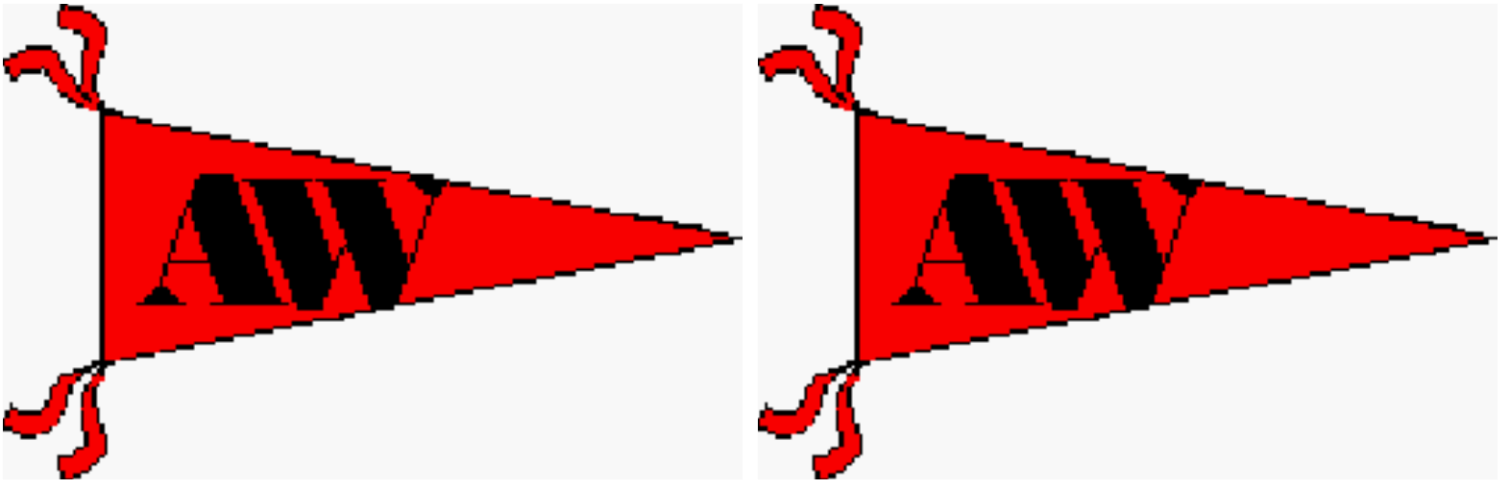


# Akron-Westfield High School

*2017-2018*



## **COURSE SELECTION GUIDE**

High Expectations + Caring Environment =  
Responsible and Accountable Learners

## **Purpose of Registration Handbook**

This handbook is an important tool to aid the student and his/her parents in making purposeful choices of classes that will make the school years as meaningful and pleasant as possible and at the same time prepare each student for a responsible adult life.

Parents and students are reminded that all classes listed are available to both male and female students. Akron-Westfield Community School is an equal opportunity education institution and will not discriminate on the basis of age, color, creed, national origin, race, religion, marital status, sex, sexual orientation, gender identity, physical attributes, physical or mental ability or disability, ancestry, political party preference, political belief, socioeconomic status, or familial status in its activities, programs or employment practices as required by Title VI, Title IX and Section 504. For information regarding civil rights or grievance procedures, contact the High School Principal at Akron- Westfield, School, Kerr Drive, Akron, Iowa, (712) 568-2020.

## **Graduation Requirements**

In order to qualify for graduation a student must meet the following minimum requirements:

1. Students must have earned 44 credits and passed physical education each semester prior to graduation. A credit is defined as the successful completion of one semester of work. The 44 credits must include the following:
2. Eight (8) credits of English (Required English 9, 10, Speech, and one of the following three: English 11, Adv. English 11, or Business English) plus 1 elective.
3. Six (6) credits of Science. Students are required to select one of the two following course sequences:
  - Sequence 1: Physical Science, Biology I, Chemistry I
  - Sequence 2: Unified Science, Physical Science, Biology I
4. Six (6) credits of Math. (Required would be Algebra I (or Algebra A and Algebra B) and either Geometry or Informal Geometry)
5. Six (6) credits of Social Studies (Required courses would be 2 credits of United States History, 1 credit of 2nd semester World History, 1 credit of American Government, 1 credit of Economics plus 1 elective.

### **Physical Education**

All physically able students shall be required to participate and pass the physical education program for a minimum of one-eighth unit during each semester they are enrolled except under the following conditions:

1. A pupil shall not be required to enroll in physical education if the pupil's parent or guardian files a written statement with the school principal that the course conflicts with the pupil's religious beliefs.
2. A twelfth grade student may be excused from physical education by the principal of the school in which the student is enrolled when the following circumstances exist:
  - a. The student is enrolled in a cooperative, work-study, or other educational program authorized by the school which requires the student's absence from the school premises during the school day.
  - b. The student is enrolled in academic courses not otherwise available. The student's parent or guardian must request the excuse in writing. The principal shall inform the superintendent that the student has been excused.
3. When a student has successfully completed the 44 credits of required course work and passed physical education each semester they have been enrolled, they would be eligible for early graduation. If a student selects early graduation, further physical education requirements would be waived.
4. A student in grades 9 - 12 may be excused from physical education class for up to one semester per year provided that the student is involved in an organized and supervised athletic program which requires at least as much time of participation per week as one-eighth unit of physical education. The student's parent or guardian must request the excuse in writing. The principal shall inform the superintendent that the student has been excused.

### **Class Load**

Freshmen and sophomores must be enrolled in at least 6 academic credit courses plus Physical Education as a minimum. Juniors and seniors must be enrolled in at least 7 academic credit courses plus Physical Education as a minimum.

- An exception to the above would be seniors that are enrolled in the work release program.

### **Retaking a Course**

A student may retake a course in order to attain a grade improvement; however, no additional credit will be given for the second time through a course.

### **Pass – Fail Option**

Students have the option of taking any elective course offered on a Pass-Fail basis if it constitutes a 6<sup>th</sup> academic subject in a freshman or sophomore schedule a 7<sup>th</sup> academic class in a junior or senior schedule and the course is not required for graduation. Students will receive full credit for courses passed but courses thus taken will not be averaged into class rank or used to determine grade point average.

### **Dropping or Adding a Course**

The first five days of each semester will be used to drop or add courses. After the fifth day of a semester, dropping or adding a class will be difficult.

### **Post-Secondary Enrollment Option (College Classes)**

The Senior Year Plus Legislation was enacted to promote rigorous academic pursuits and to provide a wider variety of options to high school students by enabling eleventh and twelfth grade students to enroll part time in nonsectarian (non-religious) courses in eligible post secondary institutions of higher learning in Iowa.

Akron-Westfield students in grades 11, 12, and TAG students in grades 9-12, for courses approved by the board on a case by case basis. Course costs will not be covered if the student is not enrolled full time in the school district. The following factors shall also be considered in the reimbursement of tuition and in the board's determination of whether a student will receive high school credit for a course at a post-secondary educational institution:

- The course must be taught at an Iowa public or accredited private institution;
- a comparable course is not offered in the school district;
- the course must be a credited course at the post-secondary institution;
- the course is not religious or sectarian.

Prior to taking a course at a post-secondary educational institution, students must receive the approval of the board to receive credits toward graduation requirements set out by the board.

Students who wish to pursue enrollment in the Post-Secondary Enrollment Option should contact the Guidance Office for further details and the proper application form.

### **Work Release**

Seniors are eligible for work release. To qualify they must have met or be meeting course requirements for graduation. They will take a minimum of 4 classes plus Physical Education each semester and must be in attendance at least one half day. They are eligible for extra-curricular activities. Approval from the Parent and Principal is necessary. The program is administered by the Guidance Counselor and the Principal.

### **Early Graduation**

Akron-Westfield students may graduate prior to the completion of grade twelve providing that the course work required for graduation under board policy "Graduation Requirements" has been fulfilled.

Students graduating early will not be allowed to participate in any of the school curricular or extra-curricular activities. This includes all school dances, sports, music, plays, class trips, summer baseball, summer softball, and any other activity of the Akron-Westfield Community School. (Exceptions are the Junior/Senior Prom, Senior Class Trip, Baccalaureate and Commencement.)

## Course Offerings

The following are course offerings in the Akron-Westfield Community High School. Courses running only one semester are labeled; the remaining courses are a year course.

|   |  |
|---|--|
| <b>Art</b>  | Art I (2)<br>Drawing (1)<br>Painting I (1)<br>Painting II (1)<br>Pottery and Sculpture I (1)<br>Pottery and Sculpture II (1)<br>Commercial Art I (1)<br>Art Independent Study (2) or (1)   |
| <b>Business Education</b>                         | Computer Keyboarding Applications (1)<br>Entrepreneurship (1)<br>Accounting I (2)<br>Accounting II (2)<br>Desktop Publishing (2)<br>Career Focus (2)<br>Internet Marketing (2)   |
| <b>Computer Science</b>                           | Computer Programming I (1)<br>Computer Programming II (1)<br>Computer Maintenance (2) or (1)   |
| <b>English</b>                                    | English 9 (2)<br>English 10 (2)<br>English 11 (2)<br>Advanced English 11 (2)<br>English Composition/College Writing (2)<br>AP Literature and Composition (2)<br>Speech I (1)<br>Speech Independent Study (1)<br>British Literature (1)<br>World Literature (1)<br>Creative Writing (1)<br>Business English (2) |
| <b>Foreign Language</b>                           | Spanish I (2)<br>Spanish II (2)<br>Spanish III (2)<br>Spanish IV (2)   |
| <b>Health Education</b>                           | Health Education (2) or (1)  |
| <b>Health Occupations</b><br>*Dual Credit Classes | Certified Nursing Assistance (1)<br>First Responder (1)<br>Introduction to Health Occupations (1)<br>Issues in Health and Society (1)<br>Medical Terminology (1)   |
| <b>Industrial Technology</b>                      | Construction (1)<br>Welding/Electricity (1)<br>Welding Topics (1)<br>Project & Cabinet Construction (1)<br>Auto Technology (1)<br>Exploration of Manufacturing Occupations (1)<br>Computer Aided Drafting-CAD (2)<br>Construction Trades (1) or (2)  |

**Mathematics**

Algebra A (2)  
Algebra B (2)  
Informal Geometry (2)  
Algebra I (2)  
Geometry (2)  
Algebra II (2)  
Math Analysis (2)  
Pre-Calculus (2)  
Personal Finance (1)

**Music**

High School Instrumental (2)  
High School Vocal (2)

**Physical Education**

Physical Education (all grades)

\*\*NOTE - As part of the freshmen physical education program, health is required one day per week.

**Science**

Unified Science (2)  
Physical Science (2)  
Biology I (2)  
Environmental Science (1)  
Chemistry I (2)  
Physics (2)  
Anatomy and Physiology (2)  
Chemistry II (1)

**Social Science**

World History Semester 1 (1)  
World History Semester 2 (1)  
United States History (1)  
Modern American Problems (1)  
Sociology (1)  
American Government (1)  
Economics (1)  
Geography (1)

**Agricultural Science & Technology**

Applied Agricultural Science & Technology (2) or (1)  
Food Science Principles (1)  
Animal Science (2) or (1)  
Biotechnology and Energy (1)  
Plant and Soil Science (1)  
Horticulture (1)  
Agribusiness Management (1)  
Ag. Science Technology Ind. Study (2) or (1)

**Electives**

Internship  
Apprenticeship  
Student Aide (2) or (1)  
College Class

## Grade 9

### Required Courses:

English 9 (2)

Unified Science (2) or Physical Science (2)

United States History (2)

Algebra A (2), Algebra I (2), Informal Geometry (2) or Geometry (2)

Physical Education - As part of the freshmen physical education program, health is required one day per week.

### Electives:

**Art:** Art I (2)

**Business Education:** Computer Keyboarding Applications (1)  
Entrepreneurship (1)  
Career Focus (2)

**Foreign Language:** Spanish I (2)

**Industrial Technology:** Construction (1)  
Welding/Electricity (1)  
Computer Aided Drafting-CAD (2)

**Music:** Instrumental Music (2)  
High School Vocal Music (2)

**Social Studies:** Geography (1)

### Agricultural Science and Technology:

Applied Agriscience & Technology (2) or (1)  
Food Science Principles (1)

The following courses are not used in computing grade point averages:

- a. Physical Education
- b. Music (Band and Vocal)
- c. Drivers Education
- d. Pass/Fail
- e. Subjects that have grades established in the learning resource room.
- f. Student aide, Internship, and Apprenticeship
- g. College Class

For students to qualify for the honor roll they must be taking 4 graded academic subjects. The above (a-f) would not qualify for the honor roll.  
Note – College Class grades would count as one of the 4 graded academic subjects, but not in GPA calculation.

## Grade 10

### Required Courses:

English 10 (2)  
Algebra B (2), Informal Geometry (2) Geometry (2), Algebra II (2)  
Physical Science (2) or Biology I (2)  
World History Second Semester (1)  
Physical Education

### Electives:

**Art:** Art I (2)  
Drawing (1)  
Painting I (1)  
Pottery & Sculpture I (1)  
Commercial Art (1)

**Business Education:** Computer Keyboarding Applications (1)  
Entrepreneurship (1)  
Internet Marketing (2)  
Career Focus (2)  
Accounting I (2)

**Computer Science** Computer Programming I (1)  
Computer Programming II (1)  
Computer Maintenance (2) or (1)

**English** Speech I (1)

**Foreign Language:** Spanish I (2)  
Spanish II (2)

**Health:** Health Education (2) or (1)

**Industrial Technology:** Construction (1)  
Welding/Electricity (1)  
Computer Aided Drafting-CAD (2)  
Welding Topics (1)  
Project & Cabinet Construction (1)

**Music:** Instrumental Music (2)  
H.S. Vocal Music (2)

**Science:** Environmental Science (1)

**Social Studies:** World History First Semester (1)  
Geography (1)  
Contemporary U.S. History (1)  
Modern American Problems (1)

**Agricultural Science and Technology:** Applied Agriscience & Technology (2) or (1)  
Food Science Principles (1)  
Animal Science (2) or (1)  
Biotechnology and Energy (1)  
Independent Study (2) or (1)  
Plant & Soil Science (1)  
Horticulture (1)  
Agribusiness Management (1)

The following courses are not used in computing grade point averages.

- a. Physical Education
- b. Music (Band and Vocal)
- c. Drivers Education
- d. Pass/Fail
- e. Subjects that have grades established in the learning resource room.
- f. Student aide, Internship, and Apprenticeship
- g. College Class

For students to qualify for the honor roll they must be taking 4 graded academic subjects. The above (a-f) would not qualify for the honor roll.  
Note – College Class grades would count as one of the 4 graded academic subjects, but not in GPA calculation.



## Grade 11

### Required Courses:

English 11 (2), Advanced English 11 (2), or Business English (2)  
Informal Geometry (2), Geometry (2), Algebra II (2) or Math Analysis (2)  
Biology I (2) or Chemistry I (2)  
American Government (1) and Economics (1)

- May be taken in Grade 11 or 12

Physical Education

### Electives:

#### Art:

Art I (2)  
Drawing (1)  
Painting I (1)  
Painting II (1)  
Pottery & Sculpture I (1)  
Pottery & Sculpture II (1)  
Commercial Art (1)

#### Business Education:

Computer Keyboarding Applications (1)  
Entrepreneurship (1)  
Accounting I (2)  
Accounting II (2)  
Career Focus (2)  
Desktop Publishing (2)  
Internet Marketing (2)

#### Computer Science

Computer Programming I (1)  
Computer Programming II (1)  
Computer Maintenance I (2) or (1)

#### English:

Creative Writing (1)  
English Composition/College Writing (2)  
Speech I (1)

#### Foreign Language:

Spanish I (2)  
Spanish II (2)  
Spanish III (2)

#### Health:

Health Education (2) or (1)

#### Health Occupations:

\*Dual Credit Classes

Certified Nursing Assistant (1)  
First Responder (1)  
Introduction to Health Occupations (1)  
Issues in Health and Society (1)  
Medical Terminology (1)

#### Industrial Technology:

Construction (1)  
Welding/Electricity (1)  
Computer Aided Drafting-CAD (2)  
Welding Topics (1)  
Project & Cabinet Construct (1)  
Auto Technology (1)  
Exploration of Manufacturing Occupations (1)  
Construction Trades (1) or (2)

#### Math:

Personal Finance (1)

#### Music:

Instrumental Music (2)  
High School Vocal (2)

#### Science:

Physics (2)  
Environmental Science (1)

**Social Studies:**  
World History First Semester (1)  
Contemporary U.S. History (1)  
Sociology (1)  
Geography (1)  
Modern American Problems (1)

**Agricultural Science and Technology:**  
Applied Agriscience & Technology (2) or (1)  
Food Science Principles (1)  
Animal Science (2) or (1)  
Biotechnology and Energy (1)  
Independent Study (2) or (1)  
Plant & Soil Science (1)  
Horticulture (1)  
Agribusiness Management

**Others:**  
Student Aide (2) or (1)  
Internship  
College Class

The following courses are not used in computing grade point averages.

- a. Physical Education
- b. Music (Band and Vocal)
- c. Drivers Education
- d. Pass/Fail
- e. Subjects that have grades established in the learning resource room.
- f. Student aide, Internship, and Apprenticeship
- g. College Class

For students to qualify for the honor roll they must be taking 4 graded academic subjects. The above (a-f) would not qualify for the honor roll.  
Note – College Class grades would count as one of the 4 graded academic subjects, but not in GPA calculation.

## Grade 12

### Required Courses:

Physical Education

American Government (1) and Economics (1)

- May be taken in Grade 11 or 12

### Electives:

#### Art:

Art I (2)  
Art Independent Study (2) or (1)  
Drawing (1)  
Painting I (1)  
Painting II (1)  
Pottery & Sculpture I (1)  
Pottery & Sculpture II (1)  
Commercial Art (1)

#### Business Education:

Computer Keyboarding Applications (1)  
Entrepreneurship (1)  
Accounting I (2)  
Accounting II (2)  
Career Focus (2)  
Desktop Publishing (2)  
Internet Marketing (2)

#### Computer Science

Computer Programming I (1)  
Computer Programming II (1)  
Computer Maintenance I (2) or (1)

#### English:

Business English (2)  
Speech I (1)  
English Composition/College Writing (2)  
AP Literature and Composition (2)  
World Literature (1)  
British Literature (1)  
Speech Independent Study (1)  
Creative Writing (1)

#### Foreign Language:

Spanish I (2)  
Spanish II (2)  
Spanish III (2)  
Spanish IV (2)

#### Health:

Health Education (2) or (1)

#### Health Occupations:

\*Dual Credit Classes

Certified Nursing Assistant (1)  
First Responder (1)  
Introduction to Health Occupations (1)  
Issues in Health and Society (1)  
Medical Terminology (1)

#### Industrial Technology:

Construction (1)  
Welding/Electricity (1)  
Computer Aided Drafting-CAD (2)  
Welding Topics (1)  
Project & Cabinet Construct (1)  
Auto Technology (1)  
Exploration of Manufacturing Occupations (1)  
Construction Trades (1) or (2)

#### Mathematics:

Math Analysis (2)  
Algebra II (2)  
Pre-Calculus (2)  
Personal Finance (1)

#### Music:

Instrumental Music (2)  
High School Vocal (2)

**Science:** Physics (2)  
Chemistry I (2)  
Anatomy and Physiology (2)  
Environmental Science (1)  
Chemistry II (1)

**Social Studies:** World History First Semester (1)  
Contemporary U.S. History (1)  
Sociology (1)  
Geography (1)  
Modern American Problems (1)

**Agricultural Science and Technology:** Applied Agriscience & Technology (2) or (1)  
Food Science Principles (1)  
Animal Science (2) or (1)  
Biotechnology and Energy (1)  
Independent Study (2) or (1)  
Plant & Soil Science (1)  
Horticulture (1)  
Agribusiness Management (1)

**Others:** Student Aide (2) or (1)  
Internship  
Apprenticeship  
College Class

The following courses are not used in computing grade point averages.

- a. Physical Education
- b. Music (Band and Vocal)
- c. Drivers Education
- d. Pass/Fail
- e. Subjects that have grades established in the learning resource room.
- f. Student aide, Internship, and Apprenticeship
- g. College Class

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Note – College Class grades would count as one of the 4 graded academic subjects, but not in GPA calculation.

## Art

### **Art I (Grades 9, 10, 11 and 12)**

This course is an exploration of basic design through studies using a wide variety of materials and techniques. The student will expand knowledge about art materials, methods and art history. Students will work in both two and three dimensional methods. Weekly sketchbook assignments will be completed outside of class. Art I must be taken before any other art classes.

### **Drawing (Grades 10, 11 and 12)**

Prerequisite: Art I

This course provides the student with an opportunity to further develop his/her skills and expression in various drawing medium. The student will also develop and increase his/her visual vocabulary. Individual expression becomes a goal. A sketchbook is required for outside-of-class assignments.

### **Painting I (Grades 10, 11 and 12)**

Prerequisite: Art I

The painting course is an introduction to the materials and subject possibilities of painting with acrylic and watercolor. Emphasis is on composition, painting skills, knowledge of painting styles, color, and individual experimentation. Art history is an important part of this course.

### **Painting II (Grades 11 and 12)**

Prerequisite: Painting I

This painting course expands on the skills and knowledge learned in Painting I. Students will be given problem-solving assignments and will develop more techniques dealing with acrylic, watercolor and oil paints. Various painters' works will be studied and incorporated into assignments.

### **Pottery and Sculpture I (Grades 10, 11 and 12)**

Prerequisite: Art I

The student will explore the possibilities of clay through hand building and wheel throwing techniques. Quality craftsmanship and design are emphasized. Students will also experience various methods of sculptures as they use a variety of materials. This class may be taken two times while in high school, the second semester taken as an advanced level course.

### **Pottery and Sculpture II (Grades 11 and 12)**

Prerequisite: Pottery & Sculpture I

Students taking this class will be expected to understand the various hand building techniques and will create unique pottery designs using these methods. More extensive work will be accomplished on the potter's wheel as the students will be expected to make "sets" of vessels. Sculpture assignments will be expanded to use new mediums.

### **Commercial Art (Grades 10, 11 and 12)**

Prerequisite: Art I

An exploration of art used as visual communication. Students will experience areas of art such as lettering, calligraphy, advertisement, poster design, and logos. Computer-generated art work will also be an important part of this class. Students will use software applicable to commercial art. This class may be taken two times while in high school, the second semester taken as an advanced level course.

### **Art Independent Study (Teacher Permission – Grade 12)**

Prerequisite: Art I

This course is offered to seniors who are ready for advanced work. The students will find creative solutions to assignments developed to utilize skills and techniques learned in previous art classes. This class will include an individualized course of study. Only the students who have demonstrated the ability to work productively and independently in other art classes will be given permission to take this course.

## Business Education

### **Career Focus (Grade 9, 10, 11 and 12)**

Career Focus is designed to foster career awareness, explore various job opportunities, and prepare the student for employment or future education. Many of these skills will carry over into the personal lives of the students. Students will analyze their skills, aptitudes, and abilities. Topics included are: career decision-making, job interviews, entering the world of work, developing skills and understanding, becoming a wise consumer, and meeting adult responsibilities. Forms and documents used in human resources will be prepared; job pursuit techniques will be studied, as well as personal characteristics needed for success on the job.

### **Desktop Publishing (Grades 11 and 12)**

Prerequisite: Computer Keyboarding and Instructor Approval

Students will use the fundamentals of Desktop Publishing using the InDesign software program to complete the school yearbook and other publications as assigned. The basics of good design and page layout concepts will be integrated with the software. This is a one-year course based on a previous foundation of good composition, keyboarding, and computer skills.

### **Computer Keyboarding Applications (Grade 9, 10, 11 and 12)**

Courses provide experience in the proper use of previously written software packages. Generally, a wide range of applications are explored, including (but not limited to) word processing, spreadsheet, graphics, and database programs. More advanced topics (such as electronic mail, desktop publishing, and telecommunications) may also be included. Exercises and problems are generally business related.

**Internet Marketing (Grade 10, 11 and 12)**

Internet Marketing covers the principles and functions of marketing from the standpoint of conducting business on the internet. Typically, students develop such skills as using the internet as a marketing tool, conducting a marketing analysis via the internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the internet, and analyzing the impact of the internet on global marketing.

**Accounting I (Grade 10, 11 and 12)**

Accounting I is the planning, keeping, analyzing, and interpreting of financial records of a person or a business. This course develops an understanding of the steps in the accounting cycle, understanding of accounting systems, and the managerial use of accounting information and payroll systems. Computerized accounting may be introduced.

**Accounting II (Grade 10, 11 and 12)**

Prerequisite: Accounting I

Accounting II is the planning, keeping, analyzing, and interpreting of financial records of a corporation. This course builds on the understanding of the steps in the accounting cycle, understanding of accounting systems, and the managerial use of accounting information and payroll systems. Computerized accounting may be introduced.

**Entrepreneurship (Grade 9, 10, 11 and 12)**

Entrepreneurship gives students an opportunity to explore new business ideas and work through the process of molding innovative and new ideas into professional business proposals. Entrepreneurship walks students through the business plan writing process, guiding them through all aspects of starting a new business. Students will have an opportunity to write and present a professional business. Entrepreneurship emphasizes professionalism in business endeavors.

**Computer Science****Computer Programming I (Grade 10, 11 and 12)**

Computer Programming courses provide students with the knowledge and skill necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data, management, graphics, and text-processing.

**Computer Programming II (Grade 10, 11 and 12)**

Computer Programming courses provide students with the opportunity to gain expertise in computer programs using languages other than those specified (such as Pascal, FORTRAN, or emerging languages). As with other computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. As students advance, they learn to capitalize on the features and strengths of the language being used.

**Computer Maintenance (Grades 10, 11, 12)**

Computer Maintenance course prepare students to apply basic electronic theory and principles of diagnosing and repairing personal computers and input/output devices. The core of this course is focused on circuit components, Ohm's Law, basic DC and AC circuits, using a multimeter and other tools. Knowledge gained will be applied to activities and projects. These skills may also be applied to repairing computers, control devices, electronic devices, and related robotics. Physics is helpful, but not a prerequisite.

**English****English 9 (Grade 9) – RAI and NCAA**

This class utilizes the 6-Trait Writing approach to reinforce composition, research and writing skills including a term paper. Concepts of literature are explored through study of the short story, novel and drama.

**English 10 (Grade 10) – RAI and NCAA**

Grammar and composition areas: reinforcement of mechanics of grammar; review of basic sentence elements and expansion through phrases and clauses; development of writing skills in the structured paragraph, formal report, essay, and short story. Literature encompasses use of contemporary, thematic textbook of short stories, essays, poetry, and drama, supplemented by classics and book reviews. Spelling and vocabulary are studied, tested, and implemented in both oral and written usage.

**English 11 (Grade 11) – RAI and NCAA**

This course will include the study of American literature from early to modern writers. Extensive work in composition (including the term paper), grammar, and vocabulary will supplement the course. This course is designed to give students satisfactory background knowledge in American Literature and composition in order to be well prepared for basic college course work.

**Advanced English 11 (Grade 11) – RAI and NCAA**

Prerequisite: Student must have a B average in English or recommendation or approval by teacher.

This advanced course includes an extensive study of the concepts of literature through key American authors. Writing focus is on advanced analytical, report and personal (including writing a college essay and resume) writing. This course is designed for the student who demonstrates a serious interest in writing and literature. [Students who opt to take Advanced English 11 are strongly encouraged to take College Prep Brit Lit and College Prep World Lit to fully prepare for rigorous college course work.]

**British Literature (Grade 12) – RAI and NCAA**

Prerequisite: English 9, 10 & 11 or Adv. English 11. Student must have a B average in English or apply to the H.S. English department for approval.

This course will include the study of British Literature and extensive work in advanced writing (including term papers, argumentative papers, and literary analysis). This course is designed for the student who shows skill with the English language and an interest in British literature. Students who take this class will have been given a background to complete rigorous college work. [Students who take this course are strongly encouraged to take World Lit in order to **fully** prepare themselves for rigorous college course work.]

**English Composition/College Writing (Grade 11 and 12) – RAI**

English Composition/College Writing courses are designed for juniors and seniors and build upon previous writing skills. Reinforcing the logic and critical-thinking skills that accompany good writing, these courses-which emphasize word choice, usage, and writing mechanics-provide continued and advanced instruction in writing for a variety of purposes and audiences. English Composition/College Writing courses may emphasize college or business preparation; literature study may be offered as an additional component in which students analyze examples of several genres.

**AP Literature and Composition (Grade 12)**

Following the College Board’s suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition courses enable students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).

**Speech I (Grade 10, 11 and 12) – RAI and NCAA**

This class is designed to help the student gain confidence in oral communication, whether one-on-one, in a small group, class discussion, or formal presentation before an audience. Students learn how to organize, prepare, and deliver speeches for specific purposes.

**Speech Independent Study (Grade 12) - RAI**

Prerequisite: Speech I

The purpose of this course is to take the information learned in Speech I and apply it to the world of mass communication. Students will participate in all aspects of a weekly television news broadcast.

**World Literature (Grade 12) – RAI and NCAA**

Prerequisite: English 9, 10 & 11 or Adv. English 11. Student must have B average in English or apply to the H.S. English department for approval.

This course will include the study of World literature and extensive work in advanced writing (including term papers, argumentative papers, and literary analysis). This course is designed for the student who shows skill with the English language and an interest in literatures around the world. Students who take this class will have been given a background to complete rigorous college course work. [Students who take this course are strongly encouraged to take British Lit in order to fully prepare themselves for rigorous college course work.]

**Business English (Grade 11 and 12)**

Business/Applied English courses teach students communication skills – reading, writing, listening, speaking – emphasizing applications in the “real world.” The emphasis is usually on the practical application of communication as a business tool, and may focus on technical reports and manuals, business letters, resumes, and applications, as opposed to the course being designed around scholarly and literary uses.

**Creative Writing (Grade 11 and 12) – RAI and NCAA**

Creative Writing classes offer students the opportunity to develop and improve their technique and individual style in poetry, short story, essays, and other forms of prose. The emphasis of the class is on writing, although exemplary representations and authors may be studied to provide a fuller appreciation of the form and craft.

**Foreign Language****Spanish I (Grade 9, 10, 11 and 12) – RAI and NCAA**

The purpose of this course is to become familiar with useful and common daily expressions, their meaning, and pronunciation. The student will be introduced to four concepts: listening comprehension, speaking, reading, and writing. This will be done through a series of dialogues and grammar drills.

**Spanish II (Grade 10, 11 and 12) – RAI and NCAA**

Prerequisite: Spanish I

Spanish II will be a continuation of Spanish I with an enlarged vocabulary. Advanced grammar concepts, including verb tenses and moods will be introduced. Students will also become acquainted with the customs and culture of the Spanish speaking people.

**Spanish III (Grade 10, 11 and 12) – RAI and NCAA**

Prerequisite: Spanish II

Spanish III is a review of grammar concepts presented in Spanish I and II. A reader is also used to supplement reading and writing skills, as well as to learn more about the culture of Spanish - speaking people. Additional vocabulary is also presented.

## **Spanish IV (Grade 10, 11 and 12) – RAI and NCAA**

Prerequisite: Spanish III

Spanish IV will use the grammar concepts and vocabulary learned in Spanish I, II, and III to read Spanish poetry, essays, and short stories. Additional vocabulary will be presented. There will be special emphasis on reading and writing skills, as well as continued study of culture, history, and grammar.

## **Health**

### **Health Education (Grade 10, 11 and 12)**

This is a two semester course in which students will develop an understanding of good health habits. Concepts related to health promotion, disease prevention, substance abuse, nutrition, mental health, community health, and environmental health are addressed. Students will become conscious of the fact that wellness is a way of living each day that includes choices and decisions based on a healthy attitude. The daily focus is based on interaction of class members through discussion, research, and lab activities.

## **Industrial Technology**

The Industrial Technology courses are planned to introduce students (boys or girls) to various industries which they may desire to enter as a vocation. Students who do not plan to enter a vocation in these areas can receive some knowledge of the areas and be able to carry on an intelligent conversation in the areas as well as an ability to do some maintenance tasks around the home. Safety will be studied in all areas.

### **Construction (Grade 9, 10, 11 and 12)**

This course is designed to introduce students into the world of construction. Safety procedures will be stressed as students are introduced to basic carpentry procedures. The following areas will be covered:

1. Material and tool selection in relationship to selection, identification, care and use.
2. Construction techniques used currently and in the future.
3. Introduction to basic drafting techniques which will allow the student to acquaint themselves with basic drawing equipment, computer aided drafting, geometric construction, and the ability to produce orthographic drawings.
4. The development of an awareness of vocations in construction technology.
5. The development of appropriate work attitudes and the ability to function as a member of a group.
6. Basic project construction.

### **Welding/Electricity (Grade 9, 10, 11 and 12)**

This course is designed to introduce students to the basic welding techniques of Oxy, Mig, and ARC welding. The second nine weeks will be used to introduce students to the theory and application of basic electricity. Units of study will include low voltage circuits, Ohm's Laws, continuity, meters, splices, safety home wiring circuits, energy costs, and types of energy and power. Lab projects will be used to demonstrate and reinforce the theories learned. Small engine repair will also be offered as part of mechanics.

### **Welding Topics (Grade 10, 11 and 12)**

Students will be introduced to advanced welding procedures. These techniques will be accomplished by hands on welding and project designs and construction, all positions will be taught: Vertical up and down; Horizontal; Flat; and Overhead. Metal projects and labs will be used to train the students in welding techniques.

### **Computer Aided Drafting-CAD (Grade 9, 10, 11 and 12)**

Frequently offered as an intermediary step to more advanced drafting courses, CAD courses introduce students to the computer-aided drafting systems available in the industry.

### **Project & Cabinet Construction (Grade 10, 11 and 12)**

Students will be given advanced wood project construction. Areas to be covered in this class will include:

|                      |                        |                                |
|----------------------|------------------------|--------------------------------|
| Computer Design      | Cabinet Construction   | Raised Panel Door Construction |
| Formica Construction | Furniture Construction |                                |

This class provides up-to-date information about wood and wood products and instruction in the use of hand and power tools in the wood working field. It provides basic instruction and information in areas of furniture construction, cabinet making, and design. Also included is an important unit on modern finishing materials and their application. Projects will be constructed by the students.

### **Auto Technology (Grade 11 and 12)**

This course is designed to provide basic instruction in the operation, care and repair of the automobile. Areas of study will include fuel delivery systems, braking systems, electrical systems, cooling systems, lubrication and general tune-ups. The lab portion of this course is designed to give the student the opportunity to apply the knowledge gained from demonstrations and classroom work.

### **Exploration of Manufacturing Occupations (Grade 11 and 12)**

Exploration of Manufacturing Occupations introduces and exposes students to the career opportunities pertaining to the processing and production of goods. Course topics vary and may include (but are not limited to) systems pertinent to the manufacturing process, properties of various raw materials, and the methods used to transform materials into consumer products. Course activities depend upon the careers being explored; course topics may include entrepreneurship, labor laws, and customer service.

### **Construction Trades (Grade 11 and 12)**



## Mathematic

### **Algebra A (Grade 9)**

This course is designed to contain the same content as first semester of Algebra I. Concept development is spread out over the course of two years. This course is the first of those years. Topics studied are the basic properties of the real number system and how they are used in simplifying expressions and solving equations.

### **Algebra B (Grade 10) - RAI**

Prerequisite: Algebra A

This course is designed to contain the same content as second semester of Algebra I. Concept development is spread out over the course of two years. This course is the second of those years and a continuation of concepts studied the previous year. Topics studied are the basic properties of the real number system and how they are used in simplifying expressions and solving equations.

### **Informal Geometry (Grade 10 and 11)**

Prerequisite: Algebra B or Algebra I

This course will emphasize a practical, synthetic approach to the study of geometry and de-emphasize an abstract, formal approach. Topics include properties of and work with plane and solid figures, including perimeter, area, and volume; lines, segments, angles, and circles; the concepts of parallelism, perpendicularity, congruence, similarity, and proportion; and inductive methods of reasoning.

### **Personal Finance (Grade 11 and 12)**

Personal Finance is a one-semester course designed to give all students basic money management skills for life. Students receive further hands-on experience in areas such as the following: paychecks, taxes, budgeting, saving & investing, insurance, credit, spending, bankruptcy, and consumer topics. This is a great life course for work-bound and college-bound students.

### **Algebra I (Grade 9) – RAI and NCAA**

Algebra I is a study of the basic properties of the real number system and how they are used in simplifying expressions & solving equations, translating word problems into equations, ratios, proportions, radical expressions and others. There is some emphasis on the discovery method where students are encouraged to experiment with known concepts to see if they can form new ideas before the ideas are formally presented as theory.

### **Geometry (Grade 10 and 11) – RAI and NCAA**

Prerequisite: Algebra B or Algebra I

In geometry the student will have the opportunity to better understand the nature of a mathematical system and to become aware of the basic structure of geometry. The student will find geometry presented as a representation of the world around us. The study of geometry encompasses its close relationship with algebra by using coordinate and algebraic means to verify properties of figures. The learning objectives of the course are correlated to the New Standards and the National Council of Teachers of Mathematics Standards.

The content of the lessons are connected to application and integration of algebra, statistics, data analysis, probability, and discrete mathematics. Realistic and relevant applications help students connect mathematics to the other topics they are studying in other classes such as biology, geography, art, history, and health. Both college-bound and tech-prep students will find meaningful activities that relate to life and work. Graphing calculators and a variety of integrated technology support the diverse learning styles. Applications, modeling activities, and open-ended projects encourage a variety of approaches and ways of assessing student learning.

Geometry is intended as a second full year course in a sequential math program. It is expected that those students who elect the course would have successfully completed Algebra I. Many of the students will be considering a college preparatory course, while some will be planning a vocational course, and some are still undecided about their future plans.

### **Algebra II (11 and 12) – RAI and NCAA**

Prerequisite: Informal Geometry or Geometry

Algebra II is intended as a third full year course in a sequential mathematics program. It is expected that those students who elect the course would have successfully completed Geometry. Many of the students will be considering a college preparatory course, while some will be planning a tech-prep course, and some are still undecided upon their future plans. The focus of the course is to use algebra as a means of representation with greater emphasis on conceptual understanding and algebraic methods as a problem solving tool.

Students explore the language of algebra in verbal, tabular, graphical, and symbolic forms. Problem-solving activities and applications encourage students to model patterns and relationships with variables and functions. The learning objectives of the course are correlated to the New Standards and the national Council of Teachers of Mathematics Standards.

Graphing calculators are used for discovery, problem solving, and modeling. Methods of transforming, simplifying, and solving symbolic expressions are deemphasized, while retaining those procedures that students need for algebraic understanding. Graphing calculators and a variety of integrated technology support the diverse learning styles. Applications, modeling activities, and open-ended projects encourage a variety of approaches and ways of assessing student learning.

### **Math Analysis (Grade 12) – RAI and NCAA**

Prerequisite: Algebra II

Math Analysis is intended as the fourth full year course in a sequential mathematics program. It is expected that those students who elect the course would have successfully completed Algebra II. Many of the students will be considering a college preparatory course, while some will be planning a tech-prep course. This full year course in pre-calculus mathematics encompasses topics and concepts which grow out of intermediate algebra. Strict attention is paid to matching course content to the New Standards and the National Council of Teachers of Mathematics Standards.

### **Pre-Calculus (Grade 12) – RAI and NCAA**

Prerequisite: Math Analysis.

Fifth year Pre-calculus is the class offering for those seniors that took first year algebra in the eighth grade and continued in the four year sequential mathematics program. Students are introduced to the standard concepts and language needed for beginning college calculus courses. The learning objectives of the course are correlated to the New Standards and the National Council of Teachers of Mathematics Standards. Intermediate algebra, analytic geometry, and trigonometry are integrated with other key topics in mathematics by an approach that emphasizes functions. The concepts of limit appears for real numbers, graphing functions, upper and lower bounds and sequences. Vectors, matrices, and polar coordinates are studied as are limits of functions, rates and tangents, and sums and areas, in which the basic concepts of derivatives and integrals are considered. This class is an extension of Math Analysis. Graphing calculators and a variety of integrated technology are used.

## **Music**

### **Instrumental Music (Grade 9, 10, 11 and 12)**

Note: Grade 9 and 10 - Must be taken as a 6<sup>th</sup> academic class.

Note: Grade 11 and 12 – Must be taken as the 7<sup>th</sup> academic class.

Concert band is open to all students who have completed Standard of Excellence Book 3, a similar method book at the same performance level, or can demonstrate by audition that their level of musical skill on their instrument meets these standards. Should a student be unable to meet this prerequisite they may still register for Instrumental Music but will be required to study privately until these standards can be met. Students not meeting this prerequisite will attend band rehearsals but will not be able to perform or travel with any of the ensembles.

The course involves the study and performance of instrumental music literature from the various periods of music history with opportunities for individual as well as both small and large group instruction. The membership for jazz band, pep band, and other small performing groups is drawn from the concert band. Student's will receive 1 credit per semester.

### **High School Vocal Music (Grade 9, 10, 11 and 12)**

Note: Grade 9 and 10 - Must be taken as a 6<sup>th</sup> academic class.

Note: Grade 11 and 12 – Must be taken as the 7<sup>th</sup> academic class.

Mixed Chorus is open to any high school student who has either completed one year of MS Chorus OR met with the director for vocal placement. Choral literature from a variety of styles and genres will be performed. The choir is a performance-oriented class, with heavy emphasis on a major concert per quarter. In addition to rehearsal each day, students are required to attend five individual or small group lessons each quarter. For dedicated and talented students there are several opportunities for extra performance, such as: vocal jazz, All State Choir, Honor Choir, and Solo and Ensemble Contest. Participation in these ensembles will be based on auditions. Students will receive 1 credit per semester.

## **Physical Education**

### **Physical Education (Grade 9, 10, 11 and 12)**

Physical Education is required of all physically able students in grades 9-12 except under the following conditions:

1. A pupil shall not be required to enroll in physical education if the pupil's parent or guardian files a written statement with the school principal that the course conflicts with the pupils religious beliefs.
2. A twelfth grade student may be excused from physical education by the principal of the school in which the student is enrolled when the following circumstances exist:
  - a. The student is enrolled in a cooperative, work-study, or other educational program authorized by the school which requires the student's absence from the school premises during the school day.
  - b. The student is enrolled in academic courses not otherwise available. The student's parent or guardian must request the excuse in writing. The principal shall inform the superintendent that the student has been excused.
3. When a student has successfully completed the 18 units of required course work and passed physical education each semester they have been enrolled, they would be eligible for early graduation. If a student selects early graduation, further physical education requirements would be waived.
4. A student in grades 9 - 12 may be excused from physical education class for up to one semester per year provided that the student is involved in an organized and supervised athletic program which requires at least as much time of participation per week as one-eighth unit of physical education. The student's parent or guardian must request the excuse in writing. The principal shall inform the superintendent that the student has been excused.

The physical education program will emphasize leisure time activities which will benefit the student outside the school environment and after graduation from high school. As part of the physical education program students in grade 9 will have health one day per week. Students will meet two days per week in physical education.

## Science

### **Unified Science (Grade 9)**

This course will combine more than one branch of science into a cohesive study. General scientific concepts are explored, as are the basic principles underlying the scientific method and the techniques of experimentation. This course will prepare a student to take Physical Science.

### **Physical Science (Grade 9 and 10) – RAI and NCAA**

Physical Science incorporates the core science areas - chemistry, physics and earth science. It will engage students in hands-on, exploratory activities (labs) that relate directly to their own experience. These activities will also foster the development of thinking skills and the processes and skills of investigation. The diverse formats include step-by-step experiments, reading activities, informal discussion, and student-designed investigations. Earth Science will consider the earth, its materials, processes and history in space. Chemistry will give students a foundation in describing matter, energy, and changes matter undergoes. Physics will develop basic ideas of force, motion, work, power, electricity, magnetism, and energy.

### **Biology I (Grade 10 and 11) – RAI and NCAA**

Prerequisite: Physical Science

In our present state of advanced technology and scientific superiority, it is essential to provide students with at least a basic understanding of the complex biological world in which we live. By enrolling in biology, it is anticipated that students will complete the course with a better understanding of their environment, themselves, and the problems which remain to be solved in our world of living organisms. The text will be used as a guide to those areas deemed most important to the high school biology student, growth and development, genetics, cell anatomy and physiology, ecology, etc., whenever necessary and available, outside materials will be used to broaden the perspective of the course. Experiments will be conducted in conjunction with each chapter, as such, the course will be laboratory oriented.

### **Environmental Science (Grade 10, 11 and 12) – RAI and NCAA**

The goal of the class is to develop students as citizens who will be able to make responsible decisions concerning our environment to make our earth a better place to live. Topics discussed include biomes, properties of ecosystems, population growth, water pollution, sewage treatment facilities, landfills, recycling, wildlife and recreation areas, nonrenewable and renewable energy sources and air pollution.

### **Chemistry I (Grade 11 and 12) – RAI and NCAA**

Prerequisite: Algebra I and Biology I

Chemistry is a science of matter and energy and the changes they undergo. Matter and its changes, atomic structure, electron configuration of atoms, the periodic law, chemical composition, chemical bonds, equations and the gas laws are covered the first semester. Molecular composition of gases, liquids, solids-water, the solution process, ionization acids, bases, salts, carbon and its oxides, hydrocarbons, chemical kinetics, equilibrium, and oxidation reduction reactions are covered the second semester. There are many interesting and practical laboratory periods during the year. Students get a chance to see and do things that are possible only in a chemistry laboratory.

### **Physics (Grade 11 and 12) – RAI and NCAA**

Prerequisite: Algebra I

The study of physics begins with a study of speed, acceleration and measurement. Forces, mass, velocity, weight, vectors, curved motion, magnetism, electricity, work, energy, heat, internal motion, atomic theory, potential and kinetic energy, light, color, sound and a special theory of relativity are topics studied throughout the year. There are frequent laboratory periods which involve physical measurements of the topics being studied. A student should have a good foundation in algebra before attempting this course.

### **Chemistry II (Grade 12) – RAI and NCAA**

Prerequisite: Chemistry I

Chemistry II is designed to develop the ideas and concepts gained in general chemistry. Additional emphasis is placed on reaction chemistry: acids, bases, equilibrium, oxidation, reduction, reaction kinetics, and organic chemistry. Laboratory experiments are more complicated than in general chemistry and may take several days to complete. This course provides additional knowledge and laboratory skills that will benefit the student in further studies and life in general.

### **Anatomy and Physiology (Grade 12) – RAI**

Prerequisite: Biology I

Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.

## Social Science

### **Contemporary U.S. History (Grade 10, 11, and 12)**

### **World History First Semester (Grade 10, 11 and 12) – RAI and NCAA**

Beginning with prehistoric man, will study the Egyptian and Mesopotamian civilizations, Greece, Rome, India, China, up to the Crusades. The relationships between the East and West are studied. The Renaissance and the development of the nation state, the power and structure of the Church, and the Reformation of Christianity in Western Europe are studied. The unifications of France, Spain, and England are studied.

### **World History Second Semester (Grade 10, 11 and 12) – RAI and NCAA**

Course begins with the Age of Exploration and colonization of the New World, Asia, and Africa. The European wars of the 17th and 18th centuries are studied. The impact of Europe on the cultures in colonized areas are studied and related to the political and social movements that led to the 20th century. Both world wars are studied. The current world is studied and related to the events of the past that caused the current situations to exist.

### **Modern American Problems (Grade 10, 11 and 12) – RAI and NCAA**

Modern American Problems is an elective semester course available to students in grades ten, eleven, and twelve. Through instruction in this course, the student will be responsible to discuss and evaluate current problems of a social, economic, and political nature. The issues will reflect current American Problems and in some cases how these problems relate to international events. Students will be expected to read and keep handed-out media materials, research individual and group projects, and actively participate in classroom discussion.

### **U.S. History (Grade 9) – RAI and NCAA**

The purpose of United States History is to develop an understanding of why we as a nation and people, think, believe, and act as we do. We will discover the origin of many problems which face us today. The course will be comprised of three principal activities. Political History-to include acts of statesmen, changes in the government, and making of law and policies of government, Economic History-to include business affairs and the ways in which men and women have made their living, and Social History-people, their daily lives, their homes, family life, religion, education and recreation, The objectives are to acquaint the student with many documents and events that have influenced our history. Major emphasis will be placed upon the post-Civil War period and events up to the present.

### **Sociology (Grade 11 and 12) – RAI and NCAA**

In our modern day society it is becoming more important that we explore the relationship people have to themselves, others in their community, as well as their environment. Sociology is an introductory subject which begins by taking a broad look at humans, our abilities and limitations, and then works into specific problems which beset our culture. This course delves into such social problems as crime, urban growth, minority groups, mental health, breakdown of the family, population explosion, and will attempt to tie together concepts formed in history, government, economics, psychology, and family living courses.

### **American Government (Grade 11 and 12) – RAI and NCAA**

The study of the beginnings of government in the United States and how these early forms developed into the system that we have now. Comparisons are made of our governmental systems and duties of the local, state, and national governments are discussed. Separation of powers, system of checks and balances between executive, judicial, and legislative branches are studied, as are the Constitution, amendments, courts law, and political parties to see the part they play in the total scheme of United States government.

### **Economics (Grade 11 and 12) – RAI and NCAA**

In this course a study is made of the importance of economic facts and principles such as scarcity, production, the price system, and the role of the national government in the economic system. Other economies are studied to see how they compare and contrast with our own. Included in this course of study will be some general principles of consumer education.

### **Geography (Grade 9, 10, 11 and 12) – RAI and NCAA**

The purpose of this course is to develop an understanding of the different cultures that exist in our world today. It will improve your comprehensive view of why societies are influenced by the area in which they live. This course is designed to improve your geographical knowledge of the world and its inhabitants. It will also improve your understanding of the political communities that evolve around agricultural and industrial based societies.

## **Agricultural Science and Technology**

### **Applied Agriscience and Technology (Grade 9, 10, 11 and 12)**

Agriscience is an introductory course that presents the basic principles of agricultural science that are needed for a strong foundation in agriculture. It is strongly suggested for first time ag students. It is recommended that students take an entire year of Agriscience, however, the class may be taken for one semester. The material will be taught through hands-on learning experiences including field trips, group activities, and interviews in addition to regular class and laboratory experiences. Students will develop skills and knowledge in the life sciences by studying the following:

**Semester I:** Introduction to agriculture, the FFA, and Animal Science

**Semester II:** Plant Science, Agribusiness (SAE), natural resources, and horticulture

### **Food Science Principles (Grade 9, 10, 11 and 12)**

Understanding food principles and preparation. This class will cover the basic elements of food preparation, food service and food scienc. Students will learn how to select food and evaluate food handling safety, food storage, meal planning, basic food preparation and government regulations. Students ill learn first hand how to cook meals. This course will count as an agriculture class.

### **Animal Science (Grade 10, 11 and 12)**

It is recommended that students take Animal Science for a full year but it may be taken for only one semester. This class instructs students on the basic principles of the small and large animal industries. This class reviews topics pertaining to traditional livestock animals (cattle, swine, sheep, horses and poultry) and non-traditional alternative agriculture animals (rabbits, fish, ostrich, bees and pets). Numerous hands-on and group activities as well as field trips will accompany this class in order to strengthen the curriculum.

**Semester I (Fall):** Introduction into animal agriculture as a science, classification of agriculture animals, beef industry, swine industry, dairy industry, poultry industry, horse and sheep industry. Consumer concerns and animal welfare.

**Semester II (Spring):** Small animals, Alternative animals, genetics, reproduction, cloning, growth and development, nutrition. Diseases and parasites, meat science, and careers in animal science.

**Biotechnology and Energy (Grade 10, 11, and 12)**

Biotechnology is the manipulation of living organisms to make products useful to humans. The student will explore and understand the importance and application of biotechnology and renewable energy benefiting our world. Areas covered in Biotechnology are Ecology, History, Food Industry, Consumer concerns and Ethical Issues, Animal and Plant Cloning, Wind Energy, Bio Fuels, Medicine in Bio-Tech, and Careers. Students will be focused in classroom with labs and projects.

**Plant Science (Grade 10, 11, and 12)**

Plant Science is offered the first semester of the year. This class will outline the basic plant and soil management principles of both agricultural crops such as corn and soybeans as well as horticultural crops such as roses and azaleas. This class will discuss the proper use of fertilizers and pesticides as well as the marketing aspects of commodity crops. There are many concepts and skills in this class which will be taught and practiced with hands on laboratory experience.

**Horticulture (Grade 10, 11 and 12)**

Horticulture is a field of industry that is exploding with new opportunities and challenges. This class is offered during the second semester of the year and students enrolled will learn about the basic function of plants and the role that they play in our lives. Students will also gain knowledge on propagating plants, pest control and management, lawn care, as well as the principles of landscape design. Many outdoor, hands-on learning experiences accompany this class.

**Agribusiness Management (Grade 10, 11 and 12)**

Ag management is offered second semester. This course teaches the basic principles of managing an ag business. This course includes information on concepts such as insurance, taxes, investing (common stocks and commodities), resume writing, job interviewing and public relations. Much of this curriculum takes place through the use of hands-on activities, group activities and field trips.

**Agriculture Independent Study (Instructor Approval - Grade 10, 11 and 12)**

Prerequisite: Instructor approval required.

There are two sections of Agriculture Independent Study. There is no set curriculum in this class which allows the student to study an area of agriculture in which they are interested. Students who enroll in this class are also given the opportunity to do a job shadow in any area of agriculture that they choose.

**Agriculture Mechanics (Grade 10, 11 and 12)**

This class will explore the possibilities of mechanics in the World of Agriculture. This course will include careers in Ag. Mech., agriculture structures, farm equipment management, and other mechanical operations in agriculture. Students will use classroom instruction to accomplish projects outside of the classroom. Projects will include shop and outside activities. Operations of setting up equipment for farm use will be targeted. Time will be spent primarily with on hands learning.

**Student Aide (Grade 11 and 12)**

Note: Must be taken as a 7<sup>th</sup> academic class or 5<sup>th</sup> academic class if a work release student.

A student aide assists a teacher with a variety of activities suitable to the student and the teacher. One credit is given for each semester of student help. These activities must be coordinated through the counselor's office. Only two credits may be used toward meeting graduation requirements. This course is designed for those students interested in a career in education.

**Internship (Grade 11 and 12)**

Note: Application and interview required in the spring prior to registration approval.

Internship is when a student works under supervision in an occupational area to gain practical experiences in a specific field. It involves a single employer under a defined agreement with the school and may or may not involve pay. The work experience typically will extend for 1 semester in a schedule that alternates with school learning. The suggested time line will be a maximum of two hours of graduation credit at the junior or senior level. Approval mandatory by the school-to-work coordinator.

**Apprenticeship (Grade 12)**

Prerequisite: Internship

Apprenticeship encompasses programs that use the work place as a learning environment to development students' competencies in technical areas combined with related mathematics, science, communication, and problem solving skills. Students learn by doing in the work place with the help of mentors. The suggested time line will be for one-half of the school day at the senior level for a maximum of four hours of credit or prorated accordingly. Approved summer work will also qualify when proper application, instructor approval, and evaluation procedures have been made. A maximum of four graduation credits may be earned, based on 90 days at 45 minutes for one credit-or prorated accordingly.

**Post-Secondary Enrollment Option (College Classes) – (Grade 11, 12 and TAG)**