

## SYCAMORE SENIOR HIGH SCHOOL

This syllabus contains a description of each course offered in the high school. It is designed to assist students and parents in selecting courses of instruction that will best prepare the individual student to either enter employment or to pursue further education following high school graduation. The long-range goal one seeks to attain is of the utmost importance in planning one's high school program.

### REGISTRATION

Registration for all high school students will be held during the spring semester. The guidance personnel will hold group meetings for all students during January for the purpose of presenting curriculum offerings and to explain the registration procedure. There will be an approximate one week period following the presentation when the student will confer with parents, counselors, and teachers and complete their actual pre-registration.

### FEES

The Sycamore Board of Education establishes fees each year. These fees include textbook, towel, Driver Education, and activity/athletic fees as well as specialized fees such as lab costs, projects, and workbooks.

### SYCAMORE HIGH SCHOOL GRADUATION REQUIREMENTS (Minimum)

Students who receive credit for Algebra 1 at the Middle School level will have this course placed on their transcript, but it will not count as a credit for high school graduation.

#### Class of 2010

Total credits: 20

Eight semesters of high school work including the following:

(a) 11 major academic credits including:

1. English - 3 credits
2. Speech – ½ credit
3. Mathematics - 3 credits
4. Science - 1 credit
5. Social Studies – 2 credits (1 credit in Am History;  
½ credit in Government; ½ credit in Geography\*)
6. Consumer Economics – ½ credit or passage of state proficiency test
7. World language, art, music or vocational - 1 credit

(b) 4 credits in Physical Education including ½ credit in health and ¼ credit in Driver Education

\* Could take World Cultures in lieu of geography

Class of 2011

Total credits: 20

Eight semesters of high school work including the following:

- (a) 12½ major academic credits including:
  - 1. English - 3 credits
  - 2. Speech – ½ credit
  - 3. Mathematics - 3 credits
  - 4. Science - 2 credits
  - 5. Social Studies – 2½ credits (1 credit in World Cultures;  
1 credit in Am History; ½ credit in Government)
  - 6. Consumer Economics – ½ credit or passage of state proficiency test
  - 7. World language, art, music or vocational - 1 credit
- (b) 4 credits in Physical Education including ½ credit in health and ¼ credit in Driver Education

Class of 2012 & Class of 2013 and beyond

Total credits: 20

Eight semesters of high school work including the following:

- (a) 13½ major academic credits including:
  - 1. English - 4 credits
  - 2. Speech – ½ credit
  - 3. Mathematics - 3 credits
  - 4. Science - 2 credits
  - 5. Social Studies – 2½ credits (1 credit in World Cultures;  
1 credit in Am History; ½ credit in Government)
  - 6. Consumer Economics – ½ credit or passage of state proficiency test
  - 7. World language, art, music or vocational - 1 credit
- (b) 4 credits in Physical Education including ½ credit in health and ¼ credit in Driver Education

IF A STUDENT FAILS A REQUIRED COURSE, IT MUST BE REPEATED THE FOLLOWING YEAR.

COURSE LOAD

1. Students are required to be enrolled in at least five classes per semester.
2. Students are expected to complete a course once they have registered for it because they have made a commitment to themselves and to the school.
3. Extra-curricular activities (athletics, cheerleading, dramatics, etc.); provision for adequate study time; and the possibility of employment should be seriously considered when planning the course load.

CHANGES IN REGISTRATION

Student programs will be changed after the final registration is completed only if extreme emergency circumstances exist. If such circumstances should arise, changes will be made only if they meet the following criteria. Some will require **written parental approval.**

1. Errors such as enrolling in a course previously taken or resulting from data processing.
2. Failure or near failure in a pre-requisite course and/or in a semester or year course.
3. Successful completion of summer school courses.
4. Scheduling conflicts.
5. Teacher/counselor/administrator initiated.

**Any changes not meeting these criteria will cost \$10.00.**

DROPPING COURSES

"Dropping" is a student's withdrawal from that course on or after the first day of the school semester. The student will receive a "W" which will be recorded on the student's permanent record.

If, after talking it over with the instructor, you find that you must drop a course, see your counselor. Written permission from a parent is required to drop a course.

If a course is dropped after the fourth week of the semester, the student will receive an "F" as a semester grade in that course and that grade will be recorded on the student's permanent record.

ABILITY GROUPING

In order that students with special needs might benefit from developmental programs and in order to provide for individual differences, the school provides advanced and regular sections in some subject matter areas. Several criteria, including test scores, past performance in the subject field and teacher recommendations are used to guide students in placement.

We are aware that misplacements can occur. The student can review his/her placement with the teacher and the director of guidance during the year and make changes in his/her course level based on the recommendation of the teacher.

### PROMOTION

Students' class standings are classified as follows:

Freshman	Completed 8 <sup>th</sup> grade
Sophomore	5 credits and completion of at least one year of high school
Junior	10 credits and completion of at least two years of high school
Senior	15 credits and completion of at least three years of high school

### GPA/CLASS RANK

Non-Weighted Grade Point Average: Sycamore High School uses 4.0 grade point system. This means that grades in classes are given "grade points" as follows: A = 4.0; B = 3.0; C = 2.0; D = 1.0; F = 0.

This system is utilized for the following purposes:

1. To determine honor roll.
2. To report to colleges and other post-high school organizations through posting on a student's official transcript.

Weighted Grade Point Average: Sycamore High School also utilizes a "weighted grade point average" for the purpose of recognizing student effort in particularly challenging, elective classes. Students will receive an additional .5 weighting per year for each grade in these courses as follows: A = 4.5; B = 3.5; C = 2.5; D = 1.5; F = .5. Weighted elective classes are as follows:

- English: Pre-Advanced Placement(AP) English(9), Pre-Advanced Placement(AP) English(10), Academic Writing 1, Academic Writing 2, Survey of American Literature, Survey of Western Literature.
- Mathematics: Geometry, Advanced Algebra, Trigonometry, Pre-Calculus
- Science: Chemistry, Physics, Advanced Chemistry, Advanced Physics, Advanced Biology
- Social Studies: Current American Problems, Economics, Psychology, Sociology, World History
- World Language: French 2,3,4; Spanish 2,3,4
- Students who meet the criteria to qualify for Sycamore High School's Mathematically Talented Program, AP English Language and Composition, AP English Literature and Composition, or AP History will receive an additional .5 per year weighting each in Geometry G, Advanced Algebra G, Pre-Calculus G, AP Calculus, AP English and AP History. Grade points in these classes will be awarded as follows: A = 5.0; B = 4.0; C = 3.0; D = 2.0; F = 1.0

The purpose of the weighted grade point system is to determine class rank. Valedictorian and salutatorian will be determined using the weighted GPA and will be computed at the conclusion of all eight semesters of high school. Also, initial eligibility for National Honor Society will utilize the students' weighted grade point average.

**AGRICULTURAL EDUCATION**  
**RECOMMENDED COURSE SEQUENCE**

<b>Agriculture Science and Business Management</b>		<b>Horticulture</b>
Introduction to Agriculture Science	<b>Freshman year</b>	Introduction to Horticulture Science (Horticulture I or II)
↓		↓
Biological Science Applications in Agriculture : BSAA (Counts as Science and Lab Science credit)	<b>Sophomore year</b>	Introduction to Horticulture Science (Horticulture I or II)
↓		↓
Ag Mechanics & Technology <b>OR</b> Ag Construction & Technology	<b>Junior year</b>	Landscaping and Turf grass Management (Horticulture III – odd year) <b>OR</b> Greenhouse Production and Floral Design (Horticulture IV – even year)
↓		↓
Ag Business (counts for Consumer Economic credit)	<b>Senior year</b>	Landscaping and Turf grass Management (Horticulture III – odd year) <b>OR</b> Greenhouse Production and Floral Design (Horticulture IV – even year)

## INTRODUCTION TO AGRICULTURAL SCIENCE

This introductory course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state and national levels; and the scope and types of job opportunities in the agricultural field (**Agricultural jobs account for 21% of all jobs in Illinois and 22% on the National Level**). Applications are presented in agribusiness, ag mechanics and animal science. The course will focus on basic concepts and introducing & developing basic skills in animal science, agricultural careers, life skills, leadership/goal setting and agricultural mechanics. Included in the course is a supervised agricultural experience project (SAEP). Students are required to start or develop an SAEP Project by January 1<sup>st</sup> 2010. Students will be introduced to leadership, cooperation and citizenship skills through the FFA.

Prerequisite: None Level: 9, 10 Semesters: 2

Credit: 2 (1 for Supervised AG Experience Program; 1 for related class work)

## BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE: BSAA

*(Now Counts for Science Credit to fulfill Graduation requirements and counts as a lab science credit at most four year universities)*

Biological Science Applications in agriculture-animal, soil, and plant science is a course designed to reinforce and extend student's understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal, soil, and plant agriculture and specific biological science concepts that govern management decisions in the animal, soil, and plant industry. Some of the major areas of study include: Biotechnology, soil science, erosion control, environmental concerns, food science, cloning, and veterinary science. This one-year course will deepen student's understanding of science as content and as a process through the use of numerous laboratory exercises and experiments. Microcomputer applications are utilized as they relate to each instructional unit. Students can also establish a Supervised Agricultural Experience Program and participate in agricultural science activities of the FFA.

Prerequisite: Introduction to Agriculture or permission from Agriculture Instructor

Level: 10 Semesters: 2

Credit: 2 (1 for Supervised AG Experience Program; 1 for related class work)

## AGRICULTURAL MECHANICS (offered in odd year)

This course will provide students with hands on activities in arc welding, oxy-acetylene welding, MIG welding and small gasoline engines.

Prerequisite: Introduction to Agriculture and B.S.A.A. Level: 11, 12 Semesters: 1

Credit: 1 (1/2 for Supervised AG Experience Program; 1 for related class work)

## AGRICULTURE CONSTRUCTION (offered in odd year)

This class focuses on specific skills relating to agricultural construction, agricultural surveying and agricultural electricity. Emphasis will be placed on these skills as they relate to agricultural business and management. **Students are required to have a construction project to work on during the last 6 weeks of this course.** Examples of projects are picnic tables, benches, patio blocks, repair of trailers, and refinishing wood projects from home. Included in the curriculum is a supervised agricultural experience program component.

Prerequisite: Introduction to Agriculture and B.S.A.A. Level: 11, 12 Semesters: 1

Credit: 1 (1/2 for Supervised AG Experience Program; 1/2 for related class work)

## AGRICULTURAL BUSINESS

This course will develop students' understanding of the agricultural industry relating to the United States and World marketplace. Instructional units include: marketing and trading of agricultural products, international agriculture, imports and exports, agricultural law, taxes, governmental regulations and policies, and advanced computerized record keeping. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Employability skills will be developed with resume writing and interviewing techniques to gain employment. Post-secondary education will be explored at agricultural colleges and universities. Improving computer and workplace skills will be a focus. An Extra Credit is Available for 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. Seniors who complete the full year of this course will fulfill the state requirement for Consumer Economics.

Prerequisite: Introduction to Agriculture and B.S.A.A. Level: 12 Semesters: 2

Credit: 2 (1 for Supervised AG Experience Program; 1 for related class work)

## HORTICULTURE I (offered in odd year)

This introductory course consists of organized subject matter and practical experiences concerned with the culture of plants used principally for home and landscaping use. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining and managing horticultural crops involved in the production, processing, marketing and servicing of horticulture products. Instruction will take place in the classroom, field, shop, laboratory, and greenhouse. Supervised Agriculture Experience can be taken as part of this course.

Prerequisite: Course sequence Level: 9, 10 Semesters: 2

Credit: 2 (1 for Supervised AG Experience Program; 1 for related class work)

## INTRODUCTION TO HORTICULTURAL SCIENCE (offered in even year)

This course is designed to develop student interest in the field of horticulture. The different areas of study include greenhouse work, leadership and job survival skills. It is intended to help the individual become more acquainted with the environmental requirements of plants for best growth, to teach the student how plants are used and maintained in different areas, and to develop personal skills needed for every day life. This two semester course will include various aspects of identification, selection, and care of annual and perennial flowers, potted flowering and foliage crops, and flowering shrubs and trees. The student will also have experience in solving problems on heating and cooling, watering, insects and diseases, and merchandising greenhouse products.

Prerequisite: Course sequence Level: 9, 10 Semesters: 2

Credit: 2 (1 for Supervised AG Experience Program; 1 for related class work)

## LANDSCAPING AND TURF GRASS MANAGEMENT (offered in even year)

Horticulture III is a continuation of Horticulture II to help students put all of the phases of ordering, timing, planting, and planning out turf grass projects. In this course the student will become familiar with the costs of materials, ordering, costs of production, and determining the selling prices. In the spring semester, the student will become familiar with the installing and maintaining of different landscapes around the school grounds and possible one in the community. Each student will make seven to eight drawings of residential/commercial housing with complete landscape recommendations. Students will have a chance to use a computer landscape design program to design two of these projects. Field trips throughout the year will

give the students a chance to actually install landscape designs, to view of actual practices involved in horticultural businesses, and to show the possibilities of employment.

Prerequisite: Course sequence Level: 11, 12 Semesters: 2

Credit: 2 (1 for Supervised AG Experience Program; 1 for related class work)

**Additional fee required for this course**

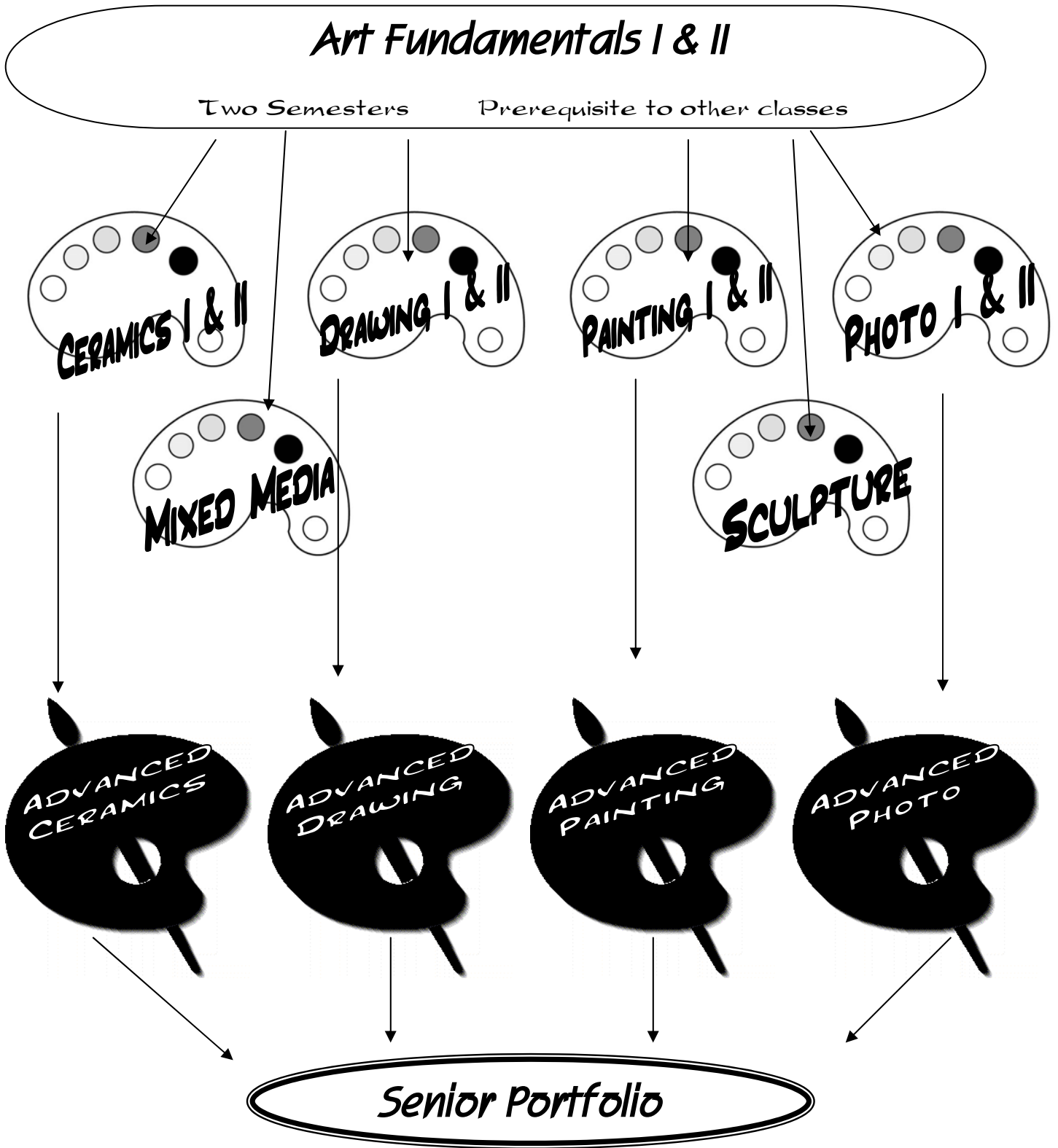
GREENHOUSE PRODUCTION & FLORAL DESIGN (offered in odd year)

This course builds on experiences previously developed in horticulture courses. The different areas include greenhouse work, leadership and job survival skills. It is intended to help the individual become more acquainted with the environmental requirements of plants for best growth, to teach the student how plants are used and maintained in different areas, and to develop personal skills needed for every day life. This two semester course will include various aspects of identification, selection, and care of perennial flowers, flowering shrubs and trees, and turf grass. The area of floral design will teach skills that will give the student some background in floral design and sales, so one may see the possibilities in this field of work. Student will design 15 different arrangements during this 10-week unit. Several of the arrangements will be available for the students to purchase at cost during this time.

Prerequisite: Course sequence Level: 11, 12 Semesters: 2

Credit: 2 (1 Supervised AG Experience Program; 1 for related class work)

**Additional fee required for this course**



ART FUNDAMENTALS I

An introduction to the elements: line, shape, color, texture, and space/form. Students will develop eye/hand coordination as they develop drawing and composition skills. A variety of art materials will be used.

Prerequisite: None Level: 9, 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

ART FUNDAMENTALS II

An introduction to the principles: movement, balance, rhythm, pattern, repetition, contrast, and unity. A variety of art materials and techniques will be used.

Prerequisite: Art Fund. I Level: 9, 10, 11, 12 Semesters: 1 Credit: ½

**Additional fee required for this course**

DRAWING I

Enhance Drawing ability and develop skills through the use of pencil, charcoal, pen and ink, pastel, and colored pencil.

Prerequisite: Art Fund. I & II Level: 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

DRAWING II

An extension of Drawing I with an emphasis on technique, style, and composition.

Prerequisite: Art Fund I & II, Drawing I & Good Imagination Level: 10, 11, 12

Semesters: 1 Credit: 1/2 **Additional fee required for this course**

ADVANCED DRAWING

Students will use skills developed in Drawing I & II to design individual contracted assignments. This course may be repeated.

Prerequisite: Art Fund I & II, Drawing I & II Level: 11, 12

Semesters: 1 or 2 Credit 1/2 or 1 **Additional fee required for this course**

PAINTING I

Discover the use of color in a composition using the mediums acrylic, oil, watercolor, and mixed media.

Prerequisite: Art Fund. I & II Level: 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

PAINTING II

Exploration of watercolor, mixed media and oils. Developing various compositions that will also increase their knowledge of trends and artists.

Prerequisite: Art Fund. I & II, Painting I Level: 10, 11, 12

Semesters: 1 Credit: 1/2

**Additional fee required for this course**

ADVANCED PAINTING

Each student will design individual course objectives tailored to their personal goals.

Prerequisite: Art Fund I & II, Painting I & II. Level: 11, 12

Semesters: 1 or 2 Credit: 1/2 or 1

**Additional fee required for this course**

### SCULPTURE

This course is for students who prefer working with 3-D art materials: Students will learn how to create sculptures using clay, wood, plaster, wire, paper etc. and will study various sculptors.

Prerequisite: Art Fund. I & II Level: 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

### MIXED MEDIA

This course offers a variety of projects using many different mediums. Students will use sculpy clay, create hand made paper, do a variety of printmaking (block printing, monotype, found object), paint on fabric and use found objects.

Prerequisite: Art Fund. I & II Level: 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

### CERAMICS I

This beginning ceramics course will take the student through fundamental hand building techniques focusing on both functional and sculptural ceramics. The student will be aware of styles and artists from different cultures. At this time wheel-throwing will be introduced for those students who are interested.

Prerequisite: Art Fund. I & II Level: 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

### CERAMICS II

Ceramics 2 will continue a strong emphasis on advanced hand building, with an introduction to mold making, mosaics, and individual exploration. A stronger emphasis will be placed on developing a students skill on the wheel.

Prerequisite: Art Fund., I & II & Ceramics I Level: 10, 11, 12

Semesters: 1 Credit: ½ **Additional fee required for this course**

### ADVANCED CERAMICS

The student will be able to apply knowledge gathered in Ceramics 1 and 2 in developing an individual curriculum through the use of a quarterly contract. An additional element of glaze calculation will be included into each semester.

Prerequisite: Art Fund I & II, Ceramics I & II Level: 11, 12

Semesters: 1, 2, 3, or 4 Credit: 1/2 per semester

**Additional fee required for this course**

PHOTOGRAPHY I

The history of photography, knowledge of camera parts, development and enlarging of photographs, photography tips, and the use of Photoshop are introduced in this course. A 35mm camera is required for this course.

Prerequisite: Art Fund., I & II Level: 10, 11, 12 Semesters: 1 Credit: 1/2

**Additional fee required for this course**

PHOTOGRAPHY II

The course builds off the base created in Photography I. Students will explore the concepts learned in Photography I in more depth. Photo montages, sequencing, landscapes, and night photography will be introduced. A 35mm camera is required for this course.

Prerequisite: Photography I Level: 10, 11, 12 Semesters: 1 Credit: ½

**Additional fee required for this course**

ADVANCED PHOTO

Students will explore the different aspects of Photography through individual contracted assignments. Lessons will expand upon concepts learned in Photography I and II. This curriculum can be Digital and/or Traditional Photography based.

Prerequisite: Photography I and II Level: 11, 12 Semesters 1 or 2

Credit: 1/2 or 1 **Additional fee required for this course**

SENIOR INDIVIDUAL STUDY/PORTFOLIO

Students will produce projects based on individual interpretations of selected criteria using the skills gained in previous art classes. Students will be required to build a portfolio for the purpose of college reviews.

Prerequisite: Art Fund I & II, Minimum of 2 semesters of Art electives

Level: 12 Semesters: 1 or 2 Credit: ½ or 1

**Additional fee required for this course**

## **BUSINESS & INFORMATION TECHNOLOGY**

### **Recommended Course Sequence**

The Department of Business & Information Technology strongly recommends that every freshman enroll in *Computer Applications 1 and 2* as a foundation for all high school courses.

We also recommend *Introduction to Business* as a general survey course for those only planning to take one business course from within the department. In addition to *Computer Applications* and/or *Introduction to Business* the freshman year, sophomores, juniors, and seniors may take additional courses from the areas of concentration listed below.

### **Areas of Concentration**

#### **FOUNDATION COURSES**

Introduction to Business

Computer Applications 1 (Word Processing, Spreadsheets)

Computer Applications 2 (Database, Presentation graphics, Desktop Publishing)

#### **BUSINESS COURSES**

Accounting

Marketing

Business Law

#### **COMPUTER APPLICATIONS COURSES**

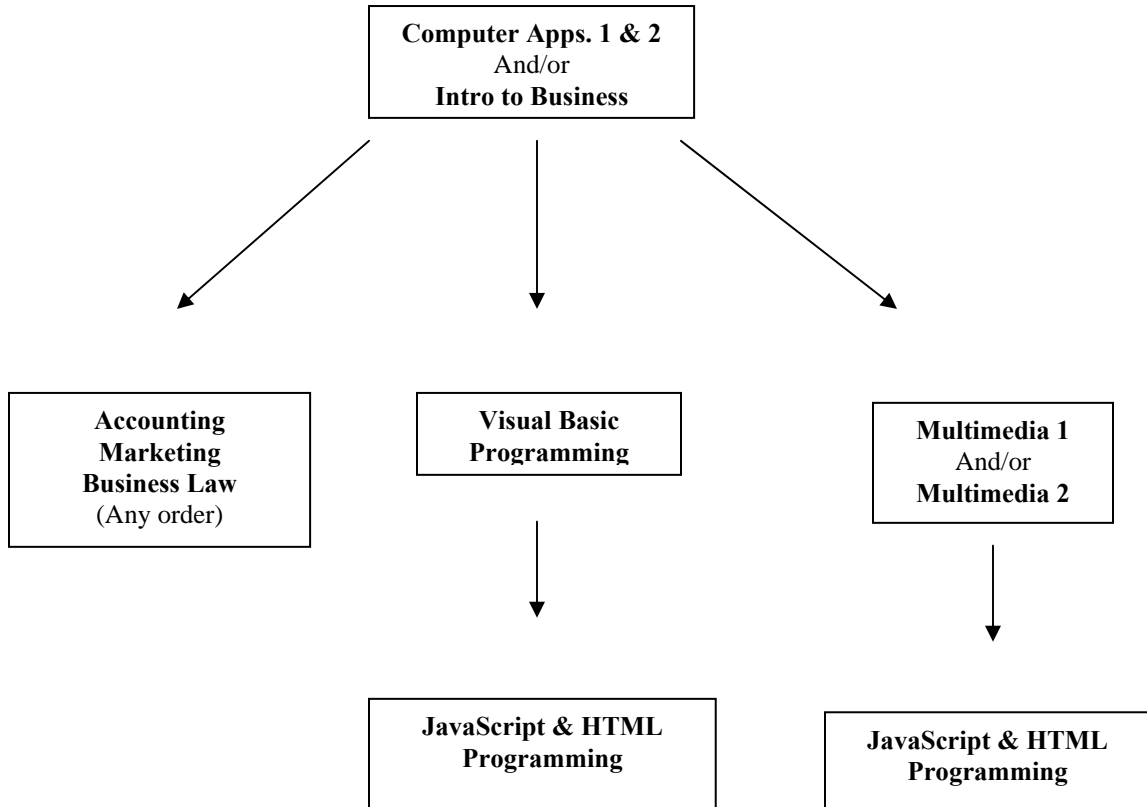
Multimedia 1: Media Production

Multimedia 2: Web Publishing

Visual Basic Programming

JavaScript & HTML Programming

**BUSINESS & INFORMATION TECHNOLOGY COURSE FLOW CHART**



INTRODUCTION TO BUSINESS

This course combines business and economic concepts with practical applications to develop the students' understanding of American business and the global economy. Students will explore the possibility of a career in business as they study the free enterprise system as it relates to the consumer and the entrepreneur. The Internet and other computer applications software is used to simulate business situations as they may occur in the modern business environment.

Prerequisite: None Level: 9, 10 Semesters: 1 Credit: 1/2

ACCOUNTING (1 semester dual credit with Kishwaukee College)

Accounting is designed to teach students the fundamental skills necessary to process and interpret financial transactions. Accounting terminology, the basics of the double-entry system, the preparation and interpretation of financial statements, and the use of computerized accounting software will be covered. Whether intended for personal use or as a foundation for further study in the pursuit of a career in business, this course is of value to all students.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

MARKETING

Marketing introduces students to the basic concepts involved in the process of developing, promoting and distributing products and services. Designed from the standpoint of the career marketer, students will study a broad range of topics including salesmanship, advertising, product placement, pricing strategy, and physical distribution systems. In addition, students will learn basic math, communication, interpersonal, and managerial skills, which are necessary for success in any business career.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

BUSINESS LAW

This course examines the law as it pertains to both the consumer and the businessperson. Topics of study include business ownership structures, ethics and behavior, constitutional rights, the court system, criminal laws, personal injury laws, and contracts. Students will also have the opportunity to visit a local law office, courtroom, and jail.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

COMPUTER APPLICATIONS 1: Word Processing

Students will learn or reinforce the skills needed to key material by the touch method. Weeks 1 through 4 focus on the development of proper keyboarding technique, with an emphasis on correcting bad keyboarding habits students may have acquired when learning to key at a young age. Proofreading and editing skills are also included. Weeks 5 through 10 cover basic word processing skills using Microsoft Word. Topics covered include letters, envelopes, memos, reports, press releases, e-mail, and other forms of written business communication, as well as the basic commands and features of the word processing software. Finally, Weeks 11-18 explore spreadsheet techniques and basic math skills using Microsoft Excel.

Prerequisite: None Level: 9, 10, 11, 12 Semesters: 1 Credit: 1/2

COMPUTER APPLICATIONS 2: Database, Presentation Graphic & Desktop Publishing

This course extends the content of Computer Applications 1 by introducing students to the database and presentation graphics components of Microsoft Office. Microsoft Publisher will also be covered. The purpose is to provide students with additional computer skills used throughout the high school or college curriculum, and in information technology, business, and science careers. Topics covered include database tables, forms, queries, and reports; computerized slideshow presentations; and DTP flyers, posters, announcements, and newsletters.

Prerequisite: Computer Applications 1, C or better

Level: 9, 10, 11, 12 Semesters: 1 Credit: 1/2

MULTIMEDIA 1: Media Production

This course teaches basic media manipulation skills using Microsoft PowerPoint, Windows Photo Story and Movie Maker, Pinnacle Studio, Adobe Photoshop and Audition, and Macromedia Flash. Through a variety of hands-on projects, students will create interactive computer presentations and learn the basics of video, sound, and photo production. Internet research skills and information ethics will also be covered.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

MULTIMEDIA 2: Web Publishing

This course is for students who are interested in Internet publishing. Students will learn to create and maintain web pages using a variety of software packages and HTML editors including Adobe GoLive! and Macromedia Flash. Internet searching techniques, the basics of JavaScript, the history and structure of the Internet, and information ethics will also be covered.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit 1/2

VISUAL BASIC PROGRAMMING

VISUAL BASIC is an upgrade of the BASIC programming language. Students with no previous programming experience will learn to create interactive Windows programs using Microsoft Visual Basic.NET. By the end of the semester students will know how to use TOE charts, pseudo-code, and flowcharts to plan applications. They will also know how to work with common controls, write If...Then...Else, Select Case, Do...Loop, and For...Next statements, as well as how to create and manipulate variables, constants, sequential access files, and arrays.

Prerequisite: Algebra AB or Algebra Level: 10, 11, 12 Semesters: 1 Credit: 1/2

JAVASCRIPT & HTML

This class is for students who are interested in web publishing from a computer programmer's perspective. Students will learn to create dynamic (interactive) web pages using HTML code and the JavaScript programming language. Topics covered include order forms, navigation controls, menus, advertising banners, popup windows, flashing signs, games, and other special effects.

Prerequisite: Visual Basic Programming, Multimedia 2, or consent of teacher

Level: 10, 11, 12 Semesters: 1 Credit: 1/2

## COOPERATIVE EDUCATION

The Cooperative Education Program is designed to provide vocational training in a skill, trade or occupation on a part-time student-learner basis. It is designed for those high school students who possess a career objective related to distribution, office occupations, home economics and health, agriculture, or trade and industrial occupations. Students must be enrolled in a minimum of four regular class periods per day including one class in related occupational information during one-half of the day and train on the job for the other half-day. Students are recommended to be trained a minimum of three hours per day, a minimum of 15 hours per week and a maximum of five hours per day. This maximum is exclusive of weekend work.

### INTERRELATED OCCUPATIONS

Interrelated Cooperative Education is provided to allow for vocational experiences in a variety of occupations making cooperative education accessible to students in schools with limited enrollments. Students participate in paid cooperative education work experience at appropriate, approved training sites and take 200 minutes of related class instruction per week. Classroom instruction focuses on providing students with job related and personal social and survival skills needed for job entry, advancement or further education. 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, economics and the job, organizations and job termination. Individualized training plan agreed upon by the

employer, student, and coordinator provides the framework for job site instruction and experiences. A qualified coordinator facilitates student learning. The coordinator, student, and employer assume compliance with federal, state and local laws and regulations.

Recommendation: Students should be encouraged to enroll in as many vocational courses as possible prior to enrollment in the Interrelated program, so they have marketable skills for employment.

Prerequisite: Applications must be filed through the Guidance Office and approved by the Cooperative Education Department

Level: 11, 12 Semesters: 2 Credit: 2 (1 for related class and 1 on-the-job)

Consumer Economics Proficiency: Seniors who complete the full year of Interrelated Occupations will fulfill the state requirement for Consumer Economics. Please note that you do not receive a credit but the proficiency.

**STANDARD SHS ENGLISH SEQUENCES**

<u>9<sup>th</sup></u>	<u>10<sup>th</sup></u>	<u>11<sup>th</sup></u>	<u>12<sup>th</sup></u>
• English I	English II & Speech	English III	English IV
• English I	English II & Speech	*Junior Comp. and Lit.	Senior Comp. (sem. 1) Senior Lit. (sem. 2)
• Pre-AP Eng 9	Pre-AP Eng 10	AP English Lang.	AP English Lit.

\*Students may choose American Heritage during junior year instead of Junior Composition and Literature.

**Note:** At the start of any new school year, students who meet the grade requirements may change to another sequence. In other words, students are not “locked into” a sequence once they begin.

**ENGLISH I**

This course is a combined study of composition, grammar, and literature stressing the use of the library, vocabulary development, correct usage, sentence structure, essay writing, and an introduction to MLA format and research skills. Literature units consist of the short story, poetry, the novel, and Shakespearean drama. This course fulfills one credit of the state graduation requirement for writing.

Prerequisite: None Level: 9 Semesters: 2 Credit: 1

**PRE-ADVANCED PLACEMENT (AP) ENGLISH: LITERATURE AND COMPOSITION (9<sup>TH</sup>)**

This course is designed to engage students in careful reading and critical analysis of literary works written originally in English from a variety of cultures and eras. The primary focus at this level will be on the epic poem, the short story genre, the Shakespearean Tragedy, and the American novel. The course will include intensive study of representative works from various time periods with attention to both the literary artistry and the social/historical values reflected in each piece. Students will be encouraged to develop close reading skills paying careful attention to the following elements: the experience of literature, the interpretation of literature, and the evaluation of literature.

Writing will also be an essential component of the course with assignments focusing on the critical analysis of literature, while also touching on descriptive writing, the personal narrative, and an introduction to the Modern language Association (MLA) format through the completion of a formal research paper. Vocabulary development will also be stressed as a means of improving both written and spoken communication.

Students entering this course are expected to possess a firm grasp of English grammar, as the concentration on language use will be designed to enhance student ability to utilize grammatical conventions appropriately. This course fulfills one credit of the state graduation requirement for writing.

Prerequisite: Information available in guidance office Level: 9  
Semesters: 2 Credit: 1

ENGLISH II

English II is a one-year course. It includes the review and study of capitalization, usage, and mechanics as it applies to the composing of essays, oral presentations, and a factual report. The study of literature, vocabulary, and literary devices will focus on Greek mythology, medieval romances, a Shakespearean play, a modern novel, and poetry.

Prerequisite: English I Level: 10 Semesters: 2 Credit: 1

PRE-ADVANCED PLACEMENT (AP) ENGLISH: LITERATURE AND COMPOSITION (10<sup>TH</sup>)

As a logical and sequential progression from AP (9<sup>th</sup>), Advanced Placement English: Literature and Composition (10<sup>th</sup>) is designed to build on the previous year's English experience. This course will engage students in careful reading and critical analysis of literary works written originally in English from a variety of cultures and eras. The course will include intensive study of representative works from various eras and cultures with attention to both the literary artistry and the social/historical values reflected in each piece. Units including Mythology, Arthurian Legend, *Macbeth*, *Julius Caesar*, American novels, short fiction, and poetry will provide much of the literary study. In such units, students will be encouraged to develop close reading skills paying careful attention to the following elements: the experience of literature, the interpretation of literature, and the evaluation of literature.

Writing will also be an essential component of this course with assignments focusing on the critical analysis of literature, while also continuing to develop creative writing (through description and narration essays) and persuasive writing with attention to MLA format for citation concerns. Vocabulary development will also be stressed as a means of improving both written and spoken communication.

Students entering this course are expected to possess a firm grasp of Standard English grammar, as the concentration on language use will be designed to enhance student ability to utilize grammatical conventions appropriately.

Prerequisite: Information available in guidance office Level: 10

Semesters: 2 Credit: 1

SPEECH COMMUNICATION

The purpose of this course is to help students improve their speaking abilities and learn the fundamentals of communication theory. Principles of oral communication, including speech purposes and preparation plans are emphasized. Listening and thinking are stressed as well as planning and delivering speeches to inform and to persuade. The fundamentals of discussion, interviewing, and parliamentary procedure are also included. This is a sophomore requirement.

Prerequisite: English I Level: 10 Semesters: 1 Credit: 1/2

ENGLISH III

English III is a junior-level, full year course designed to prepare students in the areas of composition, research, and business writing skills. Required writing includes, but is not limited to, various essays, including a typed research report following MLA style, and practical writing exercises, like business letters, that students will find useful in their lives after high school. Students will also gain an understanding and appreciation of contemporary American literature by reading and studying numerous contemporary American novels, shorts stories, plays, and poems. Students will also become informed consumers of various genres of media including

television, advertising, radio, film, and newspaper. This course fulfills one credit of the state graduation requirement for writing.

Prerequisite: English I and English II with no semester grade above a C-  
Level: 11 Semesters: 2 Credit: 1

### JUNIOR COMPOSITION AND LITERATURE

Position in Curriculum: This is a junior-level college preparatory course consisting of various approaches to composition and literature with additional attention to vocabulary development which is essential to both pursuits. The course will prepare students for the demands of mature academic writing which will be expected of them in their senior year and beyond. Students will solidify their understanding of grammar and usage especially as it relates to the clarity and precision of their writing. The course will focus on the nuances of writing a variety of essays, as well as stress the command of a variety of sentence structures and phrasing. Junior Composition and Literature is also designed to expose students to a wide variety of American Literature and to prepare them to analyze, discuss, and write about such literature effectively as well as to develop adequate and appropriate research skills.

Prerequisite: English I and English II with at least one semester grade of C or above  
Level: 11 Semesters: 2 Credit: 1

### AMERICAN HERITAGE

This course will serve high school juniors who would otherwise take separate English and history classes, which deal with many of the same social, historical, and cultural periods. The course will promote problem solving, cooperative learning, group discussion, individual oral expression, and group interaction. Furthermore, an emphasis will be placed on critical thinking skills, reading for comprehension as well as analytical reading. Students may be required to obtain various novels and reading material. Students can expect a routine dedication to Silent Sustained Reading within the course. The American Heritage class will be a two-period course taught by one English teacher and one social studies teacher in a team setting. American Heritage curriculum will effectively combine the course content of junior English (Junior Composition and Literature) and U.S. history, satisfying the district's requirement in these areas. Grades and credit will be reflected according to these traditional course titles on all high school records. Students who normally enroll in English 3, or Junior Composition and Literature, and regular U.S. history might take American Heritage as an elective that would count toward the district requirements. Recent research has highlighted the effectiveness of the inquiry method, cross discipline study, and group learning in promoting critical and creative thinking skills. American Heritage offers a wider range of perspectives than the separate U.S. history or English courses taken separately in terms of multi-cultural education offerings and would create the opportunity for students to analyze and to synthesize between the two disciplines. This course fulfills one credit of the state graduation requirement for writing.

Prerequisite: Must have junior standing; must have passed English I and English II with at least one semester grade of C or above or provide a recommendation of the English II and/or world history or world cultures teachers. Level 11 Semesters: 2  
Credit: 1 Junior Composition and Literature; 1 American History.

ADVANCED PLACEMENT (AP) ENGLISH LANGUAGE AND COMPOSITION

This course is designed to engage students in developing two critical skills: 1) becoming skilled readers of prose written in a variety of rhetorical contexts by a variety of authors from a variety of eras; 2) becoming skilled writers who are capable of composing for variety of audiences and purposes. To this end, the course will focus primarily on the study of nonfiction but will occasionally turn to fiction and poetry as necessary. Students will also be encouraged to make these rhetorical choices in the development of their own nonfiction. Writing assignments will include a variety of expository, analytical, and argumentative essays. The instruction will include attention to developing and organizing ideas in clear, coherent, and persuasive language with much focus on nurturing stylistic maturity and sophistication. Students entering this course should possess a firm grasp of standard English grammar, as our concentration on language will be designed to enhance student ability to use these grammatical conventions appropriately to develop stylistic maturity. Timed in-class writing will also be assigned in preparation for the AP exam. This course is offered to juniors interested in (and qualified for) the challenges of advanced placement courses, while AP English Literature and Composition is offered during senior year. This course fulfills one credit of the state graduation requirement for writing.

Prerequisite: Information available in guidance office. Level: 11

Semesters: 2 Credit: 1

ENGLISH IV

English IV is a senior-level semester class designed to enrich students' understanding of literature and composition. Required writing includes, but is not limited to, essays related to the readings in the course and real-world writing activities designed to mimic writing that may be done in real-life situations. Students will enrich their appreciation and understanding of contemporary fiction through various media, including novels, short stories, poems, articles, and films.

Prerequisite: English III Level: 12 Semesters: 1 Credit: 1/2

SENIOR COMPOSITION

This course is designed for students who plan to pursue further education after high school and fulfill college entrance requirements. The students will have an opportunity to review the grammar of English, to read examples of good essay writing, to study writing theory, to independently study vocabulary, to think critically, to create effective essays expressing their personal opinions, to obtain teacher and student response to their writings, and to learn the steps in effective persuasive/argumentative composition. Some oral presentations may be assigned which would apply to outside nonfiction topics, and principles of style.

Prerequisite: Academic Writing I or recommendation of English instructor

Level: 12 Semesters: 1 Credit: 1/2

SENIOR LITERATURE

This course is highly recommended for the college-bound student who needs to fulfill college entrance requirements. Students will read and discuss major literary works from a broad range of eras, cultures, and movements. The works chosen for the course will be ones that have influenced the development of Western culture. Many of the most important literary figures contributing to Western literature will be studied, including (but not limited to) Homer, Virgil, Chaucer, Shakespeare, Milton, Chekhov, Ibsen and many others. Students will evaluate the

technical and cultural effects of the works, exploring events and trends that influence the writer. They will also write literary essays based on close observation of the works.

Prerequisite: Successful completion of AC I and Survey of American Lit. or American Heritage  
Level: 12 Semesters: 1 Credit: 1/2

### ADVANCED PLACEMENT (AP) ENGLISH LITERATURE AND COMPOSITION

This course is designed to engage students in careful reading and critical analysis of literary works written originally in English from a variety of cultures and eras. The primary focus, however, will be on literature from British and American authors from the sixteenth century to contemporary times. The course will include intensive study of representative works from various genres and eras with attention to both the literary artistry and the social and historical values these works reflect. Students will be encouraged to develop close reading skills which include attention to the following elements: the experience of literature, the interpretation of literature, and the evaluation of literature. Writing will also be an essential component of the course with assignments focusing on the critical analysis of literature, but also including a variety of expository, analytical, and argumentative essays. The instruction will include attention to developing and organizing ideas in clear, coherent, and persuasive language with much focus on nurturing stylistic maturity and sophistication. Students entering this course should possess a firm grasp of Standard English grammar, as our concentration on language use will be designed to enhance student ability to use these grammatical conventions appropriately to develop stylistic maturity. Timed writing assignments will also be assigned in preparation for the AP exam. Students registering for this course should be prepared for collegiate-level assignments and homework.

Prerequisite: Information available in guidance office. Level: 12  
Semesters: 2 Credit: 1

### CREATIVE WRITING

This is a semester course designed for students who are interested in exploring various forms of creative writing: descriptive sketches, short fiction, narration, poetry, and dramatic scene. Additionally, students are encouraged to keep a personal journal in which many entries are made in class. Major projects include a personal narrative essay, descriptive sketch, one short story, one dramatic scene, and a poetry booklet.

Prerequisite: English I with a grade of "C" or above Level: 10, 11, 12  
Semesters: 1 Credit: 1/2

### DRAMA

This course is for anyone interested in dramatics. Previous stage experience is not necessary, but a desire to learn about and to experience all aspects of dramatics is. This course includes pantomiming and acting; reading and discussing plays; studying the history of theater; and experiencing the various areas of play production, such as costuming, set construction and design, and publicity. Some lab work will be required.

Prerequisite: None Level: 10, 11, 12 Semesters: 1 Credit: 1/2

### ADVANCED SPEECH

Public and interpretative speaking is stressed equally in this course. Students study fundamentals and prepare performances in a wide variety of situations. They work on logical thinking, listening, and research for extemporaneous speaking, impromptu speaking, oratory,

and other forms of public address. Oral interpretation of plays, prose, and verse is emphasized. Radio speaking preparation and performance are also studied.

Prerequisite: Speech Communication or consent of instructor or previous experience in extra-curricular speech activities Level: 11, 12 Semesters: 1 Credit: 1/2

### FILM AS LITERATURE

Classic Movies... They give voice to our genius, our heroes, and our history. They lift our spirits, terrify us, mesmerize us, ignite us, and delight us. No other medium has spoken to us or about us more proudly or profoundly. Film As Literature is the study and comparative analysis of short and long films, including some based on both classic and modern literature. Attention is given to the historic, artistic influences of film; the strategies necessary to "read" film as a type of literature; and the public and personal responses elicited by this powerful, modern medium. Units include film history, film genres, film viewing/reading, film as an art form and the language of film.

Prerequisite: English II or English III Level: 11, 12 Semesters: 1 Credit: 1/2

### JOURNALISM I

Journalism I is offered first semester and emphasizes the skills necessary to write for a newspaper. Students enrolled are members of the staff of the school newspaper, the *Spartan Voice*. Students write news stories, feature articles, and opinion pieces, as well as take photographs and design pages with PageMaker software. Press rights and responsibilities, as well as the role the press plays in a democratic society, are also emphasized. Students who wish to be considered for editor positions on the *Spartan Voice* as seniors are strongly advised to take Desktop Journalism second semester for further writing and design experience.

Prerequisite: A "C" average in English I and II Level: 11 Semesters: 1 Credit: 1/2

### DESKTOP JOURNALISM

This re-titled course is designed as the second semester follow-up to Journalism I and offers practical, advanced page design, writing, and editing experience. Students enrolled will complete design projects and writing assignments for the school newspaper, the *Spartan Voice*, as well as other desktop publishing projects. The emphasis will be on the production of desktop publishing materials for immediate practical use, primarily the school newspaper. Other projects may include newsletters, announcements, a literary magazine, and personal, school, and business projects. This course prepares students for editor positions on the newspaper and yearbook staffs.

Prerequisite: A "B" in Journalism I or Desktop Publishing Level: 11, 12  
Semesters: 1 Credit: 1/2

### NEWSPAPER PRODUCTION

Students who enroll in this course are automatically members of the school newspaper staff, the *Spartan Voice*. Newspaper Production provides further development of those skills involved in copy writing, editing, design, photography, and business practices introduced in Journalism I. While editors are chosen from those with experience in Journalism I or Desktop Production, students without that background who are interested in working on the staff are encouraged to enroll.

Prerequisite: A recommendation from a sophomore or junior English teacher  
Level: 12 Semesters: 1 or 2 Credit: 1/2 or 1

YEARBOOK PRODUCTION

Students enrolled in this course are automatically members of the yearbook staff. Coursework emphasizes the design, writing, photography, and business skills necessary for the publication of the school yearbook, *Leaves*. Staff members should have a strong interest in at least one of these areas.

Prerequisite: Students must complete an application process in order to enroll in Yearbook Production. Applications are available from the guidance counselors or from Ms. Thomas in room 521.

Level: 11, 12 Semesters: 1(first semester only) or 2 Credit: 1/2 or 1

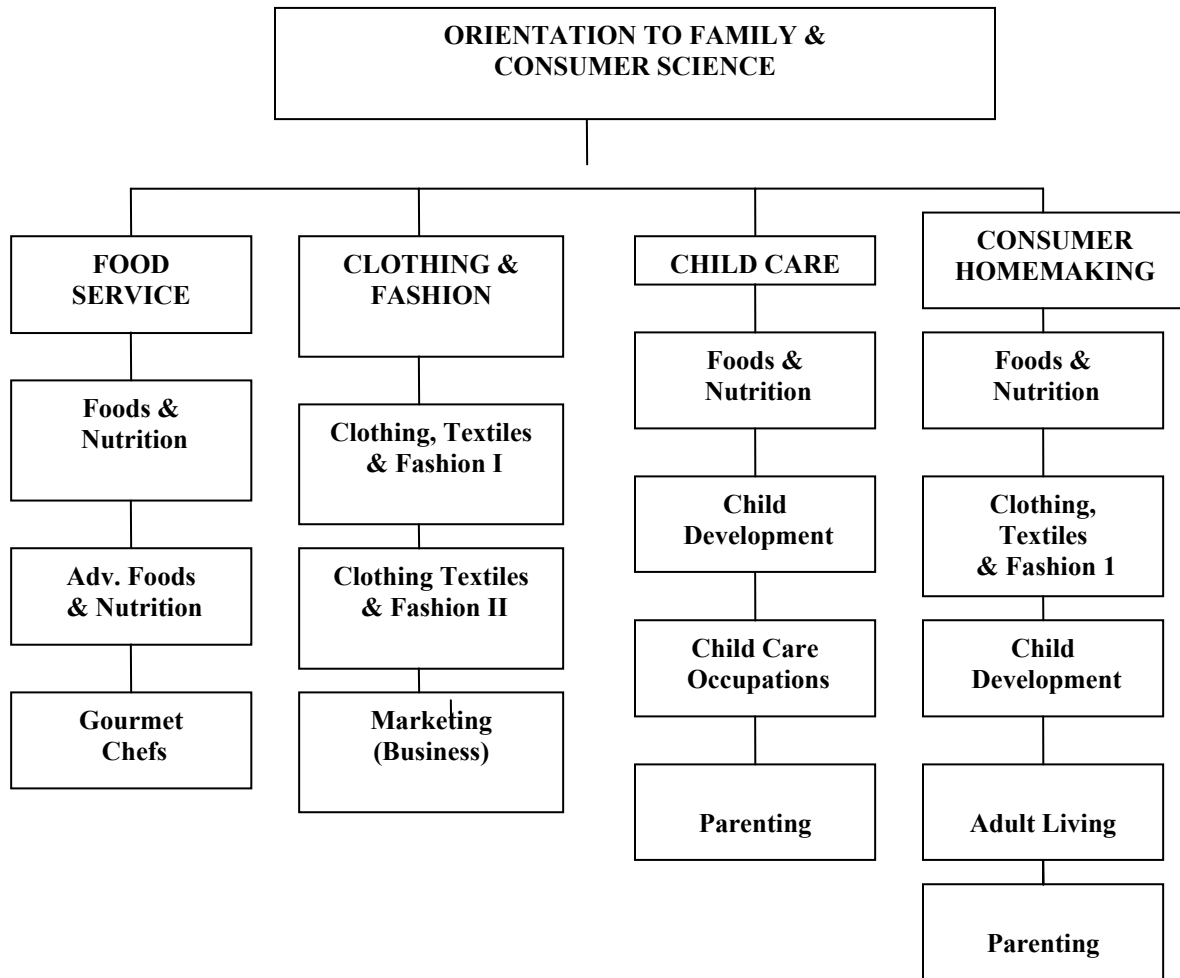
ENGLISH LANGUAGE LEARNER - ELL

The English Language Learner class is for students whose primary language is other than English. This class provides intensive reading, writing and speaking of English. The goal is to enable students to reach the age appropriate reading, writing and speaking of English.

Prerequisite: Contingent upon student qualification Level: 9, 10, 11, 12

Semesters: 2 Credit: 1

**FAMILY & CONSUMER SCIENCE EDUCATION**



**ORIENTATION TO FAMILY & CONSUMER SCIENCE**

This is the first course for students who wish to gain a broad orientation to Family & Consumer Science. The course introduces all Family & Consumer Science related programs and provides a background for advanced course work. Basic subject matter presented includes clothing and textiles, resource management; foods and nutrition; human/child development; interpersonal and family relationships; and an introduction to the world of work.

Prerequisite: None Level: 9, 10 Semesters: 2 Credit: 1

**Additional fee required for this course**

**FOODS AND NUTRITION**

This semester course includes basic classroom and laboratory experiences needed to develop knowledge and understanding of basic food principles and applied nutrition for people of all ages. Students will apply what they learned about food preparation through laboratory experiences involving eggs, fruits and vegetables, grains, soups, milk and cheese, salads, casseroles, quick

and yeast breads, pies, cookies, cakes, and microwave cookery. Information related to sanitation, food safety, nutrition and careers in foods is incorporated throughout the course.

Prerequisite: None Level: 10, 11, 12 Semesters: 1 Credit: 1/2

### ADVANCED FOODS AND NUTRITION

This advanced foods course is available to students who have successfully completed Foods and Nutrition. Laboratory experiences will include food preparation in the following areas: meat, poultry, and fish, regional and foreign foods and cultures. The course provides basic skill development for continued course work in Gourmet Chefs.

Prerequisite: Foods & Nutrition Level: 10, 11, 12 Semesters: 1 Credit: 1/2

### GOURMET CHEF'S CLASS

Basic principles of quantity food preparation will be applied as the students plan, prepare, and serve complete meals in the foods laboratory and in the student run restaurant, Spot to Eat. Food preparation experiences will include: advanced cooking skills and baking techniques with recipe work, use and care of cooking equipment, methods and skills in cooking large quantities, sanitation and safety in food handling as it relates to the food industry, food display, service to customers, catering, and cake decorating. This course provides the skill development for continued course work in Culinary and Hospitality Management.

Prerequisite: Adv. Foods & Nutrition or consent of instructor

Level: 11, 12 Semesters: 2 Credit: 1

### CLOTHING, TEXTILES & FASHION I & II

This course is planned to provide students opportunities to develop knowledge and understanding of textiles, fashion and fabrics. Basic subject matter includes: textile and clothing selection based on one's personal needs, consumer information on clothing purchases, clothing maintenance and care, sewing and other construction skills. A minimum of three projects will be required per semester, each with an increased and varied degree of difficulty and technique. Fashion merchandising and related career opportunities will be explored throughout the course.

Prerequisite: None Level: 10, 11, 12 Semesters: 2 Credit: 1

### CHILD DEVELOPMENT

This course emphasizes learning experiences which help students gain knowledge and understanding of the intellectual, physical, social and emotional development of children from age three to six. Students will apply their knowledge and learning's about children and preschool activity selection through participation and observation in an eight week preschool lab for 3 to 5 year old children. This course along with Child Care Occupations, will provide the opportunity for advanced placement credit at Kishwaukee College with teacher approval.

Prerequisite: None Level: 10, 11, 12 Semesters: 1 Credit: 1/2

### CHILD CARE OCCUPATIONS (Child Care Lab)

This course is designed to acquaint students with children, their growth, development and behavior and prepare students for employment in a variety of child care facilities. Students will apply their knowledge about children through participation in a preschool lab for 3 to 5 year old children. This course will be of value to students desiring present or future employment in the field of child care and development, elementary education or special education as well as

parenting. Successful completion is a prerequisite for enrolling in Child Care Technology. This course, along with Child Development, will provide the opportunity for advanced placement credit at Kishwaukee College with teacher approval.

Prerequisite: Child Development Level: 11, 12 Semesters: 2 Credit: 2

#### ADULT LIVING/RESOURCE MANAGEMENT

This course is designed to help students achieve life satisfaction through responsible participation as adults in the home, community and workplace. Areas of emphasis will include: Issues Facing Adolescents Today; Maturity and Character Growth; Personality Development; Stress and Conflict Management; Decision-making and Problem-Solving. In addition, this course encourages each student to develop a greater understanding of his/her relations with others and the realization of the value of effective communication in these relationships. The awareness of the factors involved in successful male and female relationships. All issues will be discussed within the context of the family.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

#### PARENTING/RESOURCE MANAGEMENT

The course is designed to help students think through the responsibilities, satisfactions, and stresses of parenthood. The course content includes: role of the parent, readiness for parenthood, parenting styles, heredity, prenatal care and development, childbirth and newborn and infant development. Current social issues that influence parenting and the family are researched and discussed. Stress prevention and the work of community agencies that help parents deal with various types of parenting crises are emphasized. Students will have the opportunity to care for a computerized "infant" simulator.

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

#### CONSUMER ECONOMICS

Consumer Economics is designed to help the student understand the economic system of our nation and how it compares to those of other nations. Students will develop an appreciation of the free enterprise system: Supply and demand concepts, scarcity, opportunity costs, wants and needs, and productive resources in relation to the nation's economy and in the world economy. Students will also develop skills and understanding of consumer rights and responsibilities; effective use of credit; budgeting and checking; comparative shopping skills for food, clothing, transportation, housing, and insurance. Students will also learn how to prepare federal and state income taxes.

Prerequisite: None Level: 12 (required of all seniors) Semesters: 1 Credit: 1/2

**INDUSTRIAL TECHNOLOGY RECOMMENDED COURSE SEQUENCE**

INDUSTRIAL TECHNOLOGY RECOMMENDED COURSE SEQUENCE

**Drafting Courses**

Technical Drafting I-A



Technical Drafting II



Computer Aided Drafting



Technical Drafting III

**Woods Courses**

Technical Drafting I-A



C & F I

**Woods Courses**

Technical Drafting I-A



C & F I



C & F II

**Metals Courses**

Technical Drafting I-A



Metals – IM

**Metals Courses**

Technical Drafting I-A



Metals IM



Technical Drafting II



Metals Technology IW

**Electricity Courses**

Intro to Electricity  
No prerequisites

**Electricity Courses**

Intro to Electricity



Electronics I

TECHNICAL DRAFTING I-A

Technical drafting I-A is a one semester class designed to give the student a wide variety of experiences in mechanical drawings and architectural drawings. It will introduce the students to the basic fundamentals of communication technology as it applies to the areas of drafting. Instruction and activities will center around board drafting. Topics covered include discussions, hands on lab activities, specific drawings, demonstrations of professional drawings, I.D.E.A. drafting competition and compiling drawings for portfolio. An introduction to CAD will complete the course.

Prerequisite: None Level: 9, 10, 11, 12 Semesters: 1 Credit: 1/2

Maximum seats per class 20

TECHNICAL DRAFTING II

Technical drafting II is a one semester class designed to give the student a wide variety of experience, building on the knowledge obtained in Technical Drafting I-A. Activities are designed to provide a more specific and in depth experience in Mechanical drawing, Architectural drawings and Computer Assisted Design/Drafting. Activities are designed to reinforce the topics covered and include discussions, hands on lab activities, specific drawings, demonstrations, I.D.E.A. drafting competition, field trips and compiling drawings for portfolio.

Prerequisite: Technical Drafting I-A with "C" or better Level 10, 11, 12

Semesters: 1 Credit: 1/2 Maximum seats per class 20

COMPUTER AIDED DRAFTING ( CAD )

This course is designed to provide an understanding of the Computer Aided Drafting programs. Through hands on computer experience, the student will learn the fundamentals of CAD programs used in real life situations in the field of interest to the student. Students will select a CAD program based on their desired field of study.

**Architecture:** A+CAD , ARCHICAD 11, SketchUp : Students will learn the programs enhanced tools to be efficient and productive in various aspects related to architecture.

**Interior Design:** A+CAD, SketchUp : Students will learn the programs enhanced tools to be efficient and productive in space planning, interior spaces, and design or various aspects concerning design of furniture and other components related to interior design.

**Mechanical Engineering:** Students will learn Solid Works 3D design with a focus on engineering and analysis principles. While learning about the design process, students acquire valuable communication, collaboration, and problem solving skills enabling students to design and create digital prototypes in the classroom.

**Civil Engineering:** Bentley Power Civil is used to create airports, rail terminals, subdivisions, urban complexes, parks, campuses, golf courses, dams, drainage, utility, floodplain projects, commercial building, plant, and manufacturing sites and is used by 48 of the 50 State Department of Transportation

**Media – Entertainment:** The line between film, games, and design visualization are quickly blurring. It's increasingly more difficult to distinguish the differences between an interactive architectural walk-through and an interactive video-game. Students will create

a fully functioning video-games, or architectural renderings, or create an animated film using Blender and The CAD Academy curriculum.

Prerequisite: Tech Drafting I-A and Tech Drafting II with "C" or better Level: 11, 12 Semesters: 1 Credit: 1/2 Maximum seats per class 20

### TECHNICAL DRAFTING III

Technical drafting III is a two semester course designed to give students a complete understanding of the field of study of interest to them, the fields are: Architecture, Interior Design, Mechanical Engineering, Civil Engineering, and Media – Entertainment. Activities are designed to give students the necessary foundations to complete drawing projects using the skills gained in previous Industrial Tech drafting classes. Students will be required to build a portfolio for the purpose of college reviews.

Prerequisite: Technical Drafting I-A, Technical Drafting II, and Computer Aided Drafting with "C" or better Level: 12 Semesters: 2 Credit: 1 Maximum seats per class 20

### METALS TECHNOLOGY IM (Exploring Metals)

A semester length course exposing students to the elements of metals, production processes, materials, machines and careers in the manufacturing industries will be studied. The course will strive to develop proper safety procedures, acceptable work habits, basic hand tool usage and beginning problem solving skills.

Prerequisite: Technical Drafting I-A with "C" or better Level 9, 10, 11, 12

Semesters: 1 Credit: 1/2 **Additional Fee required for this course**

### METALS TECHNOLOGY IW (Intro Welding I)

A semester length course consisting of classroom instruction and lab work in the areas of arc, mig, oxyacetylene, and Tig welding as production fabrication methods of industry. Elements of production technology such as safety, proper working attitudes and careers related to the welding trades will be stressed.

Prerequisite: Technical Drafting I-A, Technical Drafting II, and Metals IM with "C" or better

Level: 11, 12 Semesters: 1 Credit: 1/2

**Additional Fee required for this course**

### CONSTRUCTION MATERIALS & FABRICATION I (Basic Woods)

This course is designed to foster an awareness and understanding of manufacturing. Emphasis will be in the areas of tool safety, tool maintenance, manufacturing of wood products, product design and assembly techniques, shop procedures, and proper use of tools and materials. Students are exposed to many career opportunities available to people interested in production technology. Students will be designing their own wood projects and will need to understand measuring, cost budgets and figuring board footage, also required the ability to read blueprints and drafting their own designs.

Prerequisite: Technical Drafting I-A with "C" or better Level 9, 10, 11, 12

Semesters: 1 Credit: 1/2 **Additional Fee required for this course**

CONSTRUCTION MATERIALS & FABRICATION II (Woods Occupations)

In this course students will develop awareness and understanding of a number of manufacturing technologies that involve the building trades in residential construction. Students will have various experiences involving the tools, machines, materials, and processes of industry. Additional units will explore residential construction, woodworking careers and various methods of determining material costs.

Prerequisite: Technical Drafting I-A, Construction & Fabrication I with "C" or better  
Level 11, 12 Semesters: 1 Credit: 1/2 **Additional Fee required for this course**

INTRO TO ELECTRICITY I (Basic Electricity and Wiring)

This course fosters an understanding of how we use energy in technological society. Areas of study include electrical fundamentals, energy sources, energy conservation, electricity projects, computer simulations, home electrical systems. Students will learn to construct and maintain basic electrical circuits and to use meters and test equipment correctly. Many energy technology careers will be discussed and studied. Students will learn to read electrical schematics and required to draft their own schematics for their projects.

Prerequisite: None Level 9, 10, 11, 12 Semesters: 1 Credit: 1/2  
**Additional Fee required for this course**

ELECTRONICS I (Intro to Electronics)

In this course students receive a thorough coverage of electricity fundamentals with an introduction to electronic components and concepts. Additional units will include a study of conventional and alternative energy resources and the various ways we can conserve energy. Students will learn to read electrical schematics and apply that knowledge to constructing breadboards for experiments. Students will also construct an autonomous robot and program the robot to do various functions.

Prerequisite: Intro to Electricity I with "C" or better Level 11, 12  
Semesters: 1 Credit: 1/2 **Additional Fee required for this course**

## KISHWAUKEE EDUCATION CONSORTIUM VOCATIONAL

The Kishwaukee Education Consortium is a cooperative, Education for Employment Delivery System made up of area high schools, Kishwaukee College and other agencies. The KEC provides a variety of career and technical programs where students gain knowledge and skills for immediate employment after high school or for advanced educational programs. Work place, basic academic and transition skills are taught as an integral part of each course.

### Prerequisites

Enrollment in KEC career and technical classes is open to high school juniors and seniors from KEC school districts. Some classes offered have high school or KEC course prerequisites. See course descriptions or your guidance counselor for information.

### High School Credit

Students typically earn two high school credits for successfully completing KEC course requirements for the year.

### Tech Prep College Credit

Articulated Credit - A student receiving a B average in a Tech Prep course is eligible for credit at Kishwaukee College when he/she enrolls in the related Kishwaukee College program within 18 months after graduation. After completion of 15 credit hours at the college, the student must contact the Kishwaukee College registrar to obtain the credit. The following Tech Prep Courses are eligible for articulated credit in 2009-2010: Advanced Horticulture, Computer Assisted Drafting, Green House Management, Introduction to Horticulture, and Welding Technology. (Fire Science & Graphic Communications are articulated through other Community colleges.)

Dual Credit/Dual Enrollment – This allows students to be enrolled at Kishwaukee College and their home high school at the same time. Therefore, the **student receives college credit as well as high school credit**. Enrollment is taken care of through the KEC. The following Tech Prep Courses are eligible for dual credit/dual enrollment in 2009-2010: Auto Mechanics Technology, Aviation Flight Academy, Business & Information Technology, Early Childhood Education 2, Collision Repair Technology, Computer Information/Maintenance Systems, Construction Trades 1, Criminal Justice, Diesel Power/Heavy Equipment Technology, Health Occupations 1, & Manufacturing Engineering Technology Academy.

### Transportation

Your home school provides transportation to most KEC classes. Only after receiving permission from the KEC instructor, the home high school principal and parent/guardian is a student allowed to drive. Seniors in level 2 courses may have to provide their own transportation due to the college schedule. However, permission still must be obtained.

### Costs

Certain classes require students to purchase tools of the trade and/or safety equipment. See course descriptions for further details.

### Additional Information

If you require additional assistance selecting a KEC course, see your counselor or call the KEC office at 815.825.2000 or visit the KEC website at [www.kecprograms.com](http://www.kecprograms.com).

AUTO MECHANICS TECHNOLOGY 1

KEC &amp; Kishwaukee College

This course offers classroom and laboratory instruction in basic automotive mechanics to begin preparation for entry into the field of automotive mechanics technology. Students are introduced to fundamentals of safety practices, use of hand and power tools. Systems covered include mechanical and electrical systems. In addition to hands-on work, students will be required to use a text for reading, writing, and computers for online assignments. They will be using some algebra concepts and measurements in both the English and Metric systems. They should be able to follow multiple-step directions and work independently and in team situations. Successful completion of this course is the basis for the Kishwaukee College Basic and Advanced Automotive Technology Certificates and Automotive Technology Associate Degree (A.A.S.) Program. AMT 103 is the course for which students may earn college credit. Students need to provide their own safety goggles and writing materials.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

2 College Dual Credits/Dual Enrollment Available

AUTO MECHANICS TECHNOLOGY 2

Kishwaukee College

This advanced course allows students to use and add to the skills acquired in Auto Mechanics Technology I. Emphasis is placed on steering, suspension, brakes and related systems. Information and skills needed to enter automotive mechanics related occupations or certificate / degree programs are stressed. Successful completion of this course meets Kishwaukee College AMT 110 & 120 course requirements for the Basic and Advanced automotive Certificates and the Automotive Technology Associate Degree (A.A.S.) Programs. Students may need to provide their own safety goggles and may have to provide their own transportation since this class meets Monday-Friday at 7:00 am. All Auto Technology courses are taught by an ASE Certified Instructor.

Prerequisite: "C" grade average in Auto Mechanics Technology 1 and/or consent of instructor Level: 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

8 College Dual Credits/Dual Enrollment Available

AVIATION FLIGHT ACADEMY 1 & 2

DeKalb Airport

This course offers classroom and simulator instruction in aviation. The course will give an in-depth insight into the world of aviation and will prepare the student for the FAA Private Pilot written exam. Instruction consists of aerodynamics, FAA regulations, primary navigation, GPS navigation, the use of flight computers, weather, radio navigation, flight instrumentation, performance and limitations, and the ATC environment. In addition, the program will utilize unique, state of the art flight simulators. AVF 101 and AVF 111 are the courses for which students may earn college credit.

Prerequisite: Acceptance into Academy, consent of KEC, parental orientation session at DeKalb Airport, acceptable GPA (determined by school), recommendation of high school, oral interview with KEC Coordinator, good attendance.

Level: 11, 12 Semesters: 2 Credits: 2 **Additional fee required for this course**

8 College Dual Credits/Dual Enrollment Available

BUSINESS AND INFORMATION TECHNOLOGY 1 & 2

Kishwaukee College

This course is designed to be a two-year program which includes computer training using Windows Vista, the Internet and Microsoft Office 2007. Students will receive extensive instruction in Microsoft Word, Microsoft Excel (spreadsheets), PowerPoint (presentations), and Access (database). Some desktop publishing skills will be taught using Microsoft Publisher. We will also work with Adobe Photoshop using Macintosh computers. Business-related accounting, written and oral communications, and other office skills will be integrated into the course. Teamwork skills will be integrated into the curriculum. Field trips to area business offices will be incorporated as well. Students in the second year of the program may be placed in paid internships with work schedules from one to four days in the workplace and the remainder in the structured classroom. OS 125, OS 126, CIS 133, CIS 135, OS 136 and OS 270 are the courses for which students may earn college credit.

Prerequisite: At least 1 semester of keyboarding and/or demonstrated keyboarding proficiency.

Prerequisite for Bus Info. Tech 2: "C" grade average in Business and Information Technology 1 and/or consent of instructor Level: 11, 12

Semesters: 2 Credits: 2 **Additional fee required for this course**

11 College Dual Credits/Dual Enrollment Available

### COLLISION REPAIR TECHNOLOGY 1 (Auto Body)

Kishwaukee College

This first level course begins preparation for apprentice level entry in auto body repair or further education in the field. Emphasis is placed on the fundamental aspects of collision repair and development of skills in the basic operations required to prepare an automobile for final paint application. Instruction includes safety principles and practices, vehicle nomenclature, function of individual components, parts manuals, and the use of filler and special body repair tools. Techniques stressed are straightening, shrinking, filling and the application of the hammer and dolly, and paint preparation procedures. Welding is taught as it applies to Collision Repair. Successful completion of this course is the basis for the Kishwaukee College Collision Repair Technology Certificate and Associate Degree (A.A.S.) Program. CRT 102, CRT 112 & CRT 122 are the courses for which students may earn college credit. Students need to provide their own safety glasses, work clothing.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

7.5 College Dual Credits/Dual Enrollment Available

### COLLISION REPAIR TECHNOLOGY 2 (Auto Body)

Kishwaukee College

In this course the student continues development of knowledge and skills needed for entry in auto body repair work or certificate and degree programs in the field. Work experience progresses into repairs of a more serious nature. Students build additional skills in basic sheet metal work and learn basic paint preparation and finishing techniques. Techniques stressed are trim removal, panel removal, installation, and basic estimating. Successful completion of this course is the basis for the Kishwaukee College Collision Repair Technology Certificate and Associate Degree (A.A.S.) Program. CRT 111 & CRT 123 are the courses for which students may earn college credit. Students wishing to continue in Collision Repair Technology 2 may be integrated with Kishwaukee College students and

therefore, will be attending classes according to the college schedule which may require providing their own transportation. Students need to provide their own safety glasses, work clothing.

Prerequisite: "C" grade average in Collision Repair Technology 1 and/or consent of instructor Level: 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

*6 College Dual Credits/Dual Enrollment Available*

COMPUTER INFORMATION/MAINTENANCE SYSTEMS 1 & 2

KEC &  
Kishwaukee College

A one or two-year program open to juniors and seniors who want to work with the repair and maintenance of computers OR the networking of computers.

Repair and maintenance: This class will prepare students with competencies essential for repairing and maintaining computer hardware and operating systems, as well as simple network concepts. Qualified students may enroll in coursework that may lead to certification as an A+ Computer Technician.

Networking: Second year students may enroll in Cisco Academy or sample the high tech areas of computer usage that include internet concepts and applications and computer hardware and electronic interfacing projects. Qualified students may enroll in coursework that may lead to a Cisco Certified Network Associate (CCNA) or Network+ Certification.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

Prerequisite for Computer Information Systems 2: "C" grade average in computer Information Systems 1 and/or consent of instructor

**Additional fee required for this course**

*11 College Dual Credits/Dual Enrollment Available*

CONSTRUCTION TRADES 1 & 2

KEC & Building Job Site

Construction Trades 1 provides basic training in a controlled lab environment in the following trades: Bricklayer, Carpenter, Cement Mason, Drywall Installer, Electrician, Plumber, and Tile Setter. In addition, Construction Measurement concepts and tool and job site safety are included. After satisfying the required labs, students will then be able to perform under direction from the instructor at a residential or commercial site. Student will have introductory instruction on blueprint reading, building codes, cost analysis and rough and finish carpentry skills. At times, students will be working with local contractors at the job site. Students should not be opposed to working outside in various weather conditions. Students should have an understanding of basic math and geometry and be able to read a ruler. Students must also be able to lift heavy objects, work from ladders and not have a fear of heights. BCT 101 is the course for which students may earn college credit.

Students enrolling in the second year of the program will follow the same requirements as first year students. Advanced instruction on blueprint reading, building codes, cost analysis and rough and finish carpentry skills will be provided. Along with more

responsibilities at the job site, there will be leadership roles assigned throughout the year. Job shadowing possibilities are available to those students who show strong work ethics, 90% or better attendance and the ability to work well with others.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

Prerequisite for Construction Trades 2: "C" grade average in construction Trades 1 and/or consent of instructor

3 College Dual Credits/Dual Enrollment Available for Construction Trades 1

COSMETOLOGY 1 & 2

Hair Professionals Career College, Sycamore

This program, conducted through a contract with Hair Professionals Career College, is designed to begin to prepare students to qualify for the Illinois licensing examination in cosmetology. The program consists of approximately 450-900 of the 1,500 hours of instruction required for state licensing. The first 750-900 credit hours are typically earned over a two-year period. Classroom and practical experiences include a variety of beauty treatments including the care of hair, complexion and hands. Instruction includes: hair cutting, hair styling, chemical treatments, hair coloring and manicuring. Bacteriology, anatomy, hygiene, sanitation, salon management and customer relations are also emphasized. Students should be able to read text materials written at a 10<sup>th</sup> grade level. They should be able to follow multiple step directions working alone and in a team environment. They should also be able to follow safety procedures and work appropriately with the public. Students should expect to attend class and do clinical work that may extend beyond the regular high school day. For this reason, they should plan to provide their own transportation. Students are responsible for the initial Hair Professionals registration cost (\$100) as well as the purchase of the personal tools and professional kit which usually runs about \$1,000, as well as a lab fee of \$450 per semester for 2<sup>nd</sup> year students and \$562.50 per semester for 1<sup>st</sup> year students. Students are also responsible for the final 450-900 hours of instruction typically completed after high school graduation.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 3

**Additional fee required for this course**

CRIMINAL JUSTICE 1 & 2

KEC

This is a two-year program that introduces students to the various aspects of the Criminal Justice system. Course content includes basic principles of government, the constitution, and the courts and legal system. Other topics covered are telecommunications, patrolling, crime lab techniques, investigation procedures, search and arrest techniques, fingerprinting & human relations and police ethics. Traffic accident investigation and driving under the influence enforcement are taught along with the Illinois vehicle code, report writing and community oriented policing. Students should be able to read at the 8<sup>th</sup> grade level. They should be able to follow multiple-step directions and work independently and in team situations. This class requires a structured, motivated and disciplined student who attends class on a regular basis. A criminal background check may be done on all students. Students enrolling in this course are not allowed to have any convictions. Coursework will provide an introduction to the community college program. Successful completion of this course is the basis for the Kishwaukee College Criminal Justice Associate Degree (A.A.S.) Program. CRJ 101, CRJ 109, CRJ 152 & CRJ

160 are the courses for which students may earn college credit.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

Prerequisite for Criminal Justice 2: "C" grade average in Criminal Justice 1 and/or consent of instructor

CULINARY AND FOOD SERVICE 1 & 2

KEC

This course will provide students interested in the food service industry, further work in advanced food preparation and food preparation management. Students will learn to use commercial food service equipment to prepare food in quantity. A broad range of current food and nutrition issues will be covered such as planning food service, purchasing food, safety of food preparation, presentation of food, preparation, employer and customer relationships and careers and advanced education in the industry. Students will prepare, and evaluate the products prepared. Food Sanitation will be incorporated in the class room instruction. Emphasis will be placed on careers in the culinary and hospitality industries. Internships and field trips to local food preparation sites can be integrated into this course. Students may need to provide their own transportation, uniforms, and other costs related to placement at some community training sites.

Prerequisite: At least 1 semester of Foods at home high school is encouraged Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

Prerequisite for Culinary & Hospitality Management 2: "C" grade average in Culinary & Hospitality Management 1 and/or consent of instructor

12 College Dual Credits/Dual Enrollment Available

DIESEL POWER/HEAVY EQUIPMENT TECHNOLOGY 1

Kishwaukee College

This course offers classroom and laboratory instruction in basic diesel, heavy equipment mechanics and small engines to prepare for entry in related occupations or advanced education. Learning activities allow students to become knowledgeable in the fundamental aspects of safety practices, use of hand and power tools, diagnosis of malfunctions, fuel systems, disassembly and inspection, reconditioning, measuring, and assembling of heavy equipment components. Welding is taught as it applies to Diesel Power. Successful completion of this course is the basis for the Kishwaukee College Diesel Power Technology Certificate and Associate Degree (A.A.S.) Program. DPT 101, DPT 175 & DPT 199 are the courses for which students may earn college credit. Students provide their own safety goggles.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

6 College Dual Credits/Dual Enrollment Available

DIESEL POWER/HEAVY EQUIPMENT TECHNOLOGY 2

Kishwaukee College

This course offers more laboratory experience using the skills learned in Diesel 1 class. The student will learn trouble-shooting techniques for diesel engines and diesel fuel systems. Most of the projects for Diesel 2 class will be actual running engines brought in to simulate an equipment service shop. Diesel 2 students will also be called upon from time to time to give class demonstrations for Diesel 1 students. Successful completion of this course is the basis for the Kishwaukee College Diesel Power Technology Certificate and Associate Degree (A.A.S.) Program. DPT 172 & DPT 177 are the courses for which students may earn college credit. Students provide their own safety goggles. Level 2

students will meet Monday-Thursday from 1-3pm and may have to provide their own transportation.

Prerequisite: "C" grade average Diesel Power/Heavy Equipment Technology 1 and/or consent of instructor Level: 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

7 College Dual Credits/Dual Enrollment Available

EARLY CHILDHOOD EDUCATION 1 AND 2 (ADVANCED)

KEC

This advanced regional course is available to students who have successfully completed the Child Development Course sequence at their home high school. The course is designed to develop the skills required to plan and implement an early childhood program. Students will apply their learning experiences about children through participation in a school-based preschool and possibly an internship in a community child care facility. Interaction with parents, including conferences, meetings, phone and letter communications will be part of the course. Career opportunities related to childcare at the associate and baccalaureate degree level are explored. Students should be reading at 8<sup>th</sup> Grade level or above. Students must also be able to work in a group setting as well as individually and must be willing to take on a leadership role with same-age classmates along with pre-school age children. Successful completion of this course is the basis for the Kishwaukee College Child Care Technology Certificate and Associate Degree (A.A.S.) Program. ECE 112 is the course for which students may earn college credit for Early Childhood Education 2. Students must comply with D.C.F.S. regulations which include a background check and a T.B. skin test.

Prerequisite for Early Childhood Education 1: Successful completion of Child Care Development course(s) at home high school is encouraged Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

Prerequisite for Early Childhood Education 2: "C" grade average and/or consent of instructor

3 College Dual Credits/Dual Enrollment Available for Early Childhood Education 2

FIRE SCIENCE 1 & 2

DeKalb Fire Department &  
Sycamore Fire Department

This is a two-year program that enables students to learn curriculum in order to enter the fire service or emergency medical field. The first year will include the Firefighter II and CPR training. Curriculum is based on the standards set forth by the State of Illinois Fire Marshall's Office, the Illinois Department of Public Health, and the Department of Transportation. Curriculum for second year students will include EMS/First Responder and introduction to Fire Protection. Those students wishing to take the Firefighter II state test will have their records forwarded to the fire department with which they are working. The students will pay for any fees for state tests.

Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

Prerequisite for Fire Science 2: "C" grade average in Fire Science 1 and/or consent of instructor

College Articulated Credits and Advanced Placement Available

GRAPHIC COMMUNICATIONS 1 & 2

KEC

Graphic Communications I will introduce the student to the field of Graphic Communications (GC). The class is intended to be a overview of all phases of the GC processes, from origination of an idea, through design (development and refinement), to production procedures and post-press operations. Emphasis will be on the procedures involved in Graphic Design and Desktop Publishing, including (but not limited to) the elements and principles of design; text composition and typography; image creation and editing; digital photography and photo manipulation; color; and document layout for the production of two-dimensional products and screen printing. For each of the main categories of instruction, students will be expected to use the skills and techniques taught to create production-ready projects. Students will also receive hands-on instruction in one or more printing methods and several post-production procedures.

Graphic Communications II will investigate further all of the processes and procedures introduced in the Graphic Communications I. Emphasis will be on more complicated and involved design projects; career possibilities in the GC field; and production of a job-interview-quality portfolio of the student's work. Students will also be given an opportunity to participate in a National GC contest.

Internships are available in area graphic arts companies through this program. Students may specialize in a specific graphic arts area or participate in paid cooperative education at a community graphic arts training site in the second year of the program.

Prerequisite for Graphic Communications 1: At least 1 semester of Keyboarding and/or demonstrated keyboarding proficiency Level: 11, 12 Semesters: 2

Credits: 2 **Additional fee required for this course**

Prerequisite for Graphic Communications 2: "C" grade average Graphic Communications 1 and/or consent of instructor

College Articulated Credits and Advanced Placement Available

## HEALTH OCCUPATIONS 1

## KEC /Area Healthcare Facilities

This course provides a strong base for students who wish to gain experience and background for advanced study in the health and medical fields. Instruction includes orientation to health-related careers, basic patient care skills, medical terminology, nutrition, anatomy, physiology and first aid. In addition, this course prepares students for the Illinois Certified Nursing Assistant exam for certification. This certification is required for employment in a hospital, long-term care facility, or home health care. Since there is a minimum requirement of theory and clinical hours, **excellent attendance is crucial**. Clinical experiences at community health care facilities are an integral part of the program. A criminal background check will be done on all students prior to the start of clinical rotations and students are not allowed to have any convictions. A mandatory urine drug screen will be conducted as well. The results of this screen must be negative in order for the student to remain a full participant in this course. A valid Social Security Number is required. There will be a student lab fee of \$15 to be used toward the costs of the criminal background check, TB skin test & urine drug screen. Students must be able to lift a minimum of 25 pounds in order to complete physical tasks that are mandatory for passing skills. Students must also be able to pass a number of skills before attending clinicals. Students may have to arrange for transportation to scheduled clinical experiences at regional health care facilities. A health occupations student's organization (Skills-USA) is provided to develop leadership, personal-social and other skills. In order to earn college credit for NUR 100 in addition to High School credit, students must achieve an appropriate reading placement test score.

Prerequisite: Interest & experience in Health Sciences is recommended    Level: 11, 12  
Semesters: 2    Credits: 2    **Additional fee required for this course**  
7 College Dual Credits/Dual Enrollment Available

HEALTH OCCUPATIONS 2

KEC /Area Healthcare Facilities

This course will continue to prepare students in the healthcare field for further certification and advanced work at the college level. Subject matter to be covered will include medical terminology, anatomy and physiology and careers in several health occupations. An integral part of the second year curriculum is to have students be placed in unpaid internship positions at local medical facilities. In most cases students must be able to provide their own transportation to internship sites. A mandatory urine drug screen will be required for students to participate in clinical experiences. Consent for the testing and a negative drug screen will be required for a student to remain a full participant in this course. There will be a student lab fee of \$15 to be used toward the costs of the TB skin test & urine drug screen. Excellent attendance at the home school is essential for success in this program. A health occupations student organization (Skills-USA) is provided to support student development.

Prerequisite: Illinois Certified Nurse Assistant Certificate and a minimum grade of "C" in Health Occupations I and/or consent of instructors

Level: 12    Semesters: 2    Credits: 2    **Additional fee required for this course**

MANUFACTURING ENGINEERING TECHNOLOGY ACADEMY 1 & 2

Kishwaukee  
College/Local Industries

The Manufacturing Engineering Technology Academy is a two-year high school Career & Technology Education program to prepare students to enter a broad range of career areas in manufacturing which may require an associate or other advanced degree. Students will take coursework at Kishwaukee College and visit manufacturing sites. Students are eligible to participate in paid internships sponsored by area manufacturing companies during the summer between their junior and senior year. Students will be introduced to basic machine tool operations. Using the new IST Lab (Integrated Systems Technology) the student will be introduced to robotics, hydraulics, pneumatics, mechanical drives, CAD, CNC programming and plastics. These topics are taught through the use of high tech equipment modules that incorporate a "hands on" approach to learning. The program is intended to train students for industrial employment as entry-level toolmakers, tool designers, mechanical drafters, or production/engineering aides. Successful completion of the two-year program is designed to give the students one semester of credit towards the Kishwaukee College A.A.S. degree in Automated Engineering Technology. MT 151 Shop Math I, MT 152 Shop Math II, MT 101 Blueprint Reading, MT 215 Manufacturing Processes I, MT 216 Fabrication Practices, and MT 103 Systems Integration, are the courses for which students may earn college credit. Students must provide their own safety goggles.

*(Summer internship credit may also be available)*

Prerequisite: Application and acceptance into the Academy. See your counselor for additional information and an Academy application

Level: 11, 12    Semesters: 2    Credits: 2    **Additional fee required for this course**

14 College Dual Credits/Dual Enrollment Available

WELDING TECHNOLOGY 1 & 2

Kishwaukee College

This course, designed to develop job entry skills or prepare for advanced college course work leading to professional welder certification, combines classroom instruction with "hands on" laboratory experience. Procedures covered in this course include shop safety, oxyacetylene welding, brazing and cutting, flat position electric arc and mig welding, pattern burning and blueprint reading. Students in the second year program gain experience in advanced welding practices (horizontal, vertical and overhead positions) using electric arc, and mig processes. Subject matter in this course is articulated with the Kishwaukee College Welding Technology Certificate. All students are required to purchase and wear safety glasses, appropriate clothing, and equipment. Instructor will present samples and store locations that supply the proper equipment on the first day of class.

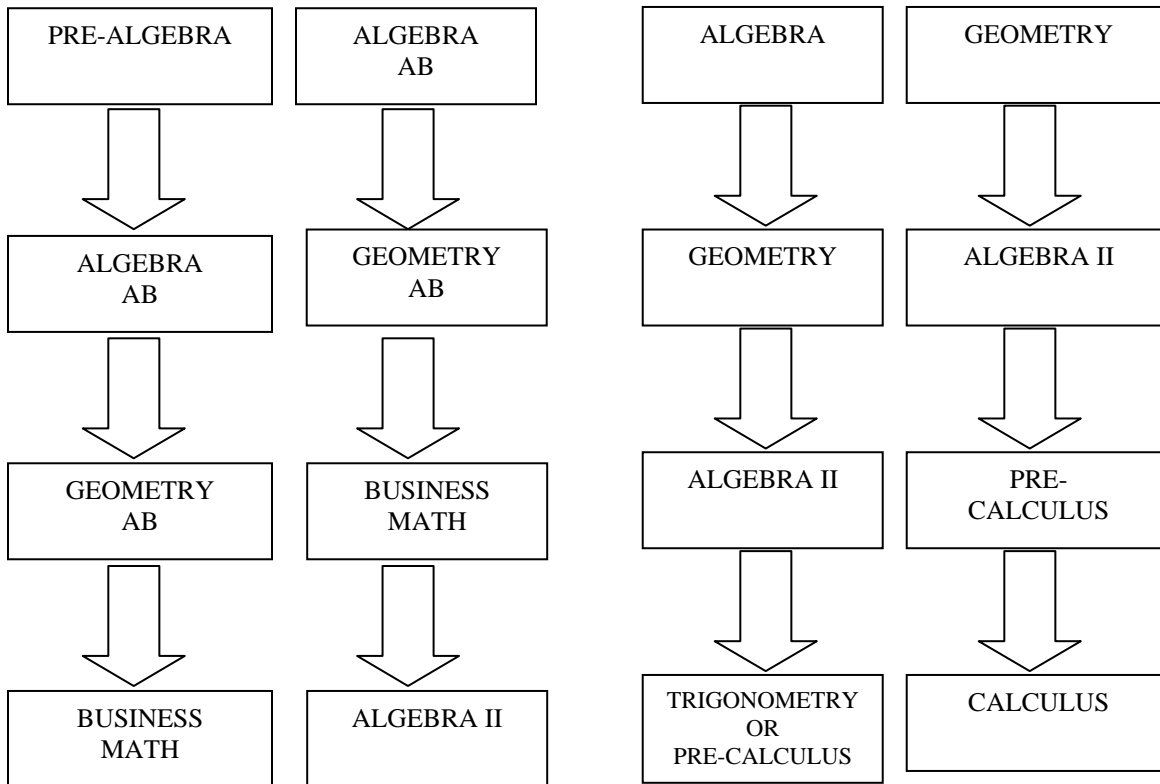
Prerequisite: None Level: 11, 12 Semesters: 2 Credits: 2

**Additional fee required for this course**

Prerequisite for Welding Technology 2: "C" grade average in Welding Technology 1 and/or consent of instructor

4 College Credits and Advanced Placement Available

## RECOMMENDED MATH SEQUENCE



### PRE-ALGEBRA

Pre-Algebra is a freshman level class designed with three major parts. The first part serves as a review of eighth grade math. The second part is comprised of the development of the skills necessary for students to succeed in Algebra. The final part of the course is a basic introduction to topics such as Geometry and logical thinking skills. This course will help students who lack solid fundamentals meet state standards. Upon completion of the course, students will enter into Algebra AB.

Prerequisite: None Level: 9 Semesters: 2 Credit: 1

### ALGEBRA AB

The goal of this course is to expose the student to basic algebra skills. Topics covered include systems of equations and inequalities, polynomials, basic factoring, exposure to quadratic and exponential functions, radicals, and graphing various types of equations. After competency has been demonstrated, a calculator may be used. Upon completion of this course students will enroll in Geometry AB.

Prerequisite: See course sequence Level: 9, 10 (10 teacher recommendation only)  
Semesters: 2 Credits: 1

ALGEBRA

Algebra is designed to give students a solid foundation in mathematics. This course emphasizes simplifying expressions, solving equations and inequalities, using problem-solving techniques to solve word problems and learning methods of graphing. Calculators are used, but not on a regular basis. This is the suggested course as a prerequisite for Geometry.

Prerequisite: None Level: 9 Semesters: 2 Credit: 1

GEOMETRY AB

This course is designed to meet the needs of struggling math students while fulfilling the state requirements. It is a one-year course that is designed to mirror the content taught in Geometry including lines, triangles, circles, quadrilaterals, areas and volumes.

Geometry AB is not a traditional college preparation course.

Prerequisite: Algebra AB or teacher recommendation Level: 10, 11 (teacher recommendation only) Semesters: 2 Credit: 1

GEOMETRY

Geometry is a standard course in the traditional college preparation sequence. Students will explore the world around us while developing their spatial and inductive and deductive reasoning skills. Topics that are covered include lines, triangles, circles, quadrilaterals, areas, and volumes. The mastery of Algebra, especially the ability to solve equations, is essential for success in Geometry. The course makes regular use of scientific calculators.

Prerequisite: Algebra (see course sequence) Level: 9, 10 Semesters: 2 Credit: 1

ALGEBRA II

Algebra II is a continuation of the Algebra course and extends those topics to include additional theory relating to the real number system. It formalizes the study of Algebra by expanding problem solving techniques. Topics include systems of equations, inequalities, quadratic and polynomial functions, logarithms, and determinants. The course makes regular use of the scientific calculator and graphing calculators to make technology an integral part of the problem solving process. Algebra II will provide the prerequisite for Pre-Calculus with Trigonometry or Trigonometry/College Math.

Prerequisite: A grade of "C-" or better in Geometry Level: 10, 11, 12

Semesters: 2 Credit: 1

BUSINESS MATH

This is a junior/senior level course that covers topics including using mathematics in the workplace as well as in one's personal life. Among the topics included are balancing a checkbook, shopping for insurance, and working with percents. It will also cover a variety of topics designed to help student performance on the ACT. This is not a course designed for college-bound students. This course is designed to follow Geometry AB.

Prerequisite: Geometry AB or teacher recommendation from Algebra II or Geometry (see course sequence) Level: 11, 12 Semesters: 2 Credit: 1

TRIGONOMETRY/COLLEGE TRANSITION MATH

This course is designed for the student who is interested in a stronger foundation in math and who wishes to develop the skills required to succeed in college math courses. Emphasis will be placed on trigonometry, probability, statistics, linear algebra and college algebra. The use of the graphing calculator is stressed. This course will enable the college-bound student to enroll in a pre-calculus class. The TI-83 or TI-84 graphing calculator is required.

Prerequisite: "D" or better in Algebra II Level: 11, 12

Semesters: 2 Credit: 1

### PRE-CALCULUS WITH TRIGONOMETRY

This course provides a foundation for all students who may wish to pursue a future in math and science at the college level. Students will be exposed to a rigorous curriculum that gives students the best chance for success in college mathematics. The first semester is a concentrated analysis of polynomial, rational, exponential, and logarithmic functions. The second semester is an in-depth analysis of the Trigonometry required for Calculus. TI-83 or TI-84 calculators are required for the class.

Prerequisite: "B-" both semesters of Algebra II or Trig/College Transition Math

Level: 11, 12 Semesters: 2 Credit: 1

### AP CALCULUS

Students combine the disciplines of Algebra, Geometry, Advanced Algebra, and Trigonometry to explore the world around us in a highly conceptual manner. Topics covered in Calculus are limits and their properties, transcendental functions, infinite sequences and series, and differentiation and integration-mainly with application. Upon completion of Calculus, students are encouraged to take the AP Calculus exam in order to obtain college credit.

Prerequisite: "C" or better in Pre-Calculus Level: 12 Semesters: 2 Credit: 1

## **MEDIA SCIENCE**

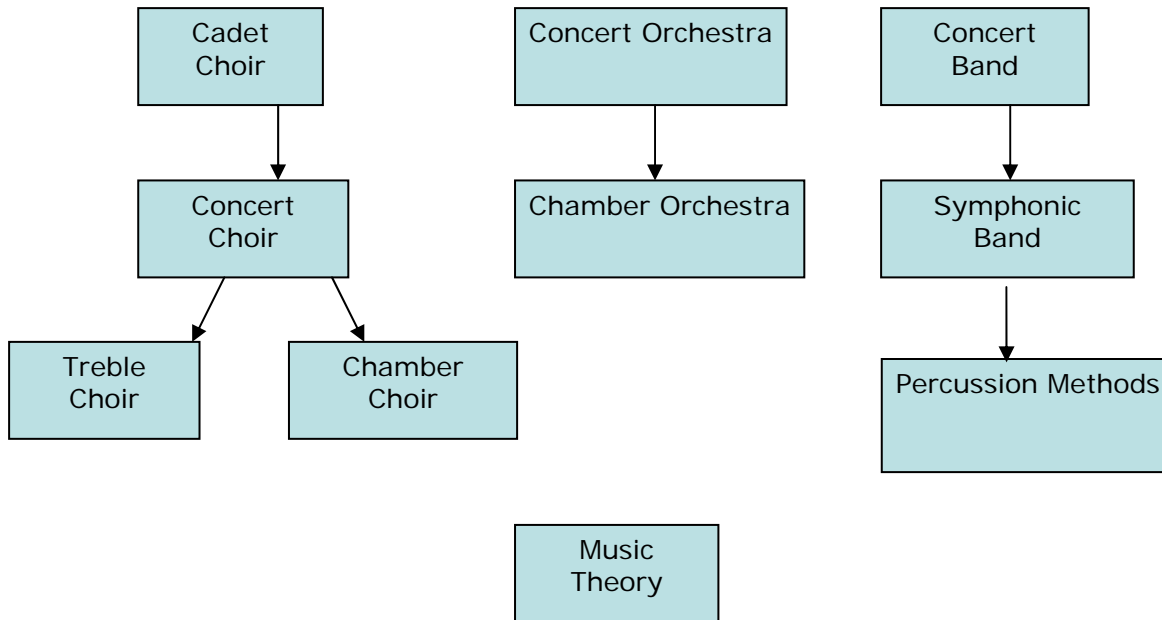
### MEDIA SCIENCE

This course offers students an opportunity to develop skills in public relations as they assist students and faculty at the circulation desk and introduces them to the everyday routines of library work. Students may grow in basic library knowledge which will assist them in other course work if they take advantage of the library environment during their time in class. Student enrollment limited to a maximum of two semesters.

Prerequisite: Not to exceed two students per class period. Application must be filed with the Guidance Office and approved by the Library Staff to enroll in media science.

Level: 11, 12 Semesters: 1 or 2 Credit: 1/4 or 1/2

## MUSIC COURSES



### CONCERT BAND

Concert Band is open to students grades 9-12 with at least 1 year instrumental music background. Instruction focuses on the development of instrumental technique, musical knowledge, and the performance of quality wind and percussion ensemble literature. Students enrolled in this class may also participate in Jazz Band and color guard.

During the first quarter all students enrolled in Concert Band combine with the Symphonic Band to form the marching band. The Marching Spartans perform at all home football games and local and regional contests. During the spring semester all students enrolled in Concert Band combine with the Symphonic Band to form the Basketball Pep Band.

Prerequisite: Consent of instructor Level: 9,10, 11, 12

Semesters: 2 Credit: 1 **Additional fee required for this course**

### SYMPHONIC BAND

Symphonic Band is open by audition only to students grades 9-12 with at least 3 years instrumental music background. Instruction focuses on the further development and refinement of advanced instrumental techniques, musical knowledge, and performance of advanced wind and percussion ensemble literature of the highest quality. Students in this organization will be eligible to perform with the Orchestra; they will also be able to participate in special performances and contests. Students enrolled in this class may also participate in Jazz Band and color guard. During the first quarter all students enrolled in Symphonic Band combine with the Concert Band to form the marching band. The Marching Spartans perform at all home football games and local and regional contests.

During the spring semester all students enrolled in Symphonic Band combine with the Concert Band to form the Basketball Pep Band. Freshmen may be admitted by special audition and the consent of the instructor.

Prerequisite: Consent of instructor Level: 9, 10, 11, 12

Semesters: 2 Credit: 1 **Additional fee required for this course**

### COLOR GUARD

The fall color guard consists of students in grades 9 - 12. Membership is by invitation or audition only. The fall color guard performs with the marching band at all home football games, contests and parades. Rehearsals take place once per week in the evening and during the summer band camp. Extra rehearsals are called as necessary.

Prerequisite: Consent of instructor Level: 9, 10, 11, 12

Semesters: 1/2 Credit: 1/4 **Additional fee required for this course**

### PERCUSSION METHODS

All percussion students in grades 9-12 will enroll in this class, which is dedicated solely to this unique segment of the Sycamore High School music program. Percussion Methods will focus on improving both students' individual skills and their ensemble performance skills. All student from this class will perform in small group ensembles throughout the year. They will combine with all other band members to form the Marching Spartans and the Basketball Pep Band. Selected students will also perform with the Concert Band, Symphonic Band, and Orchestra.

Prerequisite: Consent of Instructor Level: 9, 10, 11, 12

Semesters: 2 Credit: 1 **Additional fee required for this course**

### CONCERT ORCHESTRA

The Concert Orchestra is open to all students regardless of grade, ability or experience. The curriculum focuses on reinforcing basic skills and introducing advanced technique, musical knowledge and performance styles. The orchestra will combine with the Chamber Orchestra and Symphonic Band to perform full-orchestra literature.

Prerequisite: Consent of instructor Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

### CHAMBER ORCHESTRA

The Chamber Orchestra is for advanced and experienced players. Students are selected based on a comprehensive audition process. Students must have strong basic technique with introductory advanced technique. Character, attitude and academic merit may be taken into account. Students must re-audition each year to remain in the Chamber Orchestra. Only a select number of students will be chosen at the discretion of the teacher. Instruction focuses on the further development and refinement of advanced techniques, musical knowledge and performance of advanced orchestral literature. The orchestra will combine with the Concert Orchestra and the Symphonic Band to perform full-orchestra literature.

Prerequisite: Audition with teacher Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

### CADET CHOIR

This choir is for students 9-12 with a beginning knowledge of singing. Students need not have any previous vocal training. This choir will focus on learning and improving good vocal techniques, music reading skills, and performance etiquette. They will sing 2 or 3 part literature from a variety of genres. Singers are encouraged to participate in IHSA Solo & Ensemble Contest, and other non-curricular performance opportunities. Placement in this choir is based on a simple vocal audition or consent of the instructor.

Prerequisite: Basic audition or consent of the instructor Level: 9, 10, 11, 12

Semesters: 2 Credit: 1

### CONCERT CHOIR

This is an intermediate level mixed choir that will continue to improve and build good vocal techniques and music reading skills. Students must have vocal skills training and basic music reading skills. This choir will sing 3 and 4-part literature that may be both accompanied and a cappella. Singers are encouraged to participate in IHSA Solo & Ensemble Contest, IMEA District 8 activities and other non-curricular performance opportunities. Placement in this choir is by vocal audition.

Prerequisite: Audition with the instructor Level: 9,10,11,12 Semester: 2 Credit: 1

### TREBLE CHOIR

The Treble Choir is a select all-female choir focusing on 3 and 4 part accompanied and a cappella literature from a variety of genres. Students must have advanced vocal skills and a solid understanding of music symbols and terms. All singers are required to participate in IHSA Solo & Ensemble contest, and to audition for IMEA District 8 Festival. Singers are also encouraged to participate in other non-curricular performance opportunities. The audition will include sight-reading and a written theory test. Students must re-audition each year to remain in the Treble Choir.

Prerequisite: An advanced audition with the instructor Level: 9,10,11,12

Semester: 2 Credit: 1

### CHAMBER CHOIR

Chamber Choir is an advanced level mixed choir selected through vocal and written auditions. Students must have advanced vocal skills and mature musical understanding. The group will sing college level repertoire, both a cappella and accompanied, from various genres in four to eight voice parts. All singers are required to participate in IHSA Solo & Ensemble contest, and to audition for IMEA District 8 Festival. Singers are also encouraged to participate in other non-curricular performance opportunities. The audition will include sight-reading and a written theory test. Students must re-audition each year to remain in the Chamber Choir.

Prerequisite: An advanced audition with the instructor Level: 9,10,11,12

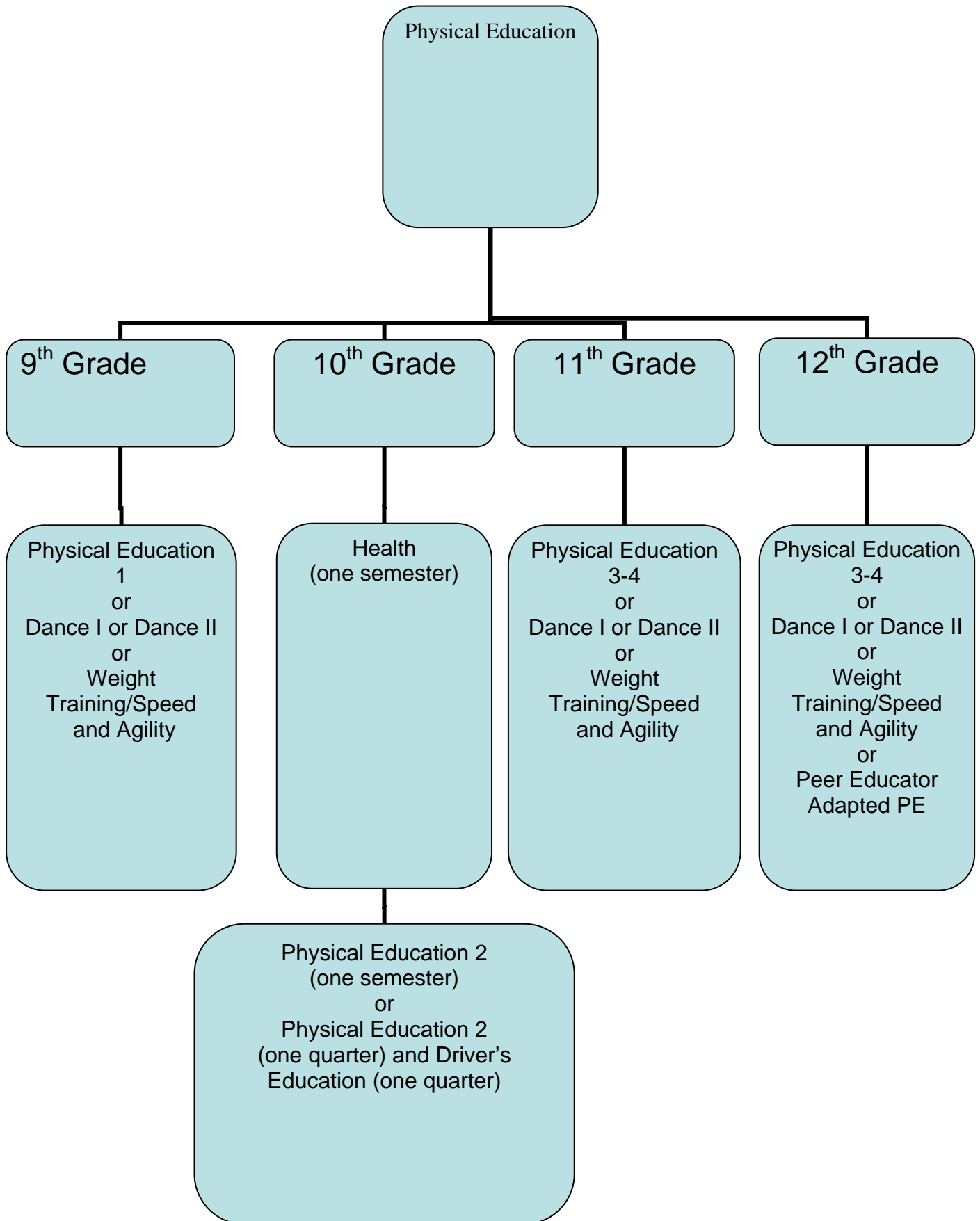
Semester: 2 Credit: 1

MUSIC THEORY

This course is designed to introduce theory of Western music. Basic diatonic theory will be introduced and evolve into advanced diatonic/chromatic studies. Aural development, singing and composition will also be studied. Music history will also be studied. Prior musical knowledge is not necessary but recommended.

Prerequisite: Consent of instructor Level: 10, 11, 12 Semesters: 2 Credit: 1

**PHYSICAL EDUCATION/DRIVER EDUCATION/HEALTH EDUCATION**



## PHYSICAL EDUCATION

The Physical Education Program is offered on a coeducational basis. This program offers an extensive program of activities for both boys and girls so that individual needs and interests are met.

The impetus of a federal law referred to as Title IX assisted us in organizing this program. Title IX states that students shall have equal opportunity to select courses offered with the high school setting regardless of sex.

The Physical Education Program is mixed between men and women instructors and most classes are coeducational. The freshmen and sophomore activities that are offered are badminton basketball, flag football, lacrosse, physical fitness, softball, soccer, tennis, track and field, and volleyball,. The junior and senior students may include the units listed above plus aerobic exercise, bowling, golf, inline skating, pickle-ball, physical management, recreational games, and outdoor games.

Student's grades will be determined by daily class participation, written assignments or quizzes, and skill tests.

EXEMPTIONS - Students may be excused from P.E. by a physician (provided the excuse is on file in the School Nurse's Office) or by qualifying for an athletic exemption (see your counselor for details).

Prerequisite: Preceding level Level: 9, 11, 12 Semesters: 2 Credit: 1

Level: 10 Semesters: 1/2 Credit: 1/4

### Dance I

This is a semester class offered both first and second semester. This course engages students in basic dance education and appreciation of dance as a physical activity, art form, and lifetime activity. Students will be introduced to jazz, ballet, modern, and tap techniques, social dances, and musical theater. The class will also focus on fitness two days a week doing yoga, Pilates, aerobics, and cardio-kickboxing.

Prerequisite: Must maintain a "B" to remain in this class. A student will be dropped at the semester if a "B" average is not maintained

Level: 9, 11, 12 Semesters: 1 or 2 Credit: 1/2 or 1

**\*Note: Band exempt students may not register for this class during the 1<sup>st</sup> semester.**

### Dance II

This is a semester class that builds on the fundamental activities and information provided in Dance I and engages the student in the development of more technical skills of dance, choreography, and cultural appreciation. Students will also learn the skills needed to choreograph dances and prepare and participate in a dance performance, which will be part of their grade. The class will also focus on fitness two days a week doing yoga, Pilates, aerobics, and cardio-kickboxing.

Prerequisite: Teacher approval through audition. Must maintain a "B" to remain in this class. A student will be dropped at the semester if a "B" average is not maintained

Level: 9, 11, 12 Semesters: 1 or 2 Credit: 1/2 or 1

**\*Note: Band exempt students may not register for this class during the 1<sup>st</sup> semester.**

## WEIGHT TRAINING/SPEED & AGILITY

This semester class will provide a unique opportunity to participate in a weight room setting while working on each student's individually designed weight program. Speed and agility training will be emphasized two days per week.

Prerequisite: Must maintain a "B" to remain in this class. A student will be dropped at the semester if a "B" average is not maintained

Level: 9, 11, 12 Semesters: 1 or 2 Credit: 1/2 or 1

**\*Note: Band exempt students may not register for this class during the 1<sup>st</sup> semester.**

### PEER EDUCATOR ADAPTED PHYSICAL EDUCATION

This class is an extension of the physical education curriculum. It involves senior students teaching their peers in the special needs adapted physical education class. A "peer educator" will have opportunities to assist in demonstrations, lead group activities, participate with and teach one-on-one or in small groups with the adapted physical education students. Students interested in learning more about teaching and adapting physical education concepts or working with students with physical disabilities should apply. Students will be receiving credit for graduation the same as regular physical education class students. Dressing for class is required. Students must have: 1). Senior status to apply, 2). Be recommended by a Physical Education Instructor to be eligible for consideration, 3). Complete "Peer Educator" Application and return a signed Parental Permission slip by deadline date of February 9, 2008.

\* An application can be picked up from the Health/Physical Education Department Chair Office with Mrs. Hill or in the guidance office.

\*\* If the "peer educator student" does not demonstrate success in this class, he/she may be removed from the Special Needs Peer Education program and transferred into a regular physical education class meeting that same period.

Prerequisite: Have passed three years of PE Level: 12 Semesters: 2 Credit: 1

### HEALTH EDUCATION

Taken in the sophomore year, this health education class is designed to aid a student to understand the facts, concepts, responsibilities and consequences of poor decision making and generalizations of mental health, personal health, social health diseases in our environment, drug/alcohol/tobacco use in our society, and human sexuality and life styles. Students will be receiving training in Community CPR and standard First Aid to help aid on responding to emergencies on job related or normal activities.

Prerequisite: None Level: 10 Semesters: 1 Credit: 1/2

**RECOMMENDED DRIVER EDUCATION SEQUENCE**

**Early Enrollment (Early Bird)**



**Driver Education Class and Behind the Wheel**

**DRIVER EDUCATION**

The Driver Education curriculum is designed to teach a student how to mentally and physically operate an automobile. The course runs in four nine-week programs according to age. Each program runs concurrently so that the student has classroom instruction and drives during the same quarter. A student needs to have at least one study hall for driving. A summer session will also be offered.

\*\*An early enrollment class (Early Bird) will be offered to freshmen and sophomores who would like to obtain their instruction permit early to allow them additional practice time with parents. There will be two parent/student classes offered. One will be in September and one in November. A parent must attend with their son or daughter. The student does not have to be 15 to attend. Students will complete the remainder of the class during their sophomore school year.

Summer school is offered to the new sophomores (summer after their freshmen year). Summer school runs from late May into early July depending upon class size.

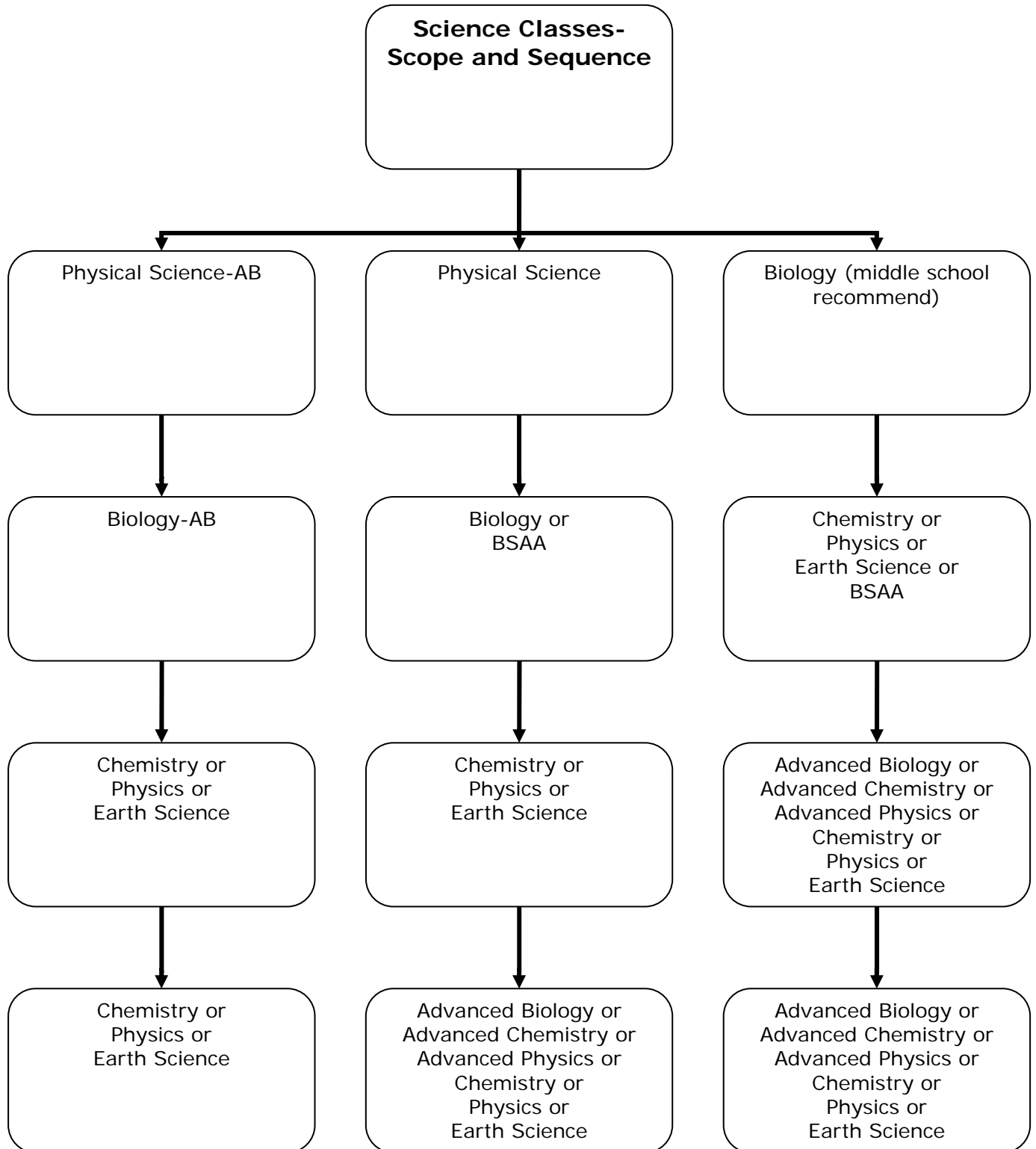
Prerequisite: Freshmen, Sophomore, Junior, or Senior at least 15 years of age

Second year freshmen may take the course during the 4th nine weeks.

All students must have passed 8 courses in the previous two semesters.

Level: 9, 10, 11, and 12 Semesters: ¼ Credit: ¼

**Additional fee required for this course**

**SCIENCE**

Two years of science (one of which is a biology class) are required for graduation (Class of 2011 and 2012).

Enrollment in a science course (Physical Science, Physical Science AB, or Biology) is required of all freshmen.

PHYSICAL SCIENCE AB

Physical Science AB is a focused course designed to introduce students to the basic principles of Chemistry, Physics, and Earth Science. Major concepts are reinforced through the use of demonstrations and laboratory investigations. Emphasis is placed on the development of skills related to the study of science.

Prerequisite: Teacher Recommendation Level: 9 Semesters: 2 Credit: 1

PHYSICAL SCIENCE

Physical Science is a course designed to introduce students to the basic principles of Chemistry, Physics, and Earth Science. Major concepts are reinforced through the use of demonstrations and laboratory investigations. Emphasis is placed on the development of skills related to the study of science. In the Physics portion of the course, students will apply basic algebraic skills to solve problems. This course is designed for the general and/or college bound student.

Prerequisite: None Level: 9 Semesters: 2 Credit: 1

BIOLOGY AB

A basic laboratory oriented science program involving active student participation. The course includes the reinforcement of process skills involving observation, problem solving, and recording and reporting data. Topics covered first semester include biochemistry, cell parts and their functions, cell processes, cell reproduction, and heredity. Second semester students investigate the history of life, human biology, and the year culminates with ecology and the relationships between living things.

Prerequisite: Passing grade in Physical Science AB or teacher recommendation

Level: 10, 11, 12 Semesters: 2 Credit: 1

BIOLOGY

A laboratory investigation formatted course centered on the understanding of living organisms and their structure. Studies include the study of molecular biology which is built upon with the topics of cells, cell reproduction, genetics, and population changes over time with a comparison to bacterial cells and viral structure. The second semester examines the human body systems with an emphasis on understanding practical functions as an organism. These topics coalesce in a study of population centered ecology.

Prerequisite: Passing grade in Physical Science or teacher recommendation

Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

ADVANCED BIOLOGY

This course is intended for students interested in biology-related vocations, including pre-professional, nursing and other biological science programs. Main topics discussed will include: biochemistry, cells, genetics, natural selection, comparative anatomy and physiology, and ecology. College-level labs are used throughout the course in an effort to prepare students for college-level biology.

Prerequisite: Completion of a course in chemistry, a Biology grade of "B" or better or consent of instructor Level: 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

EARTH SCIENCE

Earth science is a course that helps promote understanding and appreciation of the value of earth science and its applications and relevance to our daily lives. Key topics covered include: the scientific method, plate tectonics, rocks and minerals, geologic time, weathering and erosion, oceanography, meteorology, energy resources, and space science. The course is participatory in nature, consisting of laboratory investigations, demonstrations, projects, and various other activities, including multimedia. This course is designed for the general and/or college-bound student.

Prerequisite: Biology Level: 10, 11, 12 Semesters: 2 Credit: 1

## CHEMISTRY

Chemistry is a course that helps the student further develop fundamental laboratory techniques, chemistry concepts, and key terminology. Topics covered include: structure of the atom, the periodic table, nomenclature, phases of matter, formula writing, reaction types, the mole, stoichiometry, solutions, thermochemistry, acids and bases. This course is helpful for students planning an education beyond high school.

Prerequisites: Algebra I and concurrent Geometry, Biology, or teacher recommendation  
Level: 10, 11, 12 Semesters: 2 Credit: 1

## ADVANCED CHEMISTRY

Advanced chemistry goes further and expands on the topics covered in first year chemistry. This course is modeled like a typical college level general chemistry course. In the lab, the students will use a wide variety of equipment not used in first year chemistry while performing experiments. This course is ideal for students considering a career in science. Students are encouraged to take physics concurrently or before enrolling in this class. Lab fee.

Prerequisite: "B" in Chemistry Level: 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

## PHYSICS

This course is primarily designed to meet the needs of students who will continue their education at colleges, universities, or technical schools. Students will gain an understanding of physics concepts through the use of extensive demonstrations, lab experiences, and class lecture/discussions. Students will gain an understanding of how physics concepts relate to industry and their everyday lives. Emphasis is given to the mastery of problem solving techniques. Students should have strong math skills and enjoy problem solving. An optional enrichment activity at Six Flag's Great America will be offered in the fourth quarter at an additional cost.

Prerequisite: Biology, concurrent enrollment in Algebra II (or higher) or teacher recommendation

Level: 10, 11, 12 Semesters: 2 Credit: 1

## ADVANCED PHYSICS

This course is designed to expand the student's knowledge of the concepts of Physics. Topics to be covered include thermodynamics, relativity, quantum mechanics, nuclear physics, cosmology, and advanced topics in mechanics, electricity, and optics. Advanced Physics is a rigorous course designed to meet the needs of the college-bound student as well as those students who desire to further their understanding of the physical world. Emphasis is placed on developing critical thinking skills and conducting scientific inquiry.

Due to the nature of the projects required in this course, substantial cost may be incurred by the students.

Prerequisite: Physics, Trigonometry or Pre-Calculus or teacher recommendation

Level: 11, 12 Semesters: 2 Credit: 1 **Additional fee required for this course**

## SOCIAL STUDIES

### Freshmen

World Cultures

### Sophomores

World  
History

World  
Cultures

Economics

CAP

### Juniors

**AP US History  
or  
American  
Heritage  
or  
US History**

World  
History

Economics

CAP

Sociology

Psychology

### Seniors

AP US  
History

**Government**

World  
History

Economics

CAP

Sociology

Psychology

## WORLD CULTURES

World Cultures is a required one year long course that can be taken during a student's freshmen or sophomore year. This class is a people-centered study involving an in-depth look at the world's major cultures. The study of each of these cultures will focus upon historical and present-day culture and geography, family life and structure, social organizations, attitude on education, religious beliefs and institutions, economic life, political trends, and the intellectual and artistic accomplishments of men and women within the culture. The study of each of the cultures will be supplemented by the

development of reading, writing, research, geography, critical thinking, study skills/note-taking, technology use and presentation skills.

Prerequisite: None level: 9, 10 Semesters: 2 Credit: 1

### WORLD HISTORY

A study of the story or history of many countries, areas and people with an emphasis on Europe beginning with the Renaissance for the purpose of making real the development of history in relation to mankind and present day trends and influences. This course is a study of current international happenings in relation to background history studied and the purpose of broadening international understanding. Class will be taught thematically, beginning with the Italian Renaissance and Reformation. From this point, the course will be taught in units, each unit focusing on a particular country. First semester will emphasize England, France and Russia. Second semester will emphasize China, India and Japan.

Prerequisites: None Level: 10, 11, 12 Semesters: 2 Credit: 1

### AMERICAN HISTORY

American History is the study of the development of social, economic, and political institutions in the United States and includes the relationship of this country to other parts of the world during the 20th century. General themes and concepts are stressed with an added emphasis on analysis, that is, the methods used by historians in interpreting the past.

Prerequisite: None Level: 11 Semesters: 2 Credit: 1

### AMERICAN HERITAGE

This course will serve high school juniors who would otherwise take separate English and history classes, which deal with many of the same social, historical, and cultural periods. The course will promote problem solving, cooperative learning, group discussion, individual oral expression, and group interaction. Furthermore, an emphasis will be placed on critical thinking skills, reading for comprehension as well as analytical reading. Students may be required to obtain various novels and reading material. Students can expect a routine dedication to Silent Sustained Reading within the course. The American Heritage class will be a two-period course taught by one English teacher and one social studies teacher in a team setting. American Heritage curriculum will effectively combine the course content of junior English (Junior Composition and Literature) and U.S. history, satisfying the district's requirement in these areas. Grades and credit will be reflected according to these traditional course titles on all high school records. Students who normally enroll in English 3, or Junior Composition and Literature, and regular U.S. history might take American Heritage as an elective that would count toward the district requirements. Recent research has highlighted the effectiveness of the inquiry method, cross discipline study, and group learning in promoting critical and creative thinking skills. American Heritage offers a wider range of perspectives than the separate U.S. history or English courses taken separately in terms of multi-cultural education offerings and would create the opportunity for students to analyze and to synthesize between the two disciplines.

Prerequisite: Must have junior standing; must have passed English I and English II with at least one semester grade of C or above or provide a recommendation of the English II and/or world history or world cultures teachers. Level 11 Semesters: 2 Credit: 1 Junior Composition and Literature; 1 American History.

AP AMERICAN HISTORY

The AP program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials- their relevance- and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Students will be required to purchase and take the AP United States History examination to receive credit for the class.

Prerequisites: For **seniors** taking the class: As a junior: earned an A- or better in Academic Writing I, earned an A- or better for two semesters in United States history. As a sophomore: earned an A- or better in geography. Provide at least two letters of recommendation: one from a recent English teacher, one from a recent social studies teacher. Submit a copy of a graded paper of their choice from Academic Writing. For **juniors** taking the class: As a sophomore: earned an A- or better in English II or Pre-AP English 10, earned an A- or better for two semesters in World Cultures or one semester in Geography. Provide at least two letters of recommendation: one from an English teacher, and one from a social studies teacher. Submit a copy of a graded paper of their choice from English II.

Level: 11, 12 Semesters: 2 Credit: 1

GOVERNMENT

This one semester class is designed to give the student a general overview of the American system of Government. Topics within this overview include: comparison of other major systems of Government, great political thinkers and writers, the Constitution, Political Parties, our Federal system of Government, the Court system and State and County government. It is very important that the student stay current on the events of the day in the areas of Government and politics. These events, newspaper and magazine articles, in-class lecture, independent research and guest speakers will be used to study the various topics.

Prerequisite: None Level: 12 (required of all seniors) Semesters: 1 Credit: 1/2

CURRENT AMERICAN PROBLEMS

This course is designed to aid the student in exploring and understanding different current issues in modern America. Background information will be used to build a foundation for studying each particular subject, which may include independent research, guest speakers and in-class lecture, to explain the history of a situation or series of events. The topics for this class will include: US Foreign and Domestic Policy, the Federal Government, the Arms race, the US and World Economy, and selected social problems. The topics to be studied will be based, to a great extent, on what is "current" in the news at the time.

Prerequisite: None Level: 10, 11, 12 Semesters: 1 Credit: 1/2

SOCIOLOGY

Sociology is the study of social structure and human social behavior. This class will concentrate on the structure and function of these behaviors and then apply theories which seek to explain each topic. The class explores in more detail case studies and current issues through videos and Internet use. Topics that will be discussed include social relations (development of values, norms, personality), social institutions (family, school, religion, and sports), social inequalities (social class, racial/ethnic, and gender), and social problems (current issues like marriage and media).

Prerequisite: None Level: 11, 12 Semesters: 1 Credit: 1/2

ECONOMICS

This one semester elective class is designed as an introduction to microeconomics and macroeconomics. It is recommended for students with an interest in business and/or the social studies. One quarter will focus on microeconomics, which is the study of the choices made by economic groups such as households, companies, and individual markets. Topics discussed will include: consumers and producers, supply and demand, costs, sources of capital, and various organizations of business. The second quarter will focus on macroeconomics, which examines the behavior of entire economies. Topics discussed will include: the role of the government in the economy, money and banking system, the Federal Reserve, monetary and fiscal policy, and international trade.

Prerequisite: None Level: 10, 11, 12 Semesters: 1 Credit: 1/2

PSYCHOLOGY

This semester long elective will introduce students to the scientific study of mental processes and behavior. Students will study how humans behave in social context, as well as the physiological components of human behavior. Students will also critically examine "common sense" knowledge about how people function.

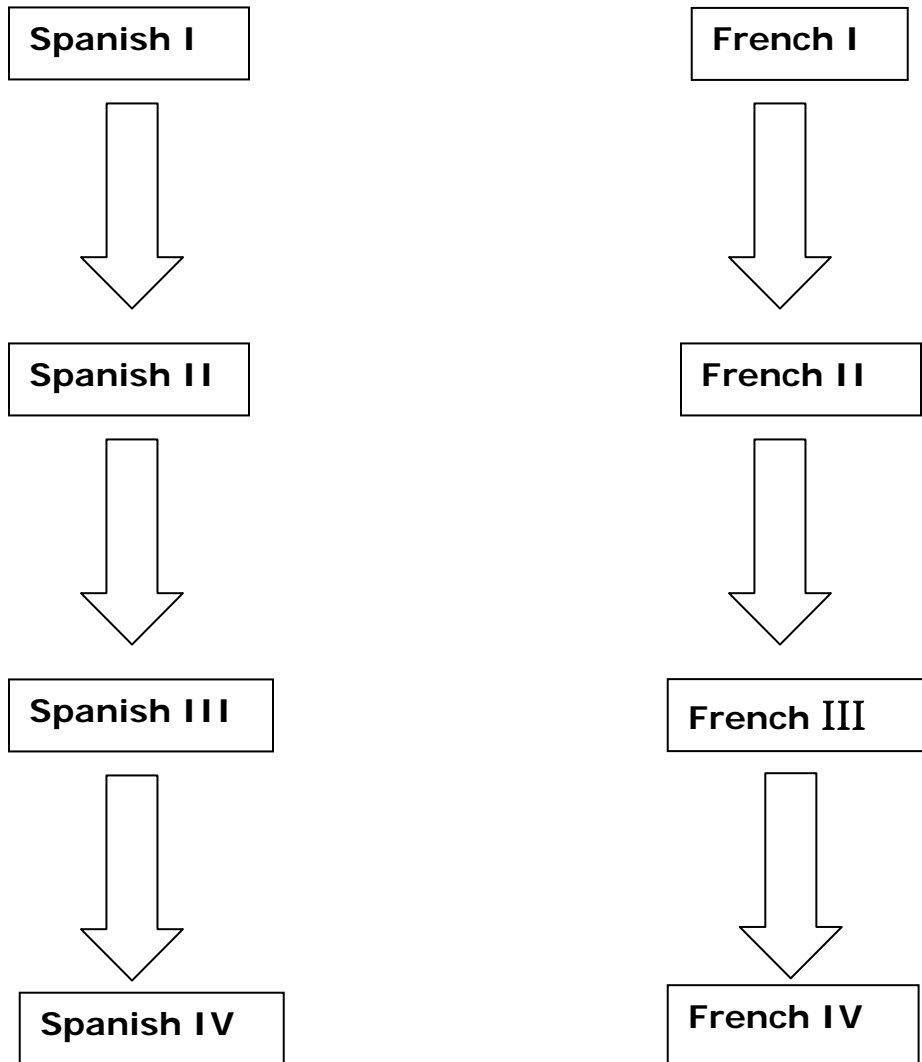
Prerequisite: Must have completed World Geography as a sophomore or World Cultures as a freshman Level: 11, 12 Semesters: 1 Credit: 1/2

## INDEPENDENT STUDY IN SOCIAL STUDIES

This independent study program is designed to assist the highly-motivated history student to explore topics of interest in detail. The course will be divided into two nine week segments with the objectives to be set forth by the student and teacher. The student will fill out an independent study contract with the teacher and will be evaluated by how well the provisions of the contract are fulfilled. The cooperating teacher will be assigned by the subject matter intended to be pursued by the student.

Prerequisite: Students who wish to take independent study in social studies must have completed American History, World History (2 semesters), Geography, and one other social studies elective with a composite grade point average of A- or above.

Level: 12 Semesters: 1 Credit: ½

**WORLD LANGUAGE**

The world language curriculum is proficiency-based, which means that students learn to use the language for communication in beginning through advanced levels. All classes are taught primarily in the target language and students are encouraged to participate in oral class activities, as well as more traditional reading and writing activities. Vocabulary and grammatical structures are presented contextually through a variety of instructional techniques such as Natural Approach, TPR, cooperative learning, and technology.

It is important to note that two years of the same world language is still a requirement for entrance in most institutions of higher learning be they colleges, universities, or academies. A world language is considered part of an academic program; therefore, many institutions require world languages for graduation. Some schools accept four years of a high school world language as fulfillment of the world language requirement for graduation from that institution of higher learning. By taking world languages in high school, students not only help assure their acceptance to the school of their choice, they can also satisfy college graduation requirements. Since it is difficult to know as a freshman which

college curriculum will be followed, it is best to start a world language class at the freshman level.

### FRENCH I

Emphasis in this course is on speaking and listening comprehension. Basic grammar and syntax are presented to enable students to communicate about a variety of topics from everyday life. Reading and writing skills are also emphasized along with discussion of cultural differences in French speaking countries.

Prerequisite: None Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

### FRENCH II

French II is a continuation of French I but expands vocabulary use in various tenses by way of short pair exchanges, conversations and skits. The student will be able to communicate on a greater range of topics in a more advanced way. Students read material for pleasure, information and to expand critical thinking skills.

Prerequisite: French I with a "C" or better or consent of instructor Level: 9, 10, 11, 12

Semesters: 2 Credit: 1 **Additional fee required for this course**

### FRENCH III

French III emphasizes conversation, vocabulary expansion, creative writing and introduces authentic literature and poetry to students. Students perform skits, author short stories, and conduct discussions about poetry, literature, and current events. Units of French Impressionism, French Poetry, and Provence highlight the year. This class is conducted in French.

Prerequisite: French I, French II with a "C" or better or consent of instructor

Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

### FRENCH IV

French IV emphasizes opportunities to hear and speak the target language. The course offers students an array of different literary works including the poetry of Ronsard and Baudelaire, folklore of Quebec, and Saint-Exupery's Le Petit Prince. Students conduct research in the target language to provide support for units about travel in francophone countries, the Loire Valley, and cathedrals and Art Movements of France. Students reflect on future studies and plans after high school, review grammar, and refine writing skills. This class is conducted in French.

Prerequisite: French I, French II, French III with a "C" or better or recommendation from instructor Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

SPANISH I

Emphasis in this course is on speaking and listening comprehension. Basic grammar and syntax are presented to enable students to communicate on a variety of topics from everyday life. Reading and writing skills are also emphasized. Geography and cultures of Spanish speaking countries are studied as well.

Prerequisite: None Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

SPANISH II

This course is a continuation of Spanish I. Students will be able to communicate on a greater range of topics as new vocabulary and verb tenses are presented at this level. A detailed unit on travel provides students with role-play activities to enhance skill development. Students will study the culture of Puerto Rico, Mexico, Chile, and Spain.

Prerequisite: Spanish I with a "C" or better or consent of instructor

Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

SPANISH III

This course is a continuation of Spanish II with an emphasis on expanding and improving students' speaking and comprehension skills, as well as their reading and writing skills. More complex grammatical structures and syntax are presented to enable students to communicate on a broader range of topics in a more sophisticated manner. Students also watch a continuing video series in which Spanish-speaking cultures are explored, specifically Spain, Argentina, and Puerto Rico.

Prerequisite: Spanish I, Spanish II with a grade of "C" or better or consent of instructor

Level: 9, 10, 11, 12 Semesters: 2 Credit: 1

**Additional fee required for this course**

SPANISH IV

Spanish IV emphasizes conversation, vocabulary expansion, creative writing, and introduces authentic Hispanic literature to students. This course enables students to refine their basic communicative and grammatical skills, and be challenged to develop new skills through role-playing, discussions, debates, interviews and presentations in the target language. This course is designed for students who have successfully completed Spanish I-III and who have a strong desire to increase their fluency, literacy and knowledge of the Spanish language and Spanish-speaking cultures.

Prerequisite: Spanish I, Spanish II, Spanish III with a grade of "C" or better or consent of instructor Level: 12 Semesters: 2 Credit: 1

**Additional fee required for this course**