, students may be required to pay a fee for an unused exam if he/she drops Calculus AB AP.

Prerequisite: Pre-Calculus

# **SCIENCE**

# ADVANCED BIOLOGY DUAL CREDIT (3026) C3026D-C3027D Grades 11-12 Credits (Full Year)

Biology II is a two semester class designed for the academically motivated student interested in pursuing a career in the life sciences (i.e. medical, pharmaceutical, biological research...). The subject matter is similar to Biology I but is studied more in-depth. The first semester includes biochemistry, with emphasis on molecular structures and their life related properties, and cytology, with emphasis on their internal structures, functions, and processes. Cellular respiration, photosynthesis, and protein synthesis are discussed in great detail. The second semester uses this knowledge towards the understanding of the anatomy and physiology of the human body. This includes a lengthy dissection of a cat. Through the comparison of the cat to the human, the student will develop a better understanding of how each organ system is designed, functions, and interrelates to each other. The course involves class lectures and discussions, labs, a research paper, class report, and the formulation of a notebook.

Prerequisite: Biology I and Chemistry I

**Dual Credit:** A student enrolled in Advanced Biology, College Credit will also have the opportunity to be simultaneously enrolled in a USI class, Biology of Human Concern (Biology 105), for43 credits.

# ADVANCED CHEMISTRY II (3066) Grades 11-12

C3066D-C3067D 2 Credits (Full Year)

Chemistry II is designed to provide those students with a real interest in chemistry an opportunity to expand their knowledge of basic chemistry and to conduct more laboratory experiments. The additional laboratory experiences help the students better understand chemical phenomena. The class should prepare a student with the necessary facts and understanding of chemical concepts to better compete in college chemistry.

Prerequisite: Chemistry I

# ADVANCED SCIENCE, ORGANIC/BIO CHEMISTRY (3092) Grades 11-12 2 Credits (Full Year)

The organic portion is a Full Year course providing students with an in-depth study of introductory organic chemistry. General chemistry concepts (atomic structure, bonding, reactions, acids/bases, equlibria, etc.) are reviewed and applied to the organic chemistry. The course content contains selected principles and applications in organic chemistry with laboratory experiments reinforcing principles covered.

The biochemistry portion provides students with an in-depth study of introductory biochemistry. General chemistry concepts (atomic structure, bonding, reactions, acids/bases, equilibria, etc.) are reviewed and applied to biochemistry. The course content contains selected principles and applications in biochemistry with laboratory experiments reinforcing principles covered. This course supplements a one-semester organic chemistry class. This class is especially designed for students who are pursuing degrees/careers in science/health fields. This course applies to CORE 40 and academic honors diplomas. The course is also available for dual credit (CHEM 141) at the University of Southern Indiana through the college achievement program (CAP). **Prerequisite**: Biology I, Chemistry 1 and Biology II or concurrently with a grade of "A" or "B".

# ADVANCED SCIENCE, SPECIAL TOPICS (ADV. BIOLOGY III) MEDICAL TERMINOLOGY DUAL CREDIT (3092) C3092D Grade 12 1 Credit (Semester)

This will be an independent study of Biology taught in conjunction with Deaconess Hospital and St. Vincent's Hospital. A genuine interest in the medical field following high school is essential. All

prerequisites must be met. A selection committee will conduct interviews with interested students. Students will provide their own transportation to and from the class site. A waiver of insurance and liability must be on file with the school for each student

Prerequisite: Biology I, Chemistry I, Biology II; students must also enroll in Advanced English 12 CC

**Dual Credit:** A student enrolled in Advanced Biology III will also have the opportunity to be simultaneously enrolled in a USI class, Medical Terminology.

### BIOLOGY I (3024) Grades 9-10

C3024-C3025 2 Credits (Full Year)

Biology I is a two semester course required for graduation. The course gives a progressive look at the biological sciences from the atom to complex organisms. The first semester includes ecology, biochemistry, the study of molecular structures and processes related to life, and cytology, the study of the cell's structures and functions. Emphasis is placed on the study of relationships among organisms and their environment, the organization of organisms, and protein synthesis. This background information leads to second semester with the study of photosynthesis, cellular respiration, genetics, evolution, and taxonomy. The course involves class lectures and discussions, labs (including the observation and dissection of organisms), projects, reports, and homework.

Prerequisite: Strong junior high science background suggested

### CHEMISTRY I (3064) Grades 10-12

C3064-C3065 2 Credits (Full Year)

Chemistry deals with the comparison, structure, and properties of substances and the changes they undergo. It includes a study of the elements and their symbols, and of compounds and the formulas. A qualitative approach to chemical changes involves the use of some basic math skills. A very close correlation exists between basic chemistry and everyday life - the food we eat, the clothes we wear, and the many items in the home. Chemistry serves as an excellent background for nearly all four year college programs and is an excellent recommendation for the best secretarial positions particularly in Southwest Indiana which has a major portion of industry that is chemically oriented.

Prerequisite: Algebra I with a grade of "C" or better

# EARTH AND SPACE SCIENCE I (3044) Grades 10-12

C3044-C3045 2 Credits (Full Year)

Earth/Space Science is an introductory science course in the areas of geology, the earth's history, oceanography, weather, climate, and astronomy. Through extensive use of laboratory exercises a student is introduced to the fundamentals of these subject areas. It is designed as an exploratory study for the student who may be interested in one or more of the above subject areas and the principles involved in these areas. The course involves class lectures and discussions, labs, special projects or reports, homework, and the formulation of a notebook. Prerequisite: Strong junior high science background recommended.

### Honors Biology I (3024) Grades 9-10

C3024H-C3025H 2 Credits (Full Year)

Biology I is a two semester course required for graduation. Honors Biology I follows the state standards for biology in more depth and at an accelerated pace. The course gives a progressive look at the biological sciences from the atom to complex organisms. The first semester includes ecology,

biochemistry, the study of molecular structures and processes related to life, and cytology, the study of the cell's structures and functions. Emphasis is placed on the study of relationships among organisms and their environment, the organization of organisms, and protein synthesis. This background information leads to second semester with a comparative study of photosynthesis and cellular respiration, genetics, evolution, and taxonomy. The course involves class lectures and discussions, labs (including the observation and dissection of organisms), projects, reports, and

Prerequisite: Strong junior high science background suggested along with counselors recommendation.

### **HUMAN BODY SYSTEMS (5216) Grades 10-12**

C5216A-C5216B 2 Credits (Full Year)

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

Prerequisite: Principles of Biomedical Sciences

#### **INTEGRATED CHEMISTRY-PHYSICS (3108)** C3108-C3109 **Grades 10-12** 2 Credits (Full Year)

Integrated Chemistry-Physics is a laboratory based course in which students explore fundamental chemistry and physics principles. Students enrolled in this course examine, through the process of scientific inquiry, the structure and properties of matter, chemical reactions, forces, motion, and the interactions between energy and matter. Working in a laboratory environment, students investigate the basics of chemistry and physics in solving real world problems that may have personal or social consequences beyond the classroom.

Prerequisite: Algebra I (May be taken concurrently with this course)

### **MEDICAL INTERVENTIONS (5217) Grades 11-12**

C5217A-C5217B 2 Credits (Full Year)

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

Prerequisite: Principles of Biomedical Science

# **PHYSICS (3084)** Grades 11-12

C3084-C3085 2 Credits (Full Year)

Physics is a science that deals with the interrelationship of matter and energy. Mechanics, light, sound, electricity and magnetism, are major areas of study. An understanding of physics through laboratory experiments plays a major role in this class. The class is a necessity for any student considering a scientific or technically-oriented career such as engineering, computer science, etc. While it is not calculus based, the student must have excellent math logic skills. The course involves class lectures and discussions, labs, reports, homework, the formation of a notebook, and special nine weeks projects.

Prerequisite: Algebra II with a grade of "C" or better and Geometry with a "C" or better.

PRINCIPLES OF BIOMEDICAL SCIENCES (3084)

#### C5218A-C5129B 2 Credits (Full Year) **Grades 11-12**

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

Prerequisite: Biology I or concurrent enrollment in Biology I.

#### SCIENCE RESEARCH, INDEPENDENT STUDY (3008) C3008-C3009 2 Credits (Full Year) **Grades 11-12**

Science Research, Independent Study is a course that provides students with unique opportunities for independent, in-depth study of one or more specific scientific phenomena. 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

Note: Students will be enrolled in this course along with Advanced Biology III.

# **SOCIAL STUDIES**

# **CURRENT PROBLEMS, ISSUES AND EVENTS (1512)** Grades 10-12

1 Credit (Semester)

Current Issues will provide opportunities to investigate and analyze significant problems and/or issues. These issues could include such topics as government policy, health, crime, education, law, and economy on the local, state, national and international level. Students will be developing the skills necessary to independently find and evaluate information and to support and defend opinions. Community service projects and leadership skills might be included in the course. Prerequisite: A strong interest in social studies.

**ECONOMICS/ECONOMICS DUAL CREDIT (1514)** S1514/S1514D 1 Credit (Semester) Grade 12

This course examines the allocation of scarce resources and the economic reasoning used by people as consumers, producers, savers, investors, workers, voters, and as government agencies. Key elements include the study of scarcity, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economics stabilization, and trade.

Prerequisite: None

**Note**: This course is required for graduation.

Dual Credit: A student enrolled in Economics College Credit will have the opportunity to be simultaneously enrolled in a USI class for 3 college credits.

ETHNIC STUDIES (1516)

S1516 Grades 9-12 1 Credit (Semester)

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States. **Prerequisite:** None

#### GEOGRAPHY AND HISTORY OF THE WORLD (1570) S1570-S1571 2 Credits (Full Year)

Students develop and use the six elements of geography to better understand current events and issues facing the world today. These elements are: The World in Spatial Terms, Places and Regions, Physical Systems, Human Systems, Environment and Society, and the Uses of Geography. Students will demonstrate an understanding of these elements of geography in a context of world history, primarily from 1450 to the present. **Prerequisite:** None

INDIANA STUDIES (1518) S1518 Grades 9-12 1 Credit (Semester)

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

Prerequisite: None

PSYCHOLOGY (1532) Grades 11-12

S1532 1 Credit (Semester)

This course provides students the opportunity to explore psychology as the scientific study of mental processes and behavior. Areas of study include the Scientific Method, development, Cognition, personality, Assessment and Mental Health, and the Socio-Cultural and Biological Bases of Behavior.

Prerequisite: None

PSYCHOLOGY AP (1558)

**Grades 11-12** 1 Credit (Semester)

This college-level one semester course is designed for qualified students who wish to complete studies in secondary school equivalent to a college psychology introductory course. This Advanced Placement course is designed to introduce students to the systematic and scientific study of behavior and mental processes. Topics include: 1) history and approaches, 2) research methods, 3) biological bases of behavior, 4) sensation and perception, 5) states of consciousness, 6) learning, 7) cognition, 8) motivation and emotion, 9) developmental psychology, 10) personality, 11) testing individual differences, 12) abnormal psychology, 13) treatment of psychological disorders, and 14) social psychology. While it is not required that students take the AP Psychology exam, it is expected. This course is only open to juniors and seniors because of the maturity necessary for some of the content. The fee for the AP Psychology Exam at the time of this publication is \$94

Prerequisites: 2.85 GPA, AP or Dual Credit experience, strong

reading skills, and Psychology.

Sociology (1534) Grades 11-12

S1534 1 Credit (Semester)

Students study human social behavior from a group perspective, including recurring patterns of attitudes and actions and how these patterns vary across time, among cultures, and in social groups. Students examine society, group behavior, and social structures, as well as the impact of cultural change on society, through research methods using scientific inquiry.

Prerequisite: None

**UNITED STATES GOVERNMENT (1540)** Grade 12

S1540

1 Credit (Semester) This course provides a framework for understanding the purposes, principles, and practices of American government as established by the United States Constitution. Students are

expected to understand their rights and responsibilities in local, state and national government.

Prerequisite: None

**UNITED STATES HISTORY/US HISTORY** 

DUAL CREDIT (1542) S1542-S1543/S1542D-S1543D Grade 11 2 Credits (Full Year)

This two-semester course builds upon concepts developed in previous studies and American history and emphasizes national development from the late nineteenth century into the twenty-first century. After review of fundamental themes in the early development of the nation, students study the key events, persons, groups and movements in the late nineteenth, twentieth, and early twenty-first centuries, as they relate to life in Indiana and the United States.

Prerequisite: None.

Note: This course is required for graduation.

Dual Credit: A Student enrolled in US History College Credit will have the opportunity to be simultaneously enrolled in a USI class for 3-6 college credits.

WORLD HISTORY AND CIVILIZATION (1548) GREADES 9-12 S1548-S549 2 Credits (Full Year)

This two-semester course emphasizes key events and developments in the past that influenced people and places in subsequent eras. They examine the key concepts of continuity and change, universality and particularity, and unity and diversity among peoples and cultures from the past to the present.

Prerequisite: None

# **TECHNOLOGY EDUCATION**

#### **COMPUTERS IN DESIGN AND PRODUCTION (4800)** T4800-T4801 **Grades 10-12** 2 Credits (Full Year)

This course is designed to develop and strengthen the student's technical imagination and to think precisely and understand the language of industry through computer drawings. The first half will emphasize mechanical drafting and the second half will deal with architectural drafting for the construction industry or very detailed

drafting for the manufacturing industry.

Prerequisite: Mechanical Drafting and Design

#### **CONSTRUCTION TRADES: FRAME/FINISH (7122)** T7122A-T7122B **Grades 10-12** 2 Credits (Full Year)

Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

Prerequisite: Principles of Construction Trades, Construction Trades: General Carpentry

CONSTRUCTION TRADES: GEN CARPENTRY (7123) T7123A-T7123B Grades 10-12 2 Credits (Full Year)

Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.

Prerequisite: Principles of Construction Trades

**GAS WELDING PROCESSES (7101)** T7101A-T7101B Grades 10-12 2 Credits (Full Year)

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

# PRINCIPLES OF CONSTRUCTION TRADES (7130) T7130A-T7130B Grades 10-12 2 Credits (Full Year)

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

Prerequisite: None

# PRINCIPLES OF WELDING TECHNOLOGY (7110) T7110A-T7110B Grades 9-12 2 Credits (Full Year)

Principles of Welding Technology includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and basic welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Designer, Researcher, or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for postsecondary and career success.

Prerequisite: Principles of Welding Technology

# SHIELDED METAL ARC WELDING (7111) T7111A-T7111B Grades 10-12 2 Credits (Full Year)

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

Prerequisite: None

# TECHNICAL SKILLS DEVELOPMENT (7156) T7156A-T7156B Grades 10-12 2 Credits (Full Year)

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development

**Prerequisite**: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course

# WELDING TECHNOLOGY I (5776) Grades 10-12

T5776-T5777 2 Credits (Full Year)

This course will be a combination of classroom and lab activities. The classroom phase will emphasize safety and material properties. The lab phase will give students experience in welding, sheet metal work, machining, bending, and automated (CNC) system operations. Students will work individually on small projects and in groups to produce competitive projects.

Prerequisite: Introduction to Manufacturing

# **WORLD LANGUAGES**

World Languages are a vital key to opening the doorways of the world for our Mt. Vernon High School students. With the increase of global trade and marketing, world language study is an asset to communication from which every student will benefit. Many adults will attest that their world language classes were also beneficial in learning English.

Three years of the same world language meets the world language requirement for the Indiana Academic Honors Diploma. While students can choose to elect two years of two languages to receive the honors diploma, they can also enroll in more than one at any given time. While studying one, the concepts of learning world language assists in learning another. Students will need to pass the requirements of one level before continuing in the sequence to the next level.

Fourth year languages are encouraged and may result in college credits given through college entrance exams or possible dual credit. For the student planning further study in any field at the college or university level, please be advised that many of their programs require two years of world language. Most students in the college classroom will have had two, three and many times four years of preparation.

# AMERICAN SIGN LANGUAGE I (2156) WL2156-WL2157 Grades 9-12 WL2156-WL2157 2 Credits (Full Year)

American Sign Language I is a course that introduces students to American Sign Language (ASL) and the deaf community. The course focuses on frequently used signs through a functional-notional approach, and discusses cultural features of the deaf community. Emphasis is placed on development of receptive and expressive language skills. Through this course, students are given the opportunity to develop visual acuity; follow brief verbal instructions; understand short statements, questions, and dialogues; develop short descriptions with guidance; begin to understand the current GLOSSING system used to write ASL; and examine other methods developed to write ASL, including Sign Writing. Students also learn to recognize the difference between the pathological and psychological definitions of deafness, recognize the widespread use of ASL throughout the

United States, and develop an understanding of the relationship between languages and cultures as a whole.

Prerequisite: None

# AMERICAN SIGN LANGUAGE II (2158) WL2158-WL2159 Grades 9-12 2 Credits (Full Year)

American Sign Language II is a course that continues the focus on frequently used signs through a functional-notional approach and the discussion of the cultural features of the deaf community. Emphasis is placed on further development of receptive and expressive communication skills in American Sign Language (ASL). Through this course, students are given the opportunity to watch and understand short stories, dialogues and poetry in ASL; continue to develop visual discrimination skills; begin to understand various dialects of ASL by interacting with ASL users within the deaf community; begin to use classifiers appropriately; continue the mastery of the current GLOSSING system used in

texts to write ASL; and begin to write in GLOSS their own simple dialogues, poetry and translations. Students will also learn to examine some of the political issues associated with the deaf community, and will further develop an understanding of the relationship between languages and cultures as a whole.

Prerequisite: American Sign Language I

# AMERICAN SIGN LANGUAGE III (2162) Grades 9-12

WL2162-WL2163 2 Credits (Full Year)

American Sign Language III is a course that continues to focus on the students 'non-verbal communication skills at advanced levels of competency. American Sign Language is used exclusively in the class as students communicate using more complex structures of the language on a variety of topics, moving from concrete to more abstract concepts. This course provides opportunities for students to learn to express themselves in advanced situations, using more sophisticated vocabulary and structure; apply advanced grammatical features, such as descriptors, classifier use and various numbering systems; and develop the ability to discuss topics related to historical and contemporary events and issues within the deaf community. Students will also build on narrative skills and learn to relay information they've read or heard through explanation of more complex ideas. This course further emphasizes the development of spontaneous language responsive behaviors through activities designed for this purpose.

Prerequisite: American Sign Language II

### GERMAN I (2040) Grades 9-12

WL2040-WL2041 2 Credits (Full Year)

This course provides instruction enabling students to discuss the many reasons for learning languages and to develop understanding of the people who speak them. As the student advances, emphasis is placed on increasing fluency to speak and the ability to write. Students will be able to respond to and give oral directions, understand and use appropriate forms of address, ask and answer simple questions, read isolated words and phrases in situational context, comprehend brief written directions and information, read short narrative texts, and write familiar words and phrases in appropriate context.

Prerequisite: None

# GERMAN II (2042) Grades 10-12

WL2042-WL2043 2 Credits (2042)

This course enables students to participate in classroom and extracurricular activities related to German as well as participate in conversations dealing with daily activities and personal interest. More emphasis is placed on fluency to speak and the ability to write. Students will be able to ask questions regarding routine activities, participate in conversations, relate a simple narrative, interact in a variety of situations to meet personal needs, understand main ideas and facts from simple texts, read aloud with appropriate intonation and pronunciation, and write in response to given situations.

Prerequisite: German I

# GERMAN III (2044) Grades 11-12

WL2044-WL2045 2 Credits (Full Year)

This course enables students to understand and appreciate other cultures by comparing social values and behaviors of German speaking peoples. Students will be able to initiate and participate in discussions concerning these cultures. Students will be able to write paraphrases, summaries, and brief compositions and read for comprehension from a variety of materials. In addition, students will be able to respond to factual and interpretive questions, describe different aspects of the culture, read literary selections, and be able to seek help utilizing the language in a crisis situation

Prerequisite: German I and II

# GERMAN IV (2046) Grade 12

WL2046-WL2047 2 Credits (Full Year)

This course enables students to participate in classroom and extracurricular activities related to German. These could include presentations to the student body and parent groups. Students should be willing to participate in conversations with native and advanced non-native speakers. Well-organized compositions and presentations will be expected. In addition, students will be able to respond to factual and interpretive questions, interact in complex social situations, express opinions and make judgments about what is spoken and read, and read for comprehension from a

number of authentic materials such as newspapers, magazines, and novels

Prerequisite: German I, II and III

# SPANISH I (2120) Grades 9-12

WL2120-WL2121 2 Credits (Full Year)

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

Recommended Prerequisites: A "C" or higher in English

# SPANISH II (2122) Grades 10-12

WL2122-WL2123 2 Credits (Full Year)

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

**Recommended Prerequisites:** Spanish I (Recommend a C or higher)

# SPANISH III (2124) Grades 11-12

WL2124-WL2125 2 Credits (Full Year)

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

understanding Spanish language and culture outside of the

**Recommended Prerequisites:** Spanish I and II (recommend C or better)

SPANISH IV (2126) Grade 12

WL2126-WL2127 2 Credits (Full Year)

Spanish IV, a course based on Indiana's Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of

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

Recommended Prerequisites: Spanish I, II and III (recommend an A or B average for first three years of Spanish)

Note: Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.

# **SOUTHERN INDIANA CAREER & TECHNICAL CENTER PROGRAMS**

Career and Technical Education programs are available to juniors and seniors at the Southern Indiana Career and Technical Center (SICTC). Students must complete the online application process at <a href="https://applytosictc.com">https://applytosictc.com</a>. Applications of students are reviewed by the Career and Technical Screening Committee in late January. The Committee makes the final determination on students to be admitted. Applicants are notified in February and given further instructions by their home high school counselors regarding additional enrollment procedures. Parental permission is required, and students must enroll for a minimum of one semester. Students are responsible for the cost of textbooks, supplies and materials for the EVSC Career and Technical Education Programs. Dual credit and certification opportunities may be available for courses taken at the SICTC. Details on courses can be found at <a href="https://sictc.evscschools.com/courses/">https://sictc.evscschools.com/courses/</a>.

# SICTC Programs

Advanced Manufacturing Technology Architecture & Engineering Design Technology Automotive Collision Repair Technology Automotive Service Technology Computer Science Criminal Justice/Public Safety **Culinary Arts** Cybersecurity Diesel Service Technology **Electrical Technology** Graphic Communications/Digital Media Health Sciences: Exercise Science Health Sciences: Pre-Professional **HVAC-R** and Energy Systems Media Communications and Broadcasting Precision Machine Metalworking Technology

Students attend the SICTC each day for half of the day—Periods 1, 2, 5, and 6 or Periods 3, 4, 7, and 8. Most juniors will attend the morning session.