

# **HENRY-SENACHWINE COMMUNITY UNIT DISTRICT 5 HIGH SCHOOL**

## **Course Description Handbook**

Agriculture and Natural Resources  
Architecture and Construction  
Business and Marketing  
Computer and Information Sciences  
English Language Arts  
Fine and Performing Arts  
Foreign Language  
Health Care Sciences  
Hospitality  
Human Services  
Life and Physical Science  
Manufacturing  
Mathematics  
Music  
Physical Education, Health, Safety  
Social Science and History

The information contained in this edition of the Henry-Senachwine High School Course Description Booklet was, to the best knowledge of the Henry-Senachwine High School Staff, considered correct and complete when submitted at the time of printing. Henry-Senachwine High School reserves the right to make changes in regulations and curriculum without notice or obligation.

We encourage students to also consider non-traditional programs of study which prepare students for employment or further education in non-traditional occupations. The term non-traditional occupation is used to refer to the occupation of an individual in which the vast majority of other job holders in the occupation are of the opposite sex; thus, a non-traditional course or program of study is one in which the vast majority of students are of the opposite sex. We do not discriminate on the basis of race, color, religion, sex, national origin, age, or handicap.

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## **Henry-Senachwine High School Graduation Requirements**

English: 4 ½ units in English are required for graduation which includes a semester of speech (2020).

Mathematics: 3 units (per state requirement) in Mathematics are required for graduation.

Science: 2 units of Science (one being a physical science and the other being a biological science) are required for graduation.

Social Studies: 2 units of Social Studies are required for graduation. 1 of the units must be U.S. History and ½ unit in Government (2020). Each student must pass the Illinois and United States Constitution tests.

Band and Chorus: Will receive one-half credit per year.

Consumer Education: ½ unit of Consumer Education is required for graduation. One unit of co-op can supplement the one-half unit of Consumer Education.

Health and Safety Education: Each student must pass instruction in Health and Safety Education for graduation.

High School 101: ½ unit is required for graduation.

Physical Education -- Each student must pass 3 ½ units of Physical Education for graduation.

Vocational Education, Foreign Language, Music, or Art: Each student must pass 1 unit of instruction from vocational education, foreign language, music or art for graduation.

A total of 22 units/credits are required for graduation from Henry-Senachwine High School.

### **Tier Program Information**

The tier program reflects the class (freshman, sophomore, junior, senior) status students have earned. In order to move to the next class level, students must earn sufficient credit. The following requirements must be met in order to move to the next level:

- In order to be a sophomore, a student must have five (5) credits and have been in attendance for one year of high school.
- In order to be a junior, a student must have ten (10) credits and have been in attendance for two years of high school.
- In order to be a senior, a student must have fifteen (15) credits and have been in attendance for at least three years of high school.

Freshmen not meeting the required five (5) credits will still move to the sophomore level, but will be placed on academic probation. Those students who fail to meet the required credits after the sophomore year will participate in earned level of credit class activities (class meetings, yearbook pictures, Homecoming Court, Prom, etc.). This will continue through the remaining years of high school, based upon the number of credits earned by the beginning of each semester. The tier committee and/or principal may use discretionary powers to deviate from these guidelines when considering the appropriateness of individual cases.

## High School Courses Required for College Freshman Admission:

Please see the school counselor for specific information relating to your school of choice.

### Summary of Minimum High School Course Requirements for Admission of Freshman to Illinois Public Universities — Effective 2016 —

	Total	English	Social Studies	Mathematics	Science	Electives and Other Requirements
Chicago State +	15	4 <sup>1</sup>	3 <sup>6</sup>	3 <sup>10</sup>	3 <sup>18</sup>	2 years of foreign language, music, vocational education or art
Eastern Illinois	15	4 <sup>1</sup>	3 <sup>6</sup>	3 <sup>10</sup>	3 <sup>15</sup>	2 years of academic or vocational electives.
Governors State	15	4 <sup>1</sup>	2	3 <sup>10</sup>	2 <sup>15</sup>	2 years of one foreign language or fine arts; and 2 years of electives.
Northeastern Illinois	15	4 <sup>1</sup>	3 <sup>6</sup>	3 <sup>10</sup>	3 <sup>15</sup>	2 years of foreign language (FL), or 2 years of fine arts (FA) or a combination of 1 year FA/FL and 1 year of vocational education.
Western Illinois +	15	4 <sup>1</sup>	3 <sup>6</sup>	3 <sup>10</sup>	3 <sup>15</sup>	2 years of foreign language, music, vocational education, art, theatre, film, religion, philosophy, speech or journalism
Illinois State	15	4	2	3 <sup>10</sup>	2 <sup>15</sup>	2 years of one foreign language or fine arts; and 2 years of electives.
Northern Illinois	15	4 <sup>2</sup>	3 <sup>6</sup>	3 <sup>11</sup>	3 <sup>10</sup>	2 units (one must be foreign language, art, or music); Up to three units of the required fifteen units may be distributed throughout any of the five categories of course work. Vocational education may satisfy up to three of the units.
<b>Southern Illinois University</b>						
Carbondale	15 or 16	4 <sup>1</sup>	3 <sup>6</sup>	3 or 4 <sup>12</sup>	3 <sup>18</sup>	2 years of electives in foreign language, art, fine arts, music or vocational education; if a foreign language is taken, it must include two semesters of the same language.
Edwardsville	15	4 <sup>1</sup>	3 <sup>6</sup>	3 <sup>10</sup>	3 <sup>15</sup>	2 years chosen from foreign language, music, the visual arts, theatre, dance and/or vocational education.
<b>University of Illinois</b>						
Chicago	16	4 <sup>4</sup>	3	3	3 <sup>18</sup>	2 years of foreign language (recommended); 1 year of electives.
Springfield	15	4 <sup>4</sup>	3 <sup>7</sup>	3 <sup>10</sup>	3 <sup>18</sup>	2 years of one foreign language or 2 years of fine arts, selected from art, music, dance and theatre are required.
Urbana-Champaign	15 or 15.5	4 <sup>4</sup>	2 <sup>6</sup>	3 or 3.5 <sup>14</sup>	2 <sup>18</sup>	2 years of one foreign language are required; and 2 years (flexible academic units) from any of the five subject categories. Approved art, music, or vocational education courses may be counted in the flexible academic units category.

#### NOTES:

- + Suggested Electives - includes other academic courses.
1. Emphasizing written and oral communication and literature.
2. Three units of English must be courses emphasizing written and oral communication and literature.
3. Emphasizing grammar, composition, written and oral communication, and literature; may include not more than 1 year of creative writing or journalism.
4. Studies in language, composition, and literature requiring practice in expository writing in all such work. Coursework should emphasize reading, writing, speaking, and listening.
5. Emphasize history and government.
6. One unit must be U.S. history or a combination of U.S. history and government.
7. At least 2 years of history and/or government; other acceptable subjects are anthropology, economics, geography, psychology, and sociology.
8. History and government are preferred. Additional acceptable social studies include anthropology, economics, geography, philosophy, political science, psychology, and sociology.
9. One unit must be American History plus 1 unit of history, government, psychology, economics or geography.
10. Introductory through advanced algebra, geometry, trigonometry, or fundamentals of computer programming.
11. Three to four units of college preparatory mathematics, including one year of geometry and one year of advanced algebra and/or trigonometry.
12. Algebra I & II, and a proof-based geometry course. A fourth unit is highly recommended: trigonometry and pre-calculus, or statistics, depending on the student's area of interest.
13. One year of introductory algebra, 1 year of geometry, 1/2 year of algebra beyond the introductory year, and 1/2 year of more advanced mathematics or fundamentals of computer programming.
14. Algebra, geometry, advanced algebra, trigonometry. Typically, such courses as career/occupational mathematics, consumer mathematics, applied business mathematics, pre-algebra, and computer courses are not acceptable. 3.5 years of mathematics including trigonometry are required in the following curricula: Agricultural, Consumer and Environmental Sciences - agricultural engineering; Business - all curricula; Engineering - all curricula; Fine and Applied Arts - architectural studies; Liberal Arts and Sciences-specialized curricula in biochemistry, chemical engineering, chemistry, geology, and physics.
15. Laboratory sciences.
16. Two units must be courses in the physical or biological sciences. One unit must be a laboratory science.
17. One year of biology, 1 year of chemistry, and 1 additional year of earth science, physics, biology, or chemistry. (All must be laboratory sciences.)
18. Laboratory courses in biology, chemistry, or physics are preferred. Laboratory courses in astronomy and geology are also acceptable. General science will not be acceptable.

Link to full document:

[www.iacac.org/articulation](http://www.iacac.org/articulation)

## Scheduling Classes

When registering for classes, it is important that students select classes with care. Such factors as interests, career choice, and graduation requirements must be carefully considered. Registration should not be taken lightly. The classes that students have registered for are the classes that they are expected to complete. The school counselor or principal must approve.

**Add/Drop Period:** During the first three (3) full school days. An Add/Drop form must be approved by the school counselor or principal.

**Student Class Load:** All students will be enrolled in at least five academic classes. No student will be allowed to have more than one study hall per semester without special permission from the School Counselor and Principal.

**AP Course Credit and Eligibility Guidelines:**

A student shall receive credit for all AP courses taken at HSHS, and the grade shall be recorded on the student's permanent record. AP course grades received from other locations by HSHS students shall not be weighted nor will they be averaged into the grade point average of the student. The following guidelines shall apply to students who wish to take AP courses:

1. Student must have a grade point average of 3.0 or higher **OR** student must have a cumulative grade point average of 3.6 for the previous year.
2. GPA will be determined at the end of the fourth or sixth semester.
3. Past relevant coursework grades will be reviewed.

### Grade Reporting/GPA Calculation

Grades are given out four times each year - every nine weeks. Grades of students transferring from another school will be evaluated for weighting according to our grading system.

**Percentile Grading Scale:**

<u>Grade</u>	<u>Range</u>
A+	100-97.5
A	97-92.5
A-	92-89.5
B+	89-86.5
B	86-82.5
B-	82-79.5
C+	79-76.5
C	76-72.5
C-	72-69.5
D+	69-66.5
D	66-62.5
D-	62-59.5
F	59 - 0.0

**Course Weighting for GPA calculations:**

<b>COURSE WEIGHTING</b>					
To Be Used To Determine Class Rank					
Course	A	B	C	D	F
Math IV	5	4	3	2	0
Chemistry II	5	4	3	2	0
Physics II	5	4	3	2	0
Accounting II	5	4	3	2	0
Algebra II	5	4	3	2	0
Anatomy & Physiology	5	4	3	2	0
Spanish III-IV	5	4	3	2	0
AP Courses	5	4	3	2	0
Dual Credit Courses	5	4	3	2	0
Other Courses	4	3	2	1	0

## *Pass/Fail*

Due to an averaging effect, students who are enrolled in a weighted course and elect to take additional academic courses beyond the required five (5) courses could have his or her GPA and class rank significantly affected. As a result, students who elect to take any additional courses beyond the required academic course load of five (5) may be eligible to take these additional courses using a pass/fail option. Note the following information regarding the pass/fail option. The pass/fail option is applied to elective courses taken beyond the required course load of five (5) courses. For the purpose of the pass/fail option, P.E./Health, Band, Choir & Driver Education are not included as part of required five (5) courses.

1. The pass/fail option is only available to students who are enrolled in a weighted course(s).
2. The students must select the pass/fail option before report cards are released at the end of the each semester. Students will not be permitted to retroactively change courses to a pass/fail after this deadline.
3. A verification statement, acknowledging the application of the pass/fail option, must be signed by both **parent/guardian and student. The verification statement is to be kept on record with the school and the parent/guardian for proof in the event of a dispute.**
4. Students choosing to take a course as pass/fail may elect to have their earned grade appear on their report card. However, this grade will not influence students' GPA. The students must select this option before report cards are released at the end of each semester. Students will not be permitted to retroactively add grades after this deadline.
5. When selecting a pass/fail option, a passing grade or a failing grade will not have any status in the calculation of grade point average. A list of elective classes is available through the school counselor. Students wanting a calculation of their GPA, class rank and/or a pass/fail verification statement should see the school counselor.

## **Honor Roll**

A scholastic honor roll is compiled and published at the end of each nine weeks and each semester. All courses taken are counted toward Honor Roll except P.E., Health, Band, Chorus, and Driver Education.

There are two sections of the honor roll: 4.0 High Honors and 3.0 Honor Roll

**HONOR STUDY HALL:** Honor study hall is an option for seniors who are maintaining no grade below a "B-", have no unexcused absences, and are in good disciplinary-standing. Any student receiving a detention will be removed from honor study hall for one week and must have the detention served. A suspension from school will result in permanent removal from honor study hall. The list of eligible seniors will be compiled at the end of each week. Students in honor study hall are to remain in the cafeteria, picnic area at the picnic tables or on the sidewalk, library/media center, or a pre-arranged classroom with a teacher. Students may be in the foyer only if the cafeteria is being used. Students must report to regular study hall for computer use. Students will be required to complete a sign out form indicating their location. Please note that only one period may be designated an honor study hall. Failure to conform to the above requirements may result in the removal of honor study hall privileges.

## **Agriculture and Natural Resources**

(These classes are available at Midland High School)

### **INTRODUCTION TO AG INDUSTRY**, ½ unit, Grades 9-12

This introductory course provides an opportunity for students to learn how the agriculture industry is organized; its major components; the economic influence of agriculture at state, national, and international levels; and the scope and types of job opportunities in the agriculture industry. Basic concepts in agribusiness management, youth leadership, communications, agriculture technology, and agriculture science are included. Leadership and evaluation skills will be developed through hands-on learning in this class. FFA membership and participation in FFA activities will be encouraged.

### **INTRODUCTION TO AG MECHANICS**, ½ unit, Grades 9-12

In this course, theory and hands-on experiences provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. Instructional areas include the basic fundamentals of maintaining and repairing small gasoline engines, basic electricity, welding, construction, cold metal work, and operating agricultural equipment safely. Improving workplace and computer skills will be a focus. Participation in the FFA student organization will be encouraged. (Introduction to Agriculture Industry recommended.)

### **AGRIBUSINESS MANAGEMENT**, ½ unit, Grades 10-12 Meets Consumer Ed Requirement

This course will develop students' understanding of the agricultural industry relating to the United States and World marketplace. Instructional units include: business ownership types, planning and organizing the agribusiness, financing the agribusiness, keeping and using records in an agribusiness, operating the agribusiness, agricultural law, taxes, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Participation in FFA student organization activities will be encouraged. (Introduction to Ag Industry recommended.)

### **AGRICULTURAL MACHINERY SERVICE**, 1 unit, Grades 11-12

This comprehensive machinery service course concentrates on the following areas: using service manuals, electrical applications for agricultural equipment, fundamentals of multi-cylinder engines, reconditioning and repairing agricultural equipment, assembling and adjusting agricultural equipment, organization and management of agricultural machinery dealerships, human relations, and sales techniques. Careers such as agricultural equipment salesperson, mechanic, parts manager, sales manager, service technician, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

### **GREENHOUSE/HORTICULTURE PRODUCTION & FLORAL DESIGN**, 1 unit, Grades 9-12

This course focuses on the greenhouse management, floral design and related segments of the horticulture industry. Major units of study include floriculture plant identification, greenhouse structures, and the culture of greenhouse crops. Also included are care and handling of cut flowers, principles of art applied to floral design, and the mechanics of floral design. Agribusiness units will be introduced in merchandising, advertising, sales, and operating a retail floral business. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities will be encouraged. (Prerequisite: Introduction to Agriculture Industry recommended.)

### **ANIMAL SCIENCE**, ½ unit, Grades 10-12

This course will develop students' understanding of the livestock (beef, dairy, sheep, goats, and swine), poultry, and large (equine) animal industry. Topics of instruction include scientific investigations, genetics,

animal anatomy and physiology, animal nutrition, animal reproduction, animal health, and meat science. Improving computer and workplace skills will be a focus. Participation in FFA student organization will be encouraged. (Prerequisite: Introduction to Agriculture Industry recommended)

**AGRIBUSINESS SALES & MARKETING**, ½ unit, Grades 10-12

This course is designed to develop student knowledge and skills in Agricultural Sales, Agribusiness Marketing, and Commodity Marketing. Instructional units include: agricultural economic principles, marketing and advertising, product development, sales techniques and strategies, communicating with employees and customers, managing risk, international agribusiness, and studying various agricultural companies and career opportunities. Participation in FFA student organization activities will be encouraged. (Prerequisite: Introduction to Agriculture Industry recommended)

**BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE - PLANT SCIENCE**,

½ unit, Grades 10-12

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. Participation in FFA student organization activities will be encouraged. (Prerequisite: Introduction to Agriculture Industry recommended)

**BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE - ANIMAL SCIENCE**,

½ unit, Grades 10-12

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, behavior, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. Participation in FFA student organization activities will be encouraged. (Prerequisite: Introduction to Agriculture Industry recommended)

**PHYSICAL SCIENCE APPLICATIONS IN AGRICULTURE (PSAA)**, ½ unit, Grades 10-12

This course is designed to reinforce and extend students understanding of physical science and math concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental/natural resource systems, agricultural production systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Participation in FFA student organization activities will be encouraged. (Prerequisite: Introduction to Ag Industry recommended)

**SAE - SUPERVISED AGRICULTURE EXPERIENCE**, ½ unit, Grades 10-12

Description: This course is based on student abilities and home/work opportunities. Records will be kept in official SAE record books. The student must show the product of the work experience program and the record book at the Section Fair in the summer or fall. The student must also be visited by the agriculture instructor during the time period for which the credit is earned and a record book must be turned in at the end of each 9 week grading period for evaluation before credit is given. Students may earn up to 3 credits for this course during high school. The course will also focus on Career Development Events and preparation for these events. FFA Membership is required. (Prerequisite: Intro to Ag & 6 months of Records)

## Architecture and Construction

### **WOODWORKING I**, ½ unit, Grades 9-12

The learning experiences and activities in this course are designed to acquaint the student with occupations related to working with wood and to develop skills and safety practices in the use of tools and equipment to construct wood products. Instruction and experiences include: safety practices, planning layouts, properties of the various types of woods, calculating material needs, preparing a bill of material, jointing and fitting methods, applications of glues and fasteners, use of hand and power tools, staining techniques and applications, and finishing techniques. (Prerequisite: Orientation to Industrial Occupations)

### **WOODWORKING II**, ½ unit, Grades 9-12

In this course, students will develop an appreciation for and gain knowledge in all forms of woodworking. Students will gain experience in planning projects and developing skills in all forms of woodworking. This experience will allow students to develop the proper skills and techniques for furniture and cabinetmaking. (Prerequisite: Woodworking I)

### **BUILDING AND HOME MAINTENANCE**, ½ unit, Grades 10-12

Building and Home Maintenance is designed to give the students the basic skills to repair and maintain buildings and homes. Laboratory work will consist of: basic plumbing, electrical wiring, refinishing, window and door repairs, identifying building materials, identification of fasteners, bricklaying and blocklaying, drywall and plaster repairs, painting, heating system repairs and maintenance. Individual projects will be required. The course will also include background for becoming a homeowner; purchasing a home, building a home, single-occupancy and multi-occupancy housing, choosing the correct homesite, types of heating and air-conditioning systems, and energy conservation. (Prerequisite: Orientation to Industrial Occupations)

### **BUILDING TRADES**, 2 units, Grade 11-12 (LP ACC)

In Building Trades, students learn carpentry skills, with a blend of classroom theory and hands-on experience. Students will become familiar with using hand tools, portable power tools, and other equipment common in the carpentry profession as well as working with lumber, fastener and roofing materials. Students will also learn site layout, rough framing, and exterior and interior finish work. These skills will be applied to off campus projects as well as in class. Students will be eligible for certification in construction and safety through the NCCER curriculum as well as an OSHA 10 safety credential. For more details, go to [www.nccer.com](http://www.nccer.com).

### **RESIDENTIAL WIRING**, 2 units, Grade 11-12 (LP ACC)

This program is designed to provide students with the basic knowledge of becoming a residential electrician. Students will learn how to safely use various hand and power tools necessary in the electrical profession. Students will learn how to properly diagnose, layout, and create electrical blueprints, as well as execute them in the field. Students will also learn how to hand light fixtures, install smoke detectors as well as build and install a main service panel with circuit breakers. Students will be eligible for 5 hours of college credit from IVCC.

## Business and Marketing

### **KEYBOARDING & FORMATTING I**, ½ unit, Grades 9-12

Keyboarding I is a course planned to develop basic skills in keyboarding techniques. Major emphasis is placed on keyboarding technique, proofreading and correcting errors, punctuation, and capitalization skills, as well as, speed and accuracy development. Students will also be able to develop employability skills and transition skills by increasing their use and application of word processing software.

**ACCOUNTING I**, 1 unit, Grade 11-12

Accounting I is a skill-level course that is of value to all students pursuing a strong background in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systemically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing for convenient interpretation, and analyzing to provide assistance to management for decision making. Accounting computer applications should be integrated throughout the course where applicable. The operation of related business machines and career opportunities in the accounting field will also be covered. (Prerequisite: Algebra I)

**MARKETING**, ½ unit, Grades 11-12

Marketing is intended to give any student a good background for either entering the world of business or for entering college business management and marketing courses. Students will receive a good background of the principles and practices of establishing and operating a business and an orientation in the occupation of marketing. Students will explore the role of managers as leaders and will also study the planning, pricing, promoting, and distributing activities of goods and services between buyers and sellers. (Prerequisite: Software Applications)

**IVEO-ILLINOIS VALLEY ENTREPRENEURIAL OPPORTUNITIES**, 2 units, Grade 11-12 (LP ACC)

If you have ever thought about owning your own business, you may be interested in the IVEO class. IVEO is a class that allows 11<sup>th</sup> and 12 grade students to visit businesses in the Illinois Valley area. The class will also be visited by entrepreneurs from all walks of the Illinois Valley business community. The class will teach you how to write a business plan, register a new business, create a prototype, market your idea, and start your own business. Students will be eligible for 3 hours of college credit from IVCC. (Prerequisite: Marketing)

## Communication and Audio/Visual

**GRAPHIC COMMUNICATIONS**, 2 units, Grade 11-12 (LP ACC)

The entire gamut of the graphic arts industry will be experienced in this course. You will learn design, typography, measurement, color, and digital imaging. Students will use Adobe Creative Suite (InDesign, Photoshop, and Illustrator). Students will create a 2 color screen printing job and a client project. Students will also get the opportunity to become PrintED certified, which is a nationally accredited certification. Second year students will run the Apprentice Printers print shop and learn leadership, dependability, ethics, and responsibility. Students will be eligible for 3 hours of college credit from IVCC. Articulation agreements are also in place with Illinois State University (ISU).

## Computer and Information Sciences

**SOFTWARE APPLICATIONS**, ½ unit, Grades 9-12

Software Applications is a course that is meant to extend the basic knowledge of and teach the fundamentals of Microsoft Office so that they may be more productive. This course will acquaint students with the proper procedures to create documents, worksheets, databases, and slide shows suitable for coursework, professional purposes, and personal use. This course will also prepare them to pass the Microsoft Office Specialist certification specialist-level examinations for Word, Excel, Access, and PowerPoint. (Prerequisites: Keyboarding & Formatting I)

**INFORMATION PROCESSING I**, ½ unit, Grades 10-12

Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures for processing information in the business world. Students will operate computers and peripherals to prepare memos, letters, reports, and forms. They will create tables and use the merge feature to create form letters, mailing labels and envelopes while using intermediate to advanced levels of word processing and publishing programs. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for business presentations using presentation software. Students will process data requiring calculations and create charts and graphs through the use of intermediate to advanced levels of a popular spreadsheet program. Students will perform data maintenance and manipulate and query data to create forms, lists, and other customized reports using a database management program. Students will reconcile a bank statement and manage a petty cash fund, in addition to maintaining a payroll register and monitoring a budget. Students will apply proper grammar, punctuation, spelling and proofreading practices, with accuracy emphasized. (Prerequisite: Software Applications)

**INFORMATION PROCESSING II**, ½ unit, Grades 10-12

Information Processing II is a skill-level course that includes creating data directories; copying, renaming, moving and deleting files, and performing backup procedures. Students will process incoming and outgoing telephone calls, and transmit and receive message electronically. Students will learn to conduct research on the internet and/or intranet, prepare and answer routine correspondence, organize and maintain a filing system, maintain an appointment calendar, make travel arrangements, prepare itineraries and expense reports, and prepare and process timesheets. In addition, students will maintain inventory, order equipment and supplies, and perform routine equipment maintenance, all by using electronic means of information gathering and compiling. (Prerequisite: Information Processing I)

**MULTI-MEDIA TECHNOLOGY**, ½ unit, Grades 10-12

Multi-Media Technology will include using hardware and software to capture, edit, create, and compress audio and video clips as well as create animated text, graphics, and images. Other topics will include using tables to align images with text, creating newspaper-style columns, and inserting side menus and call-outs. Students will learn how to use templates, cascading style sheets, and interactive elements to enhance web pages. Students will use image-editing programs to manipulate scanned images, computer graphics, and original artwork. (Prerequisite: Software Applications)

**COMPUTER REPAIR**, 1 unit, Grades 11-12 (LP ACC) Fall Semester Only

Students taking this course will experience hands on and theory based instruction in repairing and maintaining computers and their peripheral attachments. Installation and updating of software, as well as removal and diagnosis of computer virus' and malware, will provide additional elements of instruction within the curriculum. Additionally, an understanding of network configurations and maintenance will be a part of classroom instruction. Students will have an opportunity to earn A+ certification through CompTia, as well as certification via Test Out.

**DATABASE MANAGEMENT/INTRO TO PROGRAMMING**

*1 unit, Grades 11-12 (LP ACC) Spring Semester Only*

This course introduces students to the fast growing and high paying fields of computer programming and database management. Students will have an opportunity to earn industry certifications in Database application (MOS Certification) and Database Fundamentals (MTA Certification). Using the languages of Visual Basic and SQL, students will learn programming fundamentals as they apply to creating, maintaining, and enhancing database structures. This course is being negotiated for dual credit with IVCC.

## Engineering and Technology

### **ORIENTATION TO INDUSTRIAL OCCUPATIONS**, 1 unit, Grades 9-12

This course is designed to provide the student with the science and technology background needed to succeed in future industrial occupations courses and, in today's technological society. The course is comprised of the four units of the Illinois Plan for Industrial Education: 1) Transportation Technology -- which includes the propulsion and control systems of terrestrial, atmospheric, space and marine transportation media; 2) Energy Utilization Technology -- which includes the extraction, conversion, storage and conservation of fossil fuels, solar resources, wind and water resources, and nuclear energy resources; 3) Communication Technology -- which involves the graphic and electronic means of transmitting and receiving messages which includes experiences in telecommunications, computers, photography, graphic arts, broadcasting, and design/drafting; 4) Production Technology -- involves the management, material processing, research and development, production, marketing, and servicing components of industries which provides goods, services, and structures for people. In addition, all students receive a safety orientation as it relates to the shop equipment and individual exercises.

### **TECHNICAL DRAWING**, ½ unit, Grades 10-12 (1st semester)

The purpose of this course is to introduce the student to the principles, tools, materials, techniques, equipment, and processes used in the production of drawings, layouts, and plans. Instruction is provided in freehand sketching, the use and care of drawing instruments and some drafting equipment, styles and techniques of lettering, the use of templates and mechanical lettering guides, dimensioning, isometrics, sectional views, auxiliary views, perspective drawing, multiview drawings, and pictorial drawings. Time is also devoted to the preparation and execution of CAD drawings on the computer. Career and educational opportunities in the field of drafting are investigated and emphasized.

### **ARCHITECTURAL DRAWING**, ½ unit, Grades 10-12 (2nd semester)

The purpose of this course is to help the student further develop his drawing skills with emphasis on architectural drawings and the construction of a model. Instruction is provided in the terminology and materials used in building construction, drawing symbols, and conventions, the use of template and guides, dimensioning, specifications and standards, architectural styles and trends, footings and foundations, framing, interior and exterior walls, windows, doors, and roof construction. Time is also devoted to the preparation and execution of CAD drawings on the computer. Drawings include a plot plan, footing and foundation plans, floor plans, four elevations, electrical plan, and cross sections. The students will also investigate career and educational opportunities in drafting and architectural construction terminology

### **COMPUTER-AIDED DESIGN**, 1 unit, Grades 10-12 (May be taken for dual college credit through IVCC)

This course is an in-depth study of computer-aided design (CAD). Topics studied will include: the user-computer interface, hardware, software, the rationale for drafting on a computer, how CAD ties into computer-aided manufacturing (CAM), and CAD's uses in manufacturing and industry. Lab sessions will use problems and drawings to teach the student to become proficient in the use of various software packages including AutoCad LT. Problems will deal with technical drawing and architectural drawing situations. When possible, step by step tutorials will be used. Output will be to a variety of sources including a four-color plotter, laser jet printer, and dot matrix printers. (Prerequisite: None; however, it is suggested that the student have completed/be concurrently enrolled in either architectural or technical drawing)

### **COMPUTER AIDED DRAFTING**, 2 units, Grade 11-12, (LP ACC)

This course gives training in design aspects to various industries Students will use state of the art software to

solve real world problems and communicate solutions to hands-on projects and activities. Second year students will construct and test models for strength and durability. Student will be eligible for 9 hours of college credit from IVCC; 3 of those credit hours can be awarded through the dual credit agreement with the college.

## English Language Arts

### **ENGLISH I**, 1 unit, Grade 9

English I develops communication skills needed by students through the study of literature, language, writing, research, and vocabulary. Students study literature by content and form, both as classroom assignments and individual projects. They improve their expression through practice in writing and speaking. Writing assignments range from journal writing to formal compositions, essays, and short research papers. Vocabulary development is a constant goal.

### **SPEECH**, ½ unit, Grades 10-12 (Required for class of 2020 and beyond)

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Students will learn how to overcome anxiety in regards to public speaking, and in turn, students will be able to develop and present high-quality speeches for different public speaking purposes.

### **WORLD LITERATURE**, 1 unit, Grade 10

This class focuses on the study of literature originating outside the United States. Students are expected to demonstrate a broad range of reading and comprehension skills understanding that reading world literature enriches their knowledge of world history. Universal themes will be explored that, although spanning several historical eras, remain relevant to every generation. Purposeful speaking and writing skills are further developed including the persuasive, expository, and narrative essay. Grammar, mechanics, and vocabulary skills are further developed.

### **AMERICAN LITERATURE**, 1 unit, Grade 11

In this class, students are expected to approach the study of American literature analytically, understanding that literature is a product of different societies and events in history. Written and spoken communication are emphasized throughout the course. Development of a researched paper comprises part of one nine-week section of study during the year. Proper research, drafting, and revising techniques are stressed. Vocabulary is covered in the literature read for class. Grammar is studied as needed as determined by students' writing.

### **ADVANCED PLACEMENT ENGLISH (LANGUAGE/COMPOSITION)**, 1 unit, Grade 11-12

This course engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. The students' writing and reading should make students aware of the interactions among a writer's purpose and the audience's expectations.

### **BRITISH LITERATURE**, 1 unit, Grade 12

British Literature is a college preparatory English course emphasizing an analytic approach to British Literature and an understanding of the developments in the English language. Students improve their communication skills by using cooperative learning methods, expressing their opinions in class discussions, and giving formal presentations. They regularly write compositions emphasizing forms, content, creativity, correct usage, and mechanics. Through exploration and research, the student becomes an independent, life-long learner. Through their work they also develop critical thinking and vocabulary skills.

**ADVANCED PLACEMENT ENGLISH (LITERATURE/COMPOSITION)**, 1 unit, Grade 12

Advanced Placement English Literature/Composition is designed for the highly motivated senior student intent upon furthering his/her education at the college or university level. The student enrolling in AP English should carry strong English grades from previous English course work and possess above-average writing skills and verbal ability. Most importantly, the student should be an involved and active reader of fine literature. [Advanced Placement English literature and composition has as its focus three goals. First and foremost, AP English strives to develop students' appreciation and understanding of quality literature. Upon completion of the course, students will be able to effectively and maturely communicate this understanding in both oral and written form. Second, the AP instructor expects many students to perform sufficiently well on the AP exam near the end of the school year so as to earn them credit at the college or university of their choice. Finally, the course will prepare students for the broader college classroom experience. Whatever field a student chooses to pursue, the rigor demanded in AP English foreshadows that expected at the post-secondary level.

**ENGL 110: COMPOSITION I**, ½ unit, Grade 12, Dual Credit through ICC – 3 hours, Fall Semester

This course progresses the student from writing expressive compositions (expressing the ideas of the writer) to writing referential compositions (explaining or analyzing the subject matter for the reader) to writing persuasive compositions (persuading an audience), through critical reading, discussion, exercises, conferences, and revision. The majority of the writing is referential. (Pre-requisite: Approved reading placement score, or equivalent, or ENGL 095 or 099 or an equivalent course with a grade of "C" or better)

**ENGL 111: COMPOSITION II**, ½ unit, Grade 12, Dual Credit through ICC – 3 hours, Spring Semester

This course progresses the student from writing analysis of and inquiring about issues to writing argumentative and persuasive compositions using research, through critical reading, discussion, exercises, conferences, and revision. The majority of the writing is argumentative. (Pre-requisite: Approved reading placement score, or equivalent, and ENGL 110 or equivalent course with a grade of "C" or better)

## Fine and Performing Arts

**INTRODUCTION TO VISUAL ARTS**, 1 unit, Grades 9-12

This is a yearlong course with an exploratory introduction into art of self-expression through two-dimensional art: basic drawing, painting, printmaking, design, high technology computer graphics; three-dimensional art; sculpture, clay, and crafts. The student will also be involved with the understanding and appreciation of art history and humanities. **All students must successfully complete this full year course as a prerequisite prior to enrolling in studio courses.**

**PAINTING & DRAWING I**, ½ unit, Grades 10-12

This is a semester long course with an emphasis in the varieties of painting media with a drawing foundation. Students will gain an understanding of basic drawing and composition skills that can be translated into painting. The student will also be involved with the understanding and appreciation of art history and humanities as they pertain to the painting medium. Art assignments may include the following areas of study as well as additional areas as needed: drawing and composition, oil and soft pastel, landscape painting, abstract painting, portrait/figure painting, water color, and introduction to oil paint.

**PRINTMAKING AS AN ART FORM I**, ½ unit, Grades 10-12

This is a semester long course with an emphasis in the intaglio printing media with a drawing foundation. Students will gain an understanding of basic printmaking skills. The student will also be involved with the understanding and appreciation of art history and humanities as they pertain to the printmaking medium. Art assignments may include the following areas of study as well as additional areas as needed: lino-cut

block printing, collagraph, solarplate etching, monotype/monoprint, and stamp art.

**DIGITAL MEDIA I**, ½ unit, Grades 10-12

This is a semester long course with an emphasis in the various digital media with photography as a foundation. Students will gain an understanding of basic composition using digital still and video photography. The student will also be involved with the understanding and appreciation of art history and humanities as they pertain to the photography medium. Art assignments may include the following areas of study as well as additional areas as needed: digital photography, PhotoShop, anime character development, animation, zines, and video production.

**CERAMICS I**, ½ unit, Grades 10-12

This is a semester long course with an emphasis in the varieties of ceramic techniques. Students will gain an understanding of basic ceramic skills using a low-fire clay body. The student will also be involved with the understanding and appreciation of art history and humanities as they pertain to ceramics. Art assignments may include the following areas of study as well as additional areas as needed: coil built vessels, slab construction, and clay sculpting.

**3D DESIGN I**, ½ unit, Grades 10-12

This is a semester long course with an emphasis in the varieties of sculpting techniques using a variety of materials. Students will gain an understanding of basic three-dimensional sculpting skills. The student will also be involved with the understanding and appreciation of art history and humanities as they pertain to three-dimensional artmaking. Art assignments may include the following areas of study as well as additional areas as needed: clay sculpting, wire, casting materials, and wood carving.

**GRAPHIC DESIGN I**, ½ unit, Grades 10-12

This is a semester long course with an emphasis in a variety of digital and illustration techniques. Students will gain an understanding of basic design elements used in the advertising and product design industry. The student will also be involved with the understanding and appreciation of art history and humanities as they pertain to graphic design. Art assignments may include the following areas of study as well as additional areas as needed: digital and hand rendered illustration, PhotoShop, product development, and fashion design.

**ADVANCED STUDIO ART**, 1 unit, Grades 11-12

This is a year long course with a more in-depth exploratory into art of self-expression through independent artmaking in a variety of two-dimensional art: drawing, painting, printmaking, design, high technology computer graphics; three-dimensional art: sculpture, clay, and crafts. The student will also be involved with the understanding and appreciation of art history and humanities in order that the student will be able to discuss, critique, and evaluate works of art. (Prerequisite: Teacher consent)

**AP ART STUDIO**, 1 HSHS unit, (3 hours AP College Board Credit), Grade 12 only

This is a yearlong course with a more in-depth exploratory into art of self-expression through independent artmaking in a variety of two-dimensional art: drawing, painting, printmaking, design, high technology computer graphics; three-dimensional art: sculpture, clay, and crafts with an emphasis in preparing a portfolio to be submitted to the AP college board for advanced college credit with a choice of the following categories: drawing, 2D design, or 3D design. The student will also be involved with the understanding and appreciation of art history and humanities in order that the student will be able to discuss, critique, and evaluate works of art.

**SURVEY OF ART HISTORY I**, ½ HSHS unit, (3 hours IVCC credit), Grades 11-12 (Junior or Senior students are eligible to take this course and may be taken without taking Introduction to Visual Art)

This is a semester long course that can be taken for dual college/high school credit. The first part of the

survey is of western art history in an in-depth examination of the art of the prehistoric period in Europe through Gothic period. This course will also acquaint students with western art history, the critical process, and the production of art in order to achieve a well-balanced appreciation for art and how it relates to the development of western culture.

**SURVEY OF ART HISTORY II**, ½ HSHS unit, (3 hours IVCC credit), Grades 11-12 (Junior or Senior students are eligible to take this course and may be taken without taking Introduction to Visual Art)

The second part of the survey is of western art history in an in-depth examination of the art of the Fourteenth Century in Europe through Modern Art in Europe and the United States. This course will also acquaint students with western art history, the critical process, and the production of art in order to achieve a well-balanced appreciation for art and how it relates to the development of western culture.

**CREATIVE WRITING**, ½ unit, Grades 11-12

Creative Writing introduces students to the art of poetry, fiction, and drama writing. Instruction on the elements of each genre will be given. Students will compose several original pieces of creative writing during the course of the semester culminating in the creation of a portfolio of their best work. (Prerequisite: Any junior or senior who has received credit for freshman and sophomore English)

**AUTHORS, ACTORS, ORATORS, AND THE PERFORMING ARTS**, ½ unit, Grades 11-12

This class studies literature as portrayed on stage, in media, and through historical figures. Select theater productions, television shows, and movies are analyzed. There is a component on modern debate and persuasion as used by public speakers. Students may participate in skits or actor's studio type situations, do some memorization, or debate. Primarily, however, this is a class to increase literacy about various aspects of performance and media through the works of authors, actors, and orators.

## **Foreign Language**

**SPANISH I**, 1 unit

This course introduces the first level of Spanish for secondary school students. The four skills of language (reading, writing, speaking and comprehension) are practiced. The student will learn basic, practical vocabulary and fundamentals of grammar in an appropriate cultural context. The curriculum is enriched with examples of art, poetry and music.

**SPANISH II**, 1 unit

The second year student of Spanish develops a larger vocabulary and learns more sophisticated grammatical constructions. The skills of reading, writing, speaking and comprehension are learned in cultural context. The curriculum is enriched with examples of art, poetry and music.

**SPANISH III**, 1 unit

In the third year of study, the student advances in vocabulary and grammar to a level of being able to discuss and write about events and situations beyond the realm of daily activity in a broader cultural context. More extensive reading passages and examples of art and poetry are presented.

**SPANISH IV**, 1 unit

The fourth year student in Spanish acquires a knowledge of vocabulary and grammar which enables him to discuss world events and situations in areas such as sociology, politics, and environment. In this year, all remaining verb conjugations are studied. The student advances to the level of reading authentic Spanish literature.

## Health Care Sciences

**HEALTH OCCUPATIONS I/II**, 2 units, Grade 11-12 (2 semester course, 2 periods per day at LP ACC)  
Students will learn basic anatomy and physiology terminology and patient care skills, such as vital signs in the first semester. In the second semester, students will get the hands on clinical experience required by the state of Illinois to become a Certified Nursing Assistant (CAN). Second year students will earn credit for IVCC's Medical Terminology course, (3 credit hours). If both years are complete, students will be eligible for 13 dual credit hours through IVCC.

## Hospitality and Tourism

**CULINARY ARTS**, 2 units, Grades 11-12 (LP ACC)

Students will be trained for career opportunities in the Food Service industry and take the "Illinois Food Handlers: certification test. They will perform quantity food preparation as it relates to catering, bakery, restaurant, and hospitality operation. Food Service emphasizes: sanitation, safety, equipment operation and care, personal and interpersonal job acquisition and retention skills, and front and back-of-the-house worker tasks. This class manages and operates the Corner Café Restaurant and Bakery located at 200 9<sup>th</sup> Street, Peru.

## Human Services

**CHILD CARE / EARLY CHILDHOOD EDUCATION**, 2 units, Grades 11-12 (LP ACC)

This course is designed to prepare students interested in a career in child and day care operations and early childhood education with information and practical experience needed for the development of job-related competencies. Students are provided laboratory experience within a school-based or extended campus facility. Students will be eligible for 3 hours of college credit from IVCC. Also, 10 documented observation hours can apply toward the IVC Child Care/ECE program. Students will have the opportunity to achieve a Level 1 credential from "Gateways to Opportunities" program through INCCRRA.

**COSMETOLOGY**, 2 units, Grade 12 (LP ACC)

Students will be eligible for the first 250 hours toward a license in cosmetology. The class is offered at the Educators of Beauty, a Pivot Point member school. Students will have both theory and practical experiences in the introductory areas of cosmetology including shampooing, facials, permanent waves, hair removal/scalp massage, makeup application, manicures, pedicures, chemical hair relaxing and retail. Visit [www.educatorsbeauty.com](http://www.educatorsbeauty.com)

## Life and Physical Science

**BIOLOGY**, 1 unit, Grades 9-12

Biology focuses on the study of living organisms. The course covers the following topics: the nature of science, the cell and the environment, cell growth and reproduction, photosynthesis and cellular respiration, principles and mechanisms of heredity, human heredity, applied genetics, evolution, plants, invertebrates, vertebrates, and an introduction to ecology. This course will include lecture and laboratory work (including dissections).

**PHYSICAL SCIENCE**, 1 unit, Grades 10-12

This course introduces students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

**CHEMISTRY I**, 1 unit, Grades 10-12

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. (Prerequisite: Algebra I)

**PHYSICS I**, 1 unit, Grades 10-12

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena. (Prerequisite: Algebra II or dually enrolled)

**MICROBIOLOGY**, ½ unit, Grades 11-12

Microbiology is a semester course that presents students with the fundamentals and applications of microbiology. Topics will include microbial genetics, microorganisms, diseases, and immunity. This course is intended for students of average to above average ability and focuses on those students who plan to continue their education after high school, especially those interested in the medical field. This course will consist of detailed labs that may include working with live specimens and chemicals. There may also be an independent research project as a requirement for this course. This class is based on the assumption that students gained an understanding of the basic concepts and knowledge in Biology I so that more in-depth topics can be addressed. (Prerequisites: Biology I, Algebra, Chemistry or Physics)

**MEDICAL TERMINOLOGY**, ½ unit, Grades 11-12 (Dual Credit through ICC- 2 hours)

Medical terminology is a semester course that focuses on the principles of medical word building to help the student develop the extensive medical vocabulary used in health care occupations. Students receive a thorough grounding in basic medical terminology through a study of root words, prefixes and suffixes. The study focuses on correct pronunciation, spelling and use of medical terms. Anatomy, physiology, and pathology of disease are discussed yet no previous knowledge of these topics is necessary. This course is intended for students of average to above average ability and focuses on those students who plan to continue their education in the medical field. Students will have the opportunity to collaborate with classmates on different projects and activities throughout the course. (Prerequisites: Biology, Algebra, Chemistry or Physics)

**ANATOMY AND PHYSIOLOGY**, 1 unit, Grades 11-12

This course focuses on the anatomy and physiology of the human body. Students explore the organ systems at great length. Careers in the medical and health fields are investigated with guest speakers and field trips. Students should be prepared to complete several dissections throughout the year along with completing labs with living organisms. (Prerequisites: Biology, Chemistry I or Physics I and Microbiology or be concurrently enrolled in Microbiology as a senior)

**CHEMISTRY II**, 1 unit, Grades 11-12 (May be taken for dual college credit through IVCC- 4 hours)

This course covers chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry. (Prerequisites: Chemistry I and enrollment in Algebra II)

**PHYSICS II**, 1 unit, Grades 11-12

This course provides instruction in laws of conservation, thermodynamics, and kinetics; wave and particle phenomena; electromagnetic fields; and fluid dynamics. (Prerequisite: Physics I and Algebra II. Enrollment in Math IV is recommended.)

## Manufacturing

**WELDING AND METALS I**, ½ unit, Grade 9-12 (1st semester)

This course provides activities and learning experiences designed to help the student gain knowledge in welding principles and methods, and skills in oxyacetylene and electric arc welding, MIG welding, fabrication, and repair. The following areas are covered: instruction in safety, principles and practices; welder types; operating principles; electrode types and uses; metal identification and properties; welding heads, butt welds, filler welds, and lap welds in various positions; work-holding devices; and the care and use of hand and bench tools. Educational career opportunities in the field of welding and metals are investigated and emphasized. (Prerequisite: Orientation to Industrial Occupations)

**WELDING AND METALS II**, ½ unit, Grade 9-12 (2nd semester)

The activities and learning experiences in this course are designed to further develop the knowledge and skills in oxyacetylene, electric arc welding, MIG welding, fabrication, and repair which were learned in Welding and Metals I. The instruction and learning experiences will also include: instruction in safety principles and practices; properties of metals; blueprint reading; bench metal; soldering and brazing; operation of saws, drills, lathes, grinders, layout and measuring tools; cutting, tapping and threading; pattern and mold-making. The course also emphasizes the educational and career opportunities in the area of welding and metals. (Prerequisite: Orientation to Industrial Occupations)

**MACHINE TECHNOLOGY**, 2 units, Grade 11-12 (LP ACC)

Students will use technical knowledge and skills to plan, manufacture, and assemble products. They will learn to use the lathe, mill, grinders, drill press, band saw, and state of the art CNC equipment. Communication and personal skills for successful employment will be promoted. Students will be eligible for 4 hours of IVCC college credit. Second year students will also have the opportunity to work toward a national “Manufacturing Production Technical Certification” through the use of the Manufacturing Skills Standards Council curriculum.

**WELDING**, 2 units, Grade 11-12 (LP ACC)

This program provides students with knowledge of proper welding techniques and procedures. At completion, students will have the skills to get entry level jobs in the field of welding. The first year introduces students to basic techniques, tool use, and safety. Second year students will continue to learn more advanced methods and will build on skills learned in the first year. Students will be eligible for 4 proficiency hours and up to 6 hours of IVCC college credit. (Prerequisite: Welding and Metals I/II at HSHS)

## Mathematics

**BASIC CONCEPTS ALGEBRA**; 1 unit, Grades 9

This course begins with a review of the real number system, order of operations, and variable expressions. The use of variables leads into solving equations and inequalities, solving and graphing linear functions and systems of equations. Knowledge about linear functions will be expanded to exponential functions and quadratic functions. Those students who complete this course will be prepared to take Informal Geometry.

Students will cover the same general concepts as a traditional Algebra I course with less emphasis on large fractions and decimals.

**ALGEBRA I**, 1 unit, Grades 8-9

The following topics are covered in this introductory algebra course: a review of the number systems and set theory; operations with numbers and variables including addition, subtraction, multiplication, division, powers, and fractions; algebraic equations and their solutions; polynomials and their operations; graphing with the cartesian coordinate system including linear, quadratic, and inverse equations; applications of equations; systems of two-variable linear equations both graphically and algebraically; functions and variations; inequalities; rational and irrational number operations; quadratic equations; factoring; operations with radical expressions; and introduction to trigonometric functions. The emphasis is placed on understanding the concepts and operations. Special emphasis is placed on word problems, and they are used throughout the course.

**INFORMAL GEOMETRY**, 1 unit, Grade 11-12

Informal Geometry emphasizes a practical approach to the study of geometry and deemphasizes an abstract formal approach. Topics include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

**GEOMETRY**, 1 unit, Grade 9-12

Geometry covers the rules of logic in the deductive method of proof. The following topics are covered: measuring angles and segments, formal and informal proofs, logical reasoning, parallels and polygons, congruent and similar triangles, perimeter and area, three dimensional shapes and relationships, surface area and volume, similar polygons, angles of circles, transformations, and trigonometry. Many real life applications as well as connections to other school subjects are discussed on homework, projects, and reports. (Prerequisite: Algebra I)

**ALGEBRA IIA**, 1 unit, Grade 11-12

Algebra IIA will review and extend algebra and geometry concepts for students who have already taken Algebra I and Geometry **OR** Basic Concepts Algebra and Informal Geometry. Algebra IIA will include a review of such topics as properties and operations of real numbers; evaluation of rational algebraic expressions; solutions and graphs of first degree equations and inequalities; translation of word problems into equations; operations with and factoring of polynomials; simple quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, and circles in the coordinate plane; and angle measurement in triangles including trigonometric ratios.

The focus of this class will be to give the students an overview of all topics they will see on the SAT/ACT and college entrance exams. Students will cover new material while review basic algebraic and geometric concepts from the previous two years.

**ALGEBRA IIB**, 1 unit, Grade 12

Algebra IIB is a continuation of Algebra IIA. This class will focus more in depth on topics from algebra involving real numbers and their properties, operations of polynomials, solving linear equations and inequalities, solving absolute value equations and inequalities, understanding of radical expressions, operations of complex numbers, solving quadratic equations, solving systems of equations, rectangular coordinate system and graphs, introduction to functions, graph linear equations and inequalities, graph quadratic equations, graph exponential and logarithm functions, and graphing systems of equations and inequalities.

**ALGEBRA II**, 1 unit, Grade 11 (weighted)

Algebra II is a continuation of the Algebra I course. The number system is studied and the set of real numbers is used for the majority of the course. Complex imaginary numbers are introduced during the year. Polynomials, matrices, functions and their inverses, quadratic equations and their graphs, exponents, logarithms, and basic trigonometry are also covered. (Prerequisites: Algebra I and Geometry)

**PROBLEM SOLVING**, ½ unit Grade 12

Students will approach mathematics curriculum through problem-solving. Coursework will be highly cooperative and group-centered. The curriculum will include counting and probability, arithmetic and geometric patterns, geometry and spatial presentations, logic problems and modeling with mathematics. Grades will be determined by group participation, group problems, demonstration of individual knowledge of key concepts, and major projects. (Prerequisite: Algebra I, Geometry, and Algebra II)

**PROBABILITY AND STATISTICS**, ½ unit Grade 12

Probability and Statistics introduces the study of likely events and the analysis, interpretation, and presentation of qualitative data. Course topics generally included basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability. (Prerequisite: Algebra I, Geometry, and Algebra II)

**MATH IV**, 1 unit, Grade 12

A college-preparatory course includes advanced topics in Algebra and Trigonometry. The trigonometry section includes trigonometry identities, equations, word problems, inequalities, and polar coordinates. Sequences, series, and limits are studied leading up to derivatives. These concepts are used to study polynomial and rational functions and their graphs including maximum-minimum word problems. Exponential and logarithmic functions including natural logs are studied. An introduction to integration concludes the topics taught. An introduction to probability is included if time permits. Emphasis is placed on understanding the concepts. Students completing this course with an adequate grade should be able to start the calculus sequence in college. (Prerequisite: Algebra I, Geometry, and Algebra II)

**ADVANCED PLACEMENT CALCULUS**, 1 unit, Grade 12

This course is intended for students who have a thorough knowledge of college preparatory mathematics, including algebra, axiomatic geometry, trigonometry, and analytic geometry (rectangular and polar coordinates, equations and graphs, lines, and conics). AP Calculus is a course in introductory calculus with elementary functions. A graphing calculator is needed but they are provided. (Prerequisite: Mathematics IV)

## Miscellaneous

**HIGH SCHOOL 101**, ½ unit, Grade 9 (Required freshman course)

High school 101 is a course that teaches students strategies for creating success in school and in life. Topics promote student growth and self-awareness, while providing instruction in study skills. Powerful guided journal entries encourage students to explore essential life skills such as personal responsibility, self-motivation, interdependence, and self-esteem. Students engage in critical and creative problem solving that will enable them to achieve greater success in all parts of their lives.

**CONSUMER EDUCATION**, ½ unit, Grade 10-12

This is a required course for students not participating in the Interrelated Cooperative Education program. Units of study include: consumer rights and responsibilities, economic systems, advertising, the business cycle, taxes, career planning, budgeting, saving and investing, checking accounts, reconciliation, credit, and insurance.

**INTERRELATED COOPERATIVE EDUCATION**, 1 unit, 2 credits, Grade 12 (This course meets the Consumer Education requirement for graduation.)

Interrelated Cooperation Education is designed for senior students interested in pursuing careers in vocational occupations. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving student abilities to interact positively with others. For skills related to the job, refer to the skills development course outlines and the task list of the desired occupational program. In addition to technical skills, course content will reflect integration of academic and workplace skills.

A qualified vocational cooperative coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student, and coordinator. Occupational task lists form the basis for training plans. The coordinator, student, and employer comply with federal, state, and local laws and regulations.

The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, financial planning, organization and job termination. In addition, classroom instruction includes technical skills as identified on occupational task lists.

## Music

**BAND (SYMPHONIC)**, Grades 9-12

Symphonic Band is a musical organization where students are taught to play specific instruments and to appreciate different kinds of music from popular to sophisticated. Playing in band also teaches students to play together as a group. It performs publicly throughout the year and at IHSA Organizational Contest. The band program also incorporates pep band, jazz band, and marching band. Several trips are arranged for the marching band each year. All students in band take a lesson once a week during their study hall. There are extra rehearsals and obligations of the band people. The Symphonic Band is open to any students who play or wish to play a band instrument. For those who wish to begin, lessons will be arranged until proficient enough to join the band.

**CHORUS**

The Concert Choir is a musical organization where students are working together to produce choral music of all types. Singing in choir gives a student a chance to perform vocally in a large group. It also teaches students to work together for a common goal. This group gives a Winter and Spring Concert along with performing at IHSA Organizational Contest. On even numbered years, the choir sings in the Tri-County Choral Festival in which all Tri-County Schools come together to give a concert.

**SWING CHOIR**

The Swing Choir is a group of 12 to 24 singers who perform popular music of all kinds. This group is offered to all students in the second semester every year. Auditions are held in January to obtain membership in this group. This group, in conjunction with the Jazz Band, performs in the Swing Show as well as in special performances around the area. Rehearsals are held twice a week after school or evenings. Members do obtain proper attire for this group.

## Physical Education, Health and Safety

### **DRIVER EDUCATION**, no credit, Grade 9-10

The first nine weeks of this course will be classroom education totaling thirty hours. Six hours of behind-the-wheel training with the driver education instructor will follow in addition to fifty hours of behind-the-wheel experience with a parent. Students drive in order according to their age. **Students must have their driving permit a minimum of nine months before obtaining their driver license.** This course is offered to all students to meet state specifications to prepare the students to pass their driver's license test. Students who do not pass the 9 weeks of classroom instruction will not be able to take behind-the-wheel. (Prerequisite: Student must have passed 8 courses in the preceding 2 semesters)

### **HEALTH**, 1/2 unit, Grade 9

Health is taught in a one-semester course at the freshman level and is required by the Illinois State Board of Education. The topics in Health include: human sexuality, diseases and cancer, mental and emotional health, nutrition, alcohol and drug abuse and prevention, first aid and safety, fitness and sports, consumer health, health quackery, and aspects of health departments and their responsibilities.

### **PHYSICAL EDUCATION**, 1/2 unit, Grades 9-12

This program is designed to develop and promote knowledge, appreciation, and physical skills of life-time sports. Other physical activities which are designed to develop fundamental physical skills are also included. These sports are viewed from both the participant and the spectator level. A variety of team sport activities and individual sport activities are offered as follows: flag football; soccer-speedball; floor hockey; volleyball; basketball; badminton; recreational games; fitness; archery; softball; bowling & dance.

## Public, Protective, and Government Services

### **BASIC FIRE SKILLS – EMERGENCY MEDICAL RESPONDER**, 2 units, Grade 11-12 (LP ACC)

Basic Fire Skills – EMR is designed to provide students with the skills necessary to prevent and extinguish fires and provide basic emergency medical treatment. Students will hear from and visit several of the local fire stations in the area to gain an understanding of the wide variety of employment situations. Students will also be introduced to a variety of other public safety careers. Students will be eligible for up to 4 hours of dual credit by completing their Emergency Medical First Responder certification through IVCC.

## Social Sciences and History

### **WORLD HISTORY I**, 1/2 unit, Grades 9-12

World History I is a discovery of our changing world through its great civilizations starting with the ancient Sumerians and moving forward in time through the Renaissance Period. The political, economic, social, military, and cultural development of various historical periods is studied. The seven major religions of the world are examined. Places to explore include early Africa, China, India, Middle East, Greece, Rome, Russia, Europe and more.

### **WORLD HISTORY II**, 1/2 unit, Grades 9-12

World History II is a survey of man's accomplishments beyond the borders of the United States. Various modern nations are studied beginning with the French Revolution and moving forward around the globe to

the present. The idea of revolution emerges as a dominant theme as we explore the philosophies, economies, societies, and technologies of the modern era. Particular attention is paid to the culture of genocide that occurred during the 20<sup>th</sup> century.

**WORLD GEOGRAPHY I**, ½ unit, Grades 9-12

This course begins with learning the basics of geography, human geography and the world economic systems. Following that is an introduction to atlas regions: United States/Canada, Latin America, Western Europe, Central Europe/Northern Eurasia, Central/Southwest Asia, Africa, South Asia and East Asia/Pacific World. Study includes the historical overview, physical characteristics, climates, ecosystems, people/cultures and economics/technology/environment of each region.

**WORLD GEOGRAPHY II**, ½ unit, Grades 9-12

This course focuses on specific modern nations located within each of the major regions of the world: United States/Canada, Latin America, Western Europe, Central Europe/Northern Eurasia, Central/Southwest Asia, Africa, South Asia and East Asia/Pacific World. For each country the physical characteristics, culture and other geographic features will be studied.

**INTERNATIONAL RELATIONS**, ½ unit, Grades 9-12

This course will provide students with an investigative approach to understanding various nations' actions, interactions, and motives in the global environment. Students will have an opportunity to explore various international issues such as balance of power, world government, future world order, diplomacy, deterrence, terrorism, and imperialism. Students will sharpen and expand their critical thinking, cooperative learning, research and communication skills.

**AMERICAN LAW & CRIMINAL JUSTICE**, ½ unit, Grades 10-12

This course will provide students with a comprehensive look at the American criminal and justice systems. This course will offer insight into a variety of topics including crime statistics, factors of crime, the American prison system, alternatives to prison, the American court system, the death penalty, the Bill of Rights, civil rights, and Due Process of law. Students will utilize and sharpen their critical thinking, research, and debate skills in mock trials, open discussions and issue debates.

**CONTEMPORARY UNITED STATES HISTORY**, ½ unit, Grades 10-12

This course will provide students with a detailed experience of contemporary United States history beginning in the 1970s and concluding with present day events. This course will provide students with an opportunity to explore historical events more in-depth than a survey course in U.S. history. Students will sharpen their knowledge of the end of the Cold War, Vietnam War, post-Vietnam Culture, Gulf War, Internet boom, and the War on Terror (Afghanistan and Iraqi Freedom). Students will sharpen and expand their research, critical thinking, communication, and presentation skills through various projects.

**U.S. HISTORY**, 1 unit, Grade 11

U.S. History is a lecture presentation of the major events in the history of the United States from the age of exploration by European Nations to the present. Emphasis is placed on the significant personalities, legislation, treaties, Presidential elections, and the causes and effects of wars and economic changes.

The course also includes instruction in: American patriotism and the principles of representative government as enunciated in the American Declaration of Independence, the Constitution of the United States of America, and the Constitution of the State of Illinois; the proper use and display of the American flag; the method of voting at elections by means of the Australian Ballot system; and the method of counting of votes for candidates.

Students will be required to write a research paper relating to an American historical event, place, or person.

**ADVANCED PLACEMENT U.S. HISTORY**, 1 unit, Grade 11

This course satisfies the high school U.S. History requirement and gives college credit to students who take and pass the AP exam. Students use a college textbook and materials, and they are graded at the college level. Students taking AP U.S. History should be motivated and prepared to do the work.

**GOVERNMENT**, ½ unit, Grades 11-12 (Required for class of 2020 and beyond)

This course emphasizes structure, function, and analysis of national, state and local governments. It stresses the true meaning and responsibilities of citizenship. The methods of nominating and electing local, state, and national officials are studied. Students will gain hands-on experience in participating in governmental elements such as interest groups, polls, political parties, and the justice system.

**AP UNITED STATES GOVERNMENT and POLITICS**, 1 unit, Grades 11-12

AP United States Government and Politics will give students an analytical perspective on government and politics in the United States. The course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. The course requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. Topics that will be covered in this course include: Constitutional underpinnings of the United States Government; political beliefs and behaviors; political parties, interests groups and mass media; institutions of national government: Congress, the Presidency, Bureaucracy and the Federal Courts; public policy; civil rights and civil liberties.

**SOCIOLOGY**, ½ unit, Grades 10-12

In Sociology, study centers on relationships of groups, such as class, special institutions, and the family unit. The structure of our society is examined. Current events, vital issues, and social problems are also studied. Students will also conduct their own sociological study using the methods studied in class.

**PSYCHOLOGY**, ½ unit, Grades 11-12

Students will become familiar with the basic theories and principles of psychology. Psychology should help students better understand the behavior of individuals and increase self-awareness. It will also help the students develop an understanding of psycho-sociological problems and healthy alternatives.

**LOCAL HISTORY THROUGH LEGEND AND LORE**, ½ unit, Grades 10-12

This course will explore the rich body of legend and lore written about the area in which students live. Students will become more familiar with regional events that impacted our legal system, national law, and/or society. One of the best ways to learn local history is through reading a wealth of local literature. Topics that will be explored include the Cherry coal mine disaster, the Starved Rock Murders, and others. (Prerequisite: None. However, this course could not be used to replace any history classes required for graduation.)

**PSY 110 -INTRODUCTION TO PSYCHOLOGY**, ½ unit, Grade 12, Dual Credit ICC – 3 hours

Psychology is the scientific study of behavior and mental processes. This course will introduce the student to fundamentals of physiological psychology, sensation and perception, learning, emotions and motivation, and psychological disorders and their treatment. The role of research and the scientific method are emphasized throughout the course. (Pre-requisite: Approved reading placement score, or equivalent.)

**SOC 110 - AN INTRODUCTION TO SOCIOLOGY**, ½ unit, Grade 12, Dual Credit ICC – 3 hours

This course utilizes the approaches of functionalism, conflict theory, and interactionism to analyze the

structures and processes of group life from a scientific perspective. Major areas of inquiry include: theory and methodology, culture, social organizations, socialization, groups, institutions, formal organizations, collective behavior, and social change. (Pre-requisite: Approved reading placement score, or equivalent)

## **Transportation, Distribution and Logistics**

### **AUTOMOTIVE TECHNOLOGY**, 2 units, Grade 11-12 (LP ACC)

Automotive Technology teaches the basic skills needed in a career as an automotive technician, some of which includes hands-on activities related to assembly, disassembly, adjustments, repairs and service of vehicles as well as auto repair. Students will be eligible for 6 hours of college credit from IVCC. Stress will be placed on developing good safety, diagnostic, and preventative maintenance skills. Students will have the opportunity to complete the requirements for the NATEF – “General Automotive Service Technician” Certification.

## **Special Education**

### **READING A**, 1 unit

This course provides intensive reading intervention and comprehension strategies and develops students’ understanding of relationships between and among elements of literature, including characters, plot, setting, tone, point of view, and theme. Students also analyze the connections among author’s style, literary form, and the author’s intended impact on the reader. Students also select and use strategies to understand words and text, and to make and confirm inferences from what is read. Through reading high interest modern literature, students learn how to analyze characters, predict using contextual clues, identify and explain figurative language, and support inferences using textual evidence. Different skill/grade levels are offered within a classroom at the same time.

### **ELA – A (Combining English and Reading Skill Instruction)**, 1 unit

This course stretches and strengthens the literacy skills of students as they develop competency in reading and writing. Step-by-step instructions, in-class reading strategies, academic support, grammar instruction, vocabulary development, spelling instruction, and the organization and mechanics of writing will be addressed. Students will also read grade level texts and learn how to comprehend text and make inferences using textual evidence. Different skill/grade levels are offered within a classroom at the same time. Students mastering the concepts in this course will be prepared to transition to general education English. (2 semesters)

### **Math A-1**, 1 unit

This course is the first of a three-part series in the study of Algebra I skills. Students will obtain a working knowledge of the following concepts and skills: the study of properties and operations of the real number system, how to evaluate rational algebraic expressions, how to solve and graph equations and inequalities, exponents, and rationales, how to translate word problems into equations, how to solve multi-step equations. They will also become familiar with the use of a scientific calculator to assist their efforts. This course focuses on strategies and additional practice to promote and sustain mastery. (2 semesters)

### **MATH A-2**, 1 unit

This course is the second of a three-part series in the study of Algebra I skills. Students will obtain a working knowledge of the following concepts and skills: linear equations, binomials, substitutions, radical expressions, graphing models, inequalities, absolute value equations, trinomials, how to graph rational

functions, and quadratic functions, and how to master the use of a scientific calculator. This course focuses on strategies and additional practice to promote and sustain mastery. (2 semesters)

### **MATH A-3**, ½ unit

This course is the last of a three-part series in the study of Algebra I skills. Students will obtain a working knowledge of the following concepts and skills: how to evaluate rational and irrational algebraic expressions, how to graph linear and quadratic equations, how to solve operations with rational and irrational exponents. Students will learn to use a graphing calculator to apply appropriate formulas, sequence, and order of operations. This course focuses on strategies and additional practice to promote and sustain mastery.

### **PRINCIPLES OF GEOMETRY** , ½ unit

Through real-life situations and practical applications, this course offers students the opportunity to learn the same concepts as those addressed in the regular education Geometry class. This course is especially focused on the development of problem solving strategies; through the use and application of the following concepts; geometric figures, perimeter, circumference, area of regular and irregular shapes, rules of angle measurement in triangles, Pythagorean theorem, calculation of slope, midpoint, distance, and determining parallel and/or perpendicular lines. Students will be briefly introduced to the concepts of proofs.

### **US HISTORY**, 1 unit

This course explores the history of the United States from the age of exploration by European Nations to the present. Emphasis is placed upon the major turning points in American history, including the Declaration of Independence, the U.S. Constitution, and the Constitution of the State of Illinois.

### **STEP TRANSITIONAL EXPERIENCE PROGRAM (S.T.E.P.)**, 1-2 units

(STEP) is a training/placement program that helps students with disabilities prepare to transition to employment and community participation during and after high school. Students learn to become productive, self-sufficient adults through a variety of STEP experiences such as; developing desirable work habits and realistic career goals, exploring careers, 1:1 one the job placement and training, developing social and personal skills needed to maintain successful employment.

### **LIFE SKILLS** (1-2 units)

The Life Skills class is designed to fit the needs of the class participants and instruction is tailored to the participants' strengths and weaknesses. The goal of the Life Skills class is to help students become more independent, self-sufficient individuals. Students learn how Math is used in the workplace and in the home. Self-care and domestic maintenance, including basic cooking skills, are addressed on a daily basis. The practice of reading and writing skills is interwoven throughout the classroom and real-life activities. Through focused excursions into the local community, students utilize their literacy and numeracy skills to increase their confidence and competence as developing adults. (Life Skills class is a double period and can count as a one year credit for English and a one year credit for Math).