## COURSE REGISTRATION GUIDE

## 2024-25

ST. ANSGAR HIGH SCHOOL

Distríct Mission Statement.

Fostered by a cooperative effort between the St. Ansgar School District and community, our mission is to provide the highest quality education in a secure, positive, and challenging environment, empowering all students to reach their full potential.

## Distríct Vision Statement.

Educating every student, every day, with quality learning activities.
Düstrüct Motto:

Every student, every day; striving to be the best:
St. Ansgar Equity Statement.

The St. Ansgar Community School District offers career and technical programs in the following service areas: Agriculture, Food and Natural Resources; Business, Finance, Marketing and Management; Applied Science, Technology, Engineering and Manufacturing; and Human Services.

It is the policy of the St. Ansgar Community School District not to discriminate on the basis of race, color, national origin, sex, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. This institution is an equal opportunity provider.

There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy please contact the district's Equity Coordinator, Lynn A. Baldus, Principal, PO Box 398, 206 E. $8^{\text {th }}$ St., St. Ansgar, IA 50472, (641) 713-4720, lbaldus@stacsd.org. Inquiries may also be directed in writing to the Office for Civil Rights, Chicago Office U.S. Department of Education John C. Kluczynski Federal Building 230 S. Dearborn Street, 37th Floor Chicago, IL 60604 Telephone: (312) 730-1560 Facsimile: (312) 7301576 Email: OCR.Chicago@ed.gov or the Iowa Department of Education, Grimes State Office Building, Des Moines, IA, 50319-0146, (515) 281-5295.

> Lynn Baldus, 6-12 Principal Katie Hewett, 6-12 School Counselor $206 \mathrm{E} .8^{\text {th }}$ St.
> St. Ansgar, IA 50472

### 641.713.4720

This booklet has been designed to assist in making several important decisions. The courses, programs and activities that you decide to take while in high school may have a profound effect on your future. Generally, this task is easier when you are able to obtain advice from other people.

The purpose of this bulletin is to acquaint students and parents with the subject offerings of St. Ansgar High School and to provide information that will assist in the appropriate selection of course by students at the time of registration. Parents and students are reminded that the HS Counselor is available anytime for a discussion of the student's program. If parents or students have problems they wish to discuss with the counselor, they are invited to arrange an appointment for such discussion by calling 713-4720.

Please consult with your parents, counselors, teachers, and administrators in making your final decisions. The St. Ansgar High School curriculum contains many alternatives. The variety and quality of courses offered is excellent, but might be confusing if you do not keep in mind or understand the implication of your long-range educational goal and career aspirations.

All of us associated with the high school are interested in helping you make wise curriculum decisions, not only at the high school, but for the future as well.

## COURSE SELECTION GUIDELINES

Normal load --

1. Every student is required to fill eight (8) periods each semester. All courses, unless otherwise designated, carry one (1) credit per semester.
2. The St. Ansgar Board of Education requires all graduates to have completed 49 credits.
3. See the table on the next page for additional information.

## POST-SECONDARY ENROLLMENT OPTIONS/CONCURRENT ENROLLMENT OPTIONS

Post-Secondary Enrollment Options (PSEO) and Concurrent Enrollment are available to high school students who meet the qualifying criteria. Both provide the opportunity for students to take college level classes for both high school and college credit. Tuition for such courses will be paid for by the school district. Students may only take advantage of this if it is a class we DO NOT offer. Students will not be allowed to waive required high school courses or take high school courses independently in order to enroll in a college course. NIACC does offer certain courses over the summer, for which tuition is provided by the State of Iowa. Students may elect to take these courses independently over the summer. The school will award credit for such classes as agreed upon with NIACC. Transportation to NIACC for these courses will be the responsibility of the student.

A meeting will be held each spring for students who are interested in taking college credit courses. This meeting will be REQUIRED for all students and a parent in order for the student to enroll in a college credit course not taught by one of our high school instructors.

Students will be responsible for purchasing their own books for most college courses. Information regarding how to purchase or rent books will be provided to students enrolling in college courses at the time of enrollment.

## CAREER LINK: A NIACC/HIGH SCHOOL PARTNERSHIP

High school students in Career Link programs can complete a year of college while still in high school.
Benefits:

* Save time and college tuition/book costs.
* Ease transition to college.
* Experience college success while still in high school.
* Receive dual credit for completed course work.
* Enhance self-esteem and self-confidence.
* Develop career focus and achieve academic/personal goals.

During their senior year, enrolled students spend about half of their school day taking NIACC career program classes and the remaining school day spent at the high school in required and articulated classes. All expenses for the Career Link Program will be paid by the school, except the cost of transportation. Students attending classes on the NIACC campus will be responsible for arranging their own transportation

## GRADE POINT AVERAGE

Procedures for determining Grade Point Average:

| $\mathrm{A}=4.00$ | $\mathrm{~B}=3.00$ | $\mathrm{C}=2.00$ | $\mathrm{D}=1.00$ |
| :--- | :--- | :--- | :--- |
| $\mathrm{~A}-=3.67$ | $\mathrm{~B}-=2.67$ | $\mathrm{C}-=1.67$ | $\mathrm{D}-=.67$ |
| $\mathrm{~B}+=3.33$ | $\mathrm{C}+=2.33$ | $\mathrm{D}+=1.33$ | $\mathrm{~F}=0$ |

Please note the following:
High school credit courses (such as Algebra I) taken before entering high school WILL be counted toward graduation credits, and grades for these courses will be factored into students' cumulative high school grade point average.

Honor Roll = "A" Honor Roll 3.67-4.0/semester; "B" Honor Roll 3.0-3.66/semester
GRADUATION REQUIREMENTS

|  | English |
| :--- | :--- |
|  | 8 Credits (4 Years) |
|  | English 9 |
|  | English 10 11 |
|  | 2 Credits of Elective English |
| Math | 6 Credits (3 Years) |
| Soc. St. | 6 Credits (3 Years) |
|  | World History |
|  | US History |
|  | Government and Economics |
| Science | 6 Credits (3 Years) |
|  | Biology |
|  | Integrated Science |
|  | 2 Credits of Elective Science |
| PE | 4 Credits (4 Years) |
|  |  |
| Other | Beginning Computers/Health I |
|  | Personal Finance (1 Semester) |
| Electives | 16 Credits |
| Total Req'd | 49 Credits |

Students who are preparing for college should take the following:
Math: 3-4 years
Science: 3-4 years
English 4 years (including speech and Composition)
Social Studies: 3-4 years
Foreign Language: Minimum 2 years required for some colleges
Computer: Introductory course
The above suggestions are designed to prepare a student for most college general education requirements, regardless of the prospective major.

AGRICULTURE EDUCATION AND TECHNOLOGY

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Intro to AFNR (Ag I) | Full Year | 2 Credits | $9,10,11,12$ |
| Ag Careers \& Tech (Ag II) | $2^{\text {nd }}$ Semester | 1 Credit | $10,11,12$ |
| Ag Leadership (Ag III) | Full Year | 2 Credits | 11,12 |
| Ag Finance \& Mktg (Ag IV) | $1^{\text {st }}$ Semester | 1 Credit | 11,12 |
| Animal Science (NIACC Credit) | $1^{\text {st }}$ Semester | 1 Credit | 11,12 |
| Plant Science | $1^{\text {st }}$ Semester | 1 Credit | $10,11,12$ |
| Small Engines | $1^{\text {st }}$ Semester | 1 Credit | $10,11,12$ |
| Horticulture | $2^{\text {nd }}$ Semester | 1 Credit | $10,11,12$ |
| Ag Power Mechanics | $2^{\text {nd }}$ Semester | 1 Credit | $10,11,12$ |
| Natural Resources | $2^{\text {nd }}$ Semester | 1 Credit | 11,12 |

## INTRODUCTION TO AFNR (AG I) Elective 2 Credits

Introduction to Agriculture, Food, and Natural Resources (AFNR) is a full year introductory course in the CASE sequence of courses. It is designed to introduce students to the four pathways that are offered through CASE. In addition to a brief overview of animal science, plant science, natural resources, and agricultural technology and systems, students will explore communications, Supervised Agricultural Experience (SAE), Conducting Meetings, FFA, Leadership, and science in agriculture.

## AG CAREERS \& TECHNOLOGY (AG II) Spring / Elective 1 Credit

This course is designed to emphasize the areas of agricultural issues, ag business, ag advertising, and sales, and using technology in agriculture. Learning experiences include developing an agricultural sales business proposal, hands-on projects and labs, field trips, interviews with agriculturists in businesses and entrepreneurships, and class discussions. The areas of emphasis are employment and careers, career planning and preparation, ag technology, precision agriculture, global positioning systems, asset acquisition, and community networking.

## AGRICULTURE LEADERSHIP (AG III) Elective 2 Credits

This course concentrates on developing skills through hands-on experiences, problem-solving, decision-making techniques, field trips, and interviews with agriculturists. Students will also learn leadership skills through the FFA and supervised agricultural experience programs. The course emphasizes skills in: agriculture safety, community development, production-processingmarketing, record keeping, parliamentary procedure, and agriculture construction and technology.

AG FINANCE \& MARKETING (AG IV) Fall / Elective 1 Credit
This course emphasizes the areas of marketing, financial planning, Ag Economics, leadership, and entrepreneurship. The major areas of emphasis will be Ag Business Management, commodity marketing, and current issues in agriculture. We will network with local experts in these areas.

ANIMAL SCIENCE Fall/Elective 1 Credit/ 3 NIACC Credits
This course is designed to provide students a general overview of the livestock industry. It identifies the ways in which domestic animals serve the basic needs of humans for food, fiber, shelter, protection, fuel and emotional well-being. Students will develop an understanding of and
be able to apply the basic principles of animal selection, breeding, genetics, feeding, health, and husbandry practices.

## PLANT SCIENCE Fall/Elective 1 Credit

Students will learn about plant science concepts through competing activities, pages and problems utilizing laboratory and practical experiences. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. The areas of study in this course include soils, anatomy and physiology, taxonomy, growing environment, reproduction, pest and disease management, and crop production.

SMALL ENGINE POWER Fall/Elective 1 Credit
Small Engine Power primarily deals with four-stroke cycle, single cylinder engines. Students will study four-stroke cycle vs. two-stroke cycle engines, engine parts identification \& functions, engine repair tools, engine operation principles and maintenance. Students will utilize proper tool usage to disassemble, assess, and reassemble a four-stroke engine. Labs will include trouble shooting, technical reading, and the diagnosis and repair of small engines to achieve proper operation.

## HORTICULTURE <br> Spring/Elective <br> 1 Credit

Anyone who enjoys working outdoors, plants, landscaping, gardening, and pruning will have an interest in this class. Students will gain an understanding relating to the basics of plant growth and propagation; hydroponics; landscaping; gardening; shrubs and trees; planting and pruning trees; floral arrangements; making a corsage; greenhouse management and plant production.

AG POWER MECHANICS Spring/Elective 1 Credit
This Ag Power Mechanics course is a foundation level course that will teach students about the fundamentals of agriculture mechanics. Students are immersed in inquiry-based exercises filled with activities, projects, and problems that focus on the form and function of materials, machines, and tools used in agriculture. Students will apply technical skill while becoming competent in the process that is used to operate, repair, engineer and design agricultural tools and equipment. Agricultural Power and Technology areas of study include: shop safety, tool operation, materials selection and use, fabrication, energy and power, machines, machinery management, engineering and technology applications.

## NATURAL RESOURCES Spring/Elective 1 Credit

Students will learn about natural resources through activities, problems, and projects that agriculturists, biologists, ecologists, natural resources conservationists face in their respective careers. An appreciation for our renewable and non-renewable resources in habitat, wildlife, and aquatic species as well as the enjoyment of life-long skills will focus labs and activities. Study of the natural world including biomes, land, air, and water in a practical setting will be the focus.
ART

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Fundamental Visual Arts | $1^{\text {st } / 2 \text { nd }}$ Sem | 1 Cred/Sem | $9,10,11,12$ |
| Advanced Visual Arts | $1^{\text {st }} 2^{\text {nd }}$ Sem | 1 Cred/Sem | $10,11,12$ |
| Advanced Graphic Design | $1^{\text {st }} 2^{\text {nd }}$ Sem | 1 Cred/Sem | $10,11,12$ |

## FUNDAMENTAL VISUAL ARTS:

## Elective 2 Credits

Fundamental Visual Arts is a yearlong course, wherein students develop skills across the gamut of visual arts media, and serves as a prerequisite for more advanced art courses.
This course will cover various forms of drawing, painting, ceramics, sculpture, art history, and graphic design. After completing one year (two semesters) of Fundamental Visual Arts-and achieving a designated level of mastery -students may then choose a path or paths for more advanced coursework in media-specific classes.

## ADVANCED VISUAL ARTS (Prerequisite: Fund Visual Arts)

## Elective 2 Credits

Advanced Visual Arts is a continuation of the Fundamental Visual Arts course intended for high school sophomores, juniors, and seniors, who have completed the Fundamental Visual Arts prerequisite. The Advanced Visual Arts course is intended to support self-directed learning through more guided independent exploration of artistic mediums. This course covers all hand created two-dimensional art forms, including, but not limited to, drawing, charcoal, pastels, watercolor painting, oil painting, acrylic painting, printmaking and batik, as well as all hand created three-dimensional projects, including but not limited to, pottery, ceramic sculpture, wire and paper sculpture, and kinetic sculpture.

## ADVANCED GRAPHIC DESIGN: (Prerequisite: Fund Visual Arts)

## Elective 2 Credits

The Advanced Graphic Design course will focus on Adobe suite, including Photoshop and Illustrator. Students develop a familiarity of the basic tools of our digital editing programs in Fundamental Visual Art. The Advanced Graphic Design course will develop an in-depth understanding of the Adobe suite that will allow students to comfortably and successfully transition into a collegiate graphic design program. Students will have access to the Adobe suite on their individual lap-tops, and all projects in this course will be created digitally. This course will also be involved with a number of "real-world" design projects, wherein students work with outside "clients" to create original media for actual production.

## BUSINESS

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Beg. Computers | $1^{\text {st }} / 2^{\text {nd }}$ Sem | 1 Credit | 9 |
| Intro to Business | Full Year | 1 Credit/Sem | $10,11,12$ |
| Accounting | Full Year | 1 Credit/Sem | 11,12 |
| Personal Finance | $2^{\text {nd }}$ Sem | 1 Credit | 11,12 |
| Work-Based Learning Internships | $2^{\text {nd }}$ Sem | 1 Credit | 12 |

## BEGINNING COMPUTERS Required 1 credit

This course is designed to give students an overall view of Microsoft Office Software. Students will refine their keyboarding skills by completing projects in (1) Keyboarding and Word Processing, (2) Desktop Publishing (3) Spreadsheets and Graphing, and (4) Presentations. The students will also review and learn how to use the Internet for classroom and personal use. The emphasis will be on how students can use these skills in their personal life and the classroom.

## INTRODUCTION TO BUSINESS Elective

2 credits
This course is designed to help students develop an understanding of our business system and their economic roles of consumer, worker, and citizen.
This course will serve as a background for other business courses the student may take in high school and college. Included in this course will be topics on economic environment, business operations, management, issues in the global economy, investments, insurance and much more.

## ACCOUNTING <br> Elective 2 credits

This course is for students who have a variety of career objectives. (1) Beginning vocational preparation for careers in accounting. (2) Accounting knowledge and skill needed for careers in related business fields. (3) A foundation on which to continue studying business and accounting at the collegiate level.
Students will study the following areas and the accounting vocabulary of each: The accounting cycle for a service business; partnership accounting for a merchandising business; and corporate accounting for businesses dealing with journals, ledgers, payroll records, uncollectible accounts, depreciation, notes and interest, and accruals. Business simulations will also accompany textbook lessons, providing even more real-world application to the concepts being taught.

## PERSONAL FINANCE

Required
1 credit
Personal Finance discusses and evaluates different financial opportunities for students. Students will study the core concepts of the finances needed in order to obtain financial stability. Curriculum includes: understanding financial instruments (checkbook, ATM cards), risks and rewards of credit cards, credit ratings, debt, taxes, insurance, retirement plans, and budgets. Students will then apply their understanding of financing fundamentals to determine how to live within their financial means

## WORK-BASED LEARNING INTERNSHIPS Elective 1 credit

The St. Ansgar Work-Based Learning Internships (WBLI) program is a work-based learning experience that allows students to work with employers to learn job-specific objectives. Students will be able to apply classroom experiences with on-the-job training through local businesses.

Students will have the opportunity to gain experience while working with an employer to make an informed decision about careers goals after they graduate high school. Students will apply to the MOC program with a criterion based on: grades, attendance, and workmanship.

## COMPUTER SCIENCE

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Beg. Computers | $1^{\text {st }} / 2^{\text {nd }}$ Sem | 1 Credit | 9 |
| Computer Science Principles I | $1^{\text {st }} / 2^{\text {nd }}$ Sem | 1 Credit/Sem | $9,10,11,12$ |
| Computer Science Principles II | $1^{\text {st } / 2^{\text {nd }} \text { Sem }}$ | 1 Credit/Sem | $10,11,12$ |
| Computer Science Python <br> Fundamentals | $1^{\text {st }} / 2^{\text {nd }}$ Sem | 1 Credit/Sem | 11,12 |
| Intro to Cyber Security | $1^{\text {st } / 2^{\text {nd }} \text { Sem }}$ | 1 Credit/Sem | 11,12 |
| Mac Lab | $1^{\text {st } / 2^{\text {nd }} \text { Sem }}$ | 1 Credit/Sem | $10,11,12$ |

## BEGINNING COMPUTERS Required 1 credit

This course is designed to give students an overall view of Microsoft Office Software. Students will refine their keyboarding skills by completing projects in (1) Keyboarding and Word Processing, (2) Desktop Publishing (3) Spreadsheets and Graphing, and (4) Presentations. The students will also review and learn how to use the Internet for classroom and personal use. The emphasis will be on how students can use these skills in their personal life and the classroom.

## COMPUTER SCIENCE PRINCIPLES I Elective 1 Credit/Sem

Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in.

## COMPUTER SCIENCE PRINCIPLES II Elective 1 Credit/Sem

Computer Science Principles II takes a deeper look at the different areas of computer science. Students work through coding languages, artificial intelligence, robotics, virtual reality, cyber security and other areas of computer science to gain a broader understanding of what career opportunities are available.

## COMPUTER SCIENCE PYTHON FUNDAMENTALS Elective 1 Credit/Sem

This course is an introductory-level course for students beginning programming. In this course, you will learn problem-solving strategies, software design, and computer science. This course is taught using Python. Python is a general-purpose programming language great for beginners. Python is used by many large organizations to build apps, analyze data, and system administration.
Requirements: Completed Computer Science Principles I and Computer Science Principles II or completed Computer Science Principles I and is in $11^{\text {th }}$ or $12^{\text {th }}$ grade.

## INTRO TO CYBER SECURITY: Elective 1 Credit/Sem

This course is designed for students who are interested in exploring careers in Cybersecurity. The focus of instruction will include the implementation and monitoring of security on network and computer systems. Students will investigate strategies to identify and protect against security threats such as hackers, eavesdropping and network attacks. The basics of cryptography and logic reasoning will be explored. Hands-on labs in the CYBER.ORG range provide practice in
the configuration and mitigation of system vulnerabilities. Each unit integrates current events and related cyber ethics and law.
Requirements: Completed Computer Science Principles I and Computer Science Principles II or completed Computer Science Principles I and is in $11^{\text {th }}$ or $12^{\text {th }}$ grade.

## MAC LAB Elective 1 credit/Sem

Mac lab is a project-based computer science course where students will have the opportunity to develop various computer skills with an emphasis on computational thinking and collaboration. This is a semester long course that will expose students to graphics development, video production with drone work, coding using a visual block-based \& text-based programming, google apps (docs, spreadsheets, forms, presentations, sites), web design with google sites and dreamweaver, 3D printing and vinyl cutting design/production, and app development. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions with school and community-based projects.

## ENGLISH

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| English 9 | Full Year | 2 Credits | 9 Required |
| English 10 | Full Year | 2 Credits | 10 Required |
| English 11 | Full Year | 2 Credits | 11 Required |
| English 12 | $1^{\text {st }}$ Sem | 1 Credit | 12 Elective |
| Speech | $1^{\text {st }}$ Sem | 1 Credit | 11,12 Elective |
| Novels | $2^{\text {nd }}$ Sem | 1 Credit | $9,10,11,12$ Elective |
| Graphic Novels | $2^{\text {nd }}$ Sem | 1 Credit | $9,10,11,12$ Elective |
| Literature \& Film | $2^{\text {nd }}$ Sem | 1 Credit | $9,10,11,12$ Elective |
| Journalism/Yearbook | Full Year | 1 Cred/Sem | $10,11,12$ Elective |
| Character Ed \& Leadership | $1^{\text {st }}$ Sem | 1 Credit | $10,11,12$ Elective |
| Composition I/II | $1^{\text {st }}$ Sem/2 ${ }^{\text {nd }}$ Sem | 1 Cred/Sem | 12 Elective |

## ENGLISH 9

Required 2 credits
This required course for all freshmen is designed to review the basic elements of writing and literature. During the two-semester course, students will be required to write essays, narratives and evaluate numerous short readings, plays and novels.

ENGLISH 10
Required 2 credits
English 10 is an all-year course that combines literature and writing to provide hands-on instruction. Students will learn written and verbal communication skills to model the challenges and responsibilities of college and the work place. Reading will include short stories and essays, To Kill a Mockingbird, and Julius Caesar. Writing instruction will include required 5-paragraph essay writing and a short research paper.

## ENGLISH 11

Required 2 credits
This year-long course will include the study of major works and themes in American Literature. Reading skills will be developed through fiction and non-fiction texts, while students will strengthen their writing skills through expository, argumentative, and narrative writing. Students will be expected to participate in in-class discussions, a class debate, and other informative speeches throughout the course of the year.

## ENGLISH 12 <br> Elective <br> 1 credit

This course is a one-semester, one-credit course for students in their fourth year of English. While deepening their understanding of reading, writing, speaking, listening, and viewing, students will focus on a new theme each unit, relating to past and present literature and society. The readings will be student-selected, based on the roster of students taking the course. Additionally, the course will focus on "real-world" writing, such as résumés, scholarship essays, and formal and informal letters.

SPEECH Elective 1 credit
This semester-long course will investigate several different areas of the speaking and performing arts. A wide variety of speech types will be covered, such as pantomiming, personal experience, informative, after dinner, and television broadcasting. An in-depth unit on job interviewing will
also be covered, with the students participating in mock interviews, writing resumes and letters of application, and researching possible careers. This course will further enhance speaking skills in outlining, library research, and logical organization.

## NOVELS <br> Elective $\quad 1$ Credit

This course is a one-semester, one-credit course for students grades 9 through 12. The course will include a combination of whole-class, independent, and small-group novels, while deepening students' understanding of reading, writing, speaking, listening, and viewing. The readings will be student-selected, based on the interests and goals of the roster of students taking the course.

## GRAPHIC NOVELS

Elective $\quad 1$ Credit
The graphic novel, or long-form comic, is a popular and accomplished literary and artistic form. This evolving and hybrid medium represents a way for words and pictures to interact meaningfully, and now features both fiction and nonfiction opportunities. This course offers a survey of some of the best graphic novels, and it provides reading and writing opportunities around use in the skills for reading comics critically in terms of what they say and how they say it.

## LITERATURE AND FILM <br> Elective 1 Credit

A comparative study of films and the literary sources upon which they are based. Special attention is given to the practical and theoretical problems of adapting literature to film and the basic differences between the two. The course explores how character development, plot, narrative, symbols, and language are translated from literary texts to film, and considers the limitations of film adaptation. Students read, analyze, and respond critically to literature and films in class discussions, examinations, and essays. This class is designed to teach you how to think critically and analytically about literature, film and literary techniques and then give you many opportunities (a.k.a. Projects) to demonstrate your understanding of media viewed both in class and outside of the classroom.

## JOURNALISM/YEARBOOK Elective 2 credits

This course is a full-year course that will deal with techniques of journalistic writing. The class will be run similar to a publishing business, dealing with proper news writing, decision making, deadlines, and professional publication (yearbook). This class will explore different technology programs to layout news, lessons on news design and photography, as well as require professional quality written assignments of various types. The yearbook will also be completed in this course, so there could be extra time requests/requirements.

## CHARACTER AND LEADERSHIP Elective 1 credit

Character and Leadership is an elective high school course offered for English credit and centered on the development of character traits and leadership skills. Employability skills and civic responsibilities are supported by the course subject matter, and college-level language arts skills are developed through the utilization of non-fiction readings, expository writing activities, and in-class discussions focused on abstract concepts and high-order cognitive reasoning. The Character and Leadership course specifically examines core values, theories of ethics, leadership skills and styles, motivational theories, and case studies of historic leaders.

## NIACC COMPOSITION I \& COMPOSITION II

Seniors will have the opportunity to take NIACC Composition I and Composition II to satisfy 2 credits of English. Must meet NIACC guidelines of ACT Score or Writing Assessment in order to enroll.

## COMPOSITION I (ENG 105) 1 Credit HS/3 Credits NIACC

 Development of skills in reading, writing, and listening with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use computers and other technology. Students must meet minimum competency requirements to receive a grade of C or higher which is required to enroll in Composition ICOMPOSITION II (ENG 106)_1 Credit HS/ 3 Credits NIACC
A continuation of Composition I, with emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use computer programs and watch videos. Must meet minimum competency requirements in writing to receive a grade of C or higher.

## FAMILY AND CONSUMER SCIENCES

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Health I | $1^{\text {st }} 2^{\text {nd }}$ Sem | 1 Credit | 9 |
| Health II | $2^{\text {nd }}$ Sem | 1 Credit | $9,10,11,12$ |
| Fall Foods | $1^{\text {st }}$ Sem | 1 Credit | $9,10,11,12$ |
| Spring Foods | $2^{\text {nd }}$ Sem | 1 Credit | $9,10,11,12$ |
| Adv. Foods | $1^{\text {st }} / 2^{\text {nd }}$ Sem | 1 Credit | $10,11,12$ |
| Child Dev./Parenting | $1^{\text {st }}$ Sem | 1 Credit | $10,11,12$ |
| Adult Living | $2^{\text {nd }}$ Sem | 1 Credit | $10,11,12$ |

## HEALTH I Required 1 credit

This course is designed to enable students to make healthful choices concerning their lifestyle. Information will be presented to stimulate thinking in regard to healthful living now and in the future. Students will be encouraged to carefully evaluate information presented regarding good health habits, healthful living and decision making in regard to their own style of living. Areas of study include: concepts of wellness, nutrition, mental and emotional health, maintenance and promotion of personal health, and sexuality and sexually transmitted diseases.

## HEALTH II Elective 1 credit

This course will cover a variety of topics, including the study of specific diseases; health-related careers; diversity awareness; and current local, national and international health concerns. The curriculum is flexible to meet the needs and interests of the students enrolled each year.

FALL FOODS \& NUTRITION
Elective
1 credit
The fall foods and nutrition class will cover units on nutrition, kitchen principles, recipe skills, cooking methods, grains, including rice, pasta, and legumes, eggs, dairy and food combinations including soups and salads. Students will need to supply a recipe box, lined recipe cards, and dividers.

## SPRING FOODS \& NUTRITION Elective 1 credit

The spring foods and nutrition class will cover units on food and fitness, planning daily meals, meal time customs, shopping for meals, convenience foods, vegetables and fruits, meats and poultry, and baking including quick breads, yeast breads, cakes, pies and cookies. Students will need to supply a recipe box, lined recipe cards, and dividers.

## ADVANCED FOODS \& NUTRITION Elective 1 credit

Pre-requisite: Fall or Spring Foods
The advanced foods and nutrition class will focus on foreign cookery, advanced techniques, gourmet influences, appetizers and garnishes, seasonings, entertaining, and meal preparation. Students will be responsible for planning, budgeting, shopping, and preparing meals. Students will need to supply a recipe box, lined recipe cards, and dividers

CHILD DEVELOPMENT AND PARENTING Elective 1 credit
The child development and parenting class will focus on the development of children from conception through preschool age will be studied. This course will focus on factors associated with
teenage pregnancy, pregnancy, examine prenatal development and study the birth of the baby. Infants, toddlers, and preschoolers will be studied on the basis of physical, emotional, social and intellectual development.
Study will also focus on parental expectations and responsibilities, children's health and safety, guidance and discipline, exceptional children, child abuse, and day-care/preschool programs. Students will work with children in supervised capacity.

## ADULT LIVING

The Adult Living class will focus on adult expectations and responsibilities associated with personal development, lifestyle choices, communication and conflict resolution, wellness and crisis management, peer and dating relationships, building strong marriages and families, single living, aging and death. Individual, family and societal issues involved in balancing work and family will be studied.

## FOREIGN LANGUAGE

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| German I | Full Year | 1 Credit/Sem | $9,10,11,12$ |
| German II | Full Year | 1 Credit/Sem | $10,11,12$ |
| German III | Full Year | 1 Credit/Sem | 11,12 |
| German IV | Full Year | 1 Credit/Sem | 12 |
| Spanish I | Full Year | 1 Credit/Sem | $9,10,11,12$ |
| Spanish II | Full Year | 1 Credit/Sem | $10,11,12$ |
| Spanish III | Full Year | 1 Credit/Sem | 11,12 |
| Spanish IV | Full Year | 1 Credit/Sem | 12 |

The study of a foreign language is highly recommended for college-bound students and can greatly benefit all other students, especially in the areas of English, Social Studies, Science, Business, and Music. Several colleges have foreign language requirements, so check your college catalog or consult your counselor to find out if the college of your choice requires a foreign language.
Foreign language requirements at the three regent universities:

## UNI

Foreign Language courses are not required for admission. However, 2 years of a foreign language in high school with a C- or above in the last course will meet the university graduation requirements.

## IOWA STATE UNIVERSITY

2 years of a single foreign language are required for admission to the College of Liberal Arts and Sciences (and effective Fall 2009, to the College of Engineering).

## UNIVERSITY OF IOWA

2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation.

## OPTIMUM RECOMMENDATION

4 years of a single foreign language. By taking foreign language during all 4 years of high school, you'll go beyond the basic skills and begin to use the language and reinforce your fluency.

## GERMAN I <br> Elective 2 credits

German I provides an introduction to the German language and culture. Emphasis will be placed on listening, reading, writing and speaking skills. Students will be expected to use German whenever possible. Some topics are school, family, food, and weather. The main project during German I is a weather report and commercial.

GERMAN II (Successful completion of German I with grade of C- or above) Elective 2 credits German II continues to emphasize listening, reading, writing, and speaking skills. Students will have increased expectations to use German in class. They will further their knowledge of both the language and culture of German speaking countries. Some topics are movies, sports, body parts, and travel. The main project during German II is music related.

GERMAN III (Successful completion of German II with a grade of C- or above) Elective 2 credits German III will be combined with German IV. This class further emphasizes all four foreign language skills. Students also work throughout the year to refine their basic knowledge, proving that they can recall basic vocabulary and grammar concepts. The theme is Deutsch durch Film, learning German vocabulary, history, and grammar, with a focus on one film each quarter.

GERMAN IV (Successful completion of German III with grade of C- or above) Elective 2 credits German IV will be combined with German III. This class continues to emphasize all four foreign language skills. Students will work on the online course Nico's Weg throughout the year. The theme is Deutsch durch Film, learning German vocabulary, history, and grammar, with a focus on one film each quarter.

## SPANISH I Elective 2 credits

This course will introduce students to the Spanish language and the culture of Mexico. Emphasis will be placed on listening, speaking, reading, and writing skills. Incoming freshmen with strong grades and most upperclassmen would be good candidates for Spanish I.

SPANISH II (Successful completion of Spanish I with grade of C- or above)
Elective
2 credits
This course is a continuation of Spanish I. There will be continued emphasis on listening, speaking, reading, and writing skills at a more advanced level. College-bound students and students who are fascinated by the Spanish language are encouraged to take Spanish II. Students will focus more on the culture of Spain.

SPANISH III (Successful completion of Spanish II with grade of C- or above)
Elective 2 credits
Spanish III further emphasizes all four foreign language skills. Higher expectations are in place regarding speaking, use of time, and self-motivation. Students who have successfully completed Spanish I and II with a grade of B or higher are good candidates for Spanish III.

SPANISH IV (Successful completion of Spanish III with grade of C- or above)
Elective 2 credits
Spanish IV continues emphasis on reading, writing, listening, and speaking Spanish. High expectations will continue in the same areas as Spanish III. Those who were successful in Spanish III should consider continuing on to Spanish IV.

INDUSTRIAL TECHNOLOGY

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Basics of Industrial Tech | Full Year | 1 Credit/Sem | $9,10,11,12$ |
| Advanced Woodworking | $1^{\text {st }}$ Sem | 1 Credit | $10,11,12$ |
| Automotive Ownership | $1^{\text {st }}$ Sem | 1 Credit | 11,12 |
| Building Trades | $1^{\text {st }}$ Sem | 1 Credit | 11,12 |
| Advanced Welding | $2^{\text {nd }}$ Sem | 1 Credit | $10,11,12$ |
| Welding (NIACC Credit) | $2^{\text {nd }}$ Sem | 1 Credit | $10,11,12$ |
| General Electricity | $2^{\text {nd }}$ Sem | 1 Credit | 11,12 |
| Work-Based Learning Internships | $2^{\text {nd }}$ Sem | 1 Credit | 12 |
| Saints Manufacturing | Full Year | 1 Credit/Sem | 11,12 |

## BASICS OF INDUSTRIAL TECHNOLOGY Elective 2 credits

This course is designed to give students introduction to woodworking, drafting and welding. Students will utilize hands on projects to learn basics skills needed to successful in Industrial Technology. Students will learn the proper way to run woodworking equipment in the shop and utilize the equipment to complete small projects associated woodworking while learning the basic concepts associated with each curricular area. Drafting concepts will be applied to interpret and draft project plans. Students will be able to continue developing their skills by taking Woodworking, Drafting, Architectural Drafting or Welding. Students will learn the proper way to run woodworking equipment and apply drafting concepts to project plans, as well as basic concepts in welding utilizing stick and wire welding methods. Basic oxy-acetylene cutting will be practiced. First semester will be devoted to the woodworking concepts, while second semester will focus on welding concepts

## ADVANCED WOODWORKING Elective

1 credit
This woodworking class is designed to continue and build on techniques learned in Basics of Industrial Technology. It is intended to allow the students the opportunity to improve their woodworking skills through the designing and construction of individual projects of the students own choosing at the student's cost. Other areas discussed will be furniture making and cabinetry as well as other related wood technologies. Completion of Woodworking I is required prior to this class. Students choosing this class should be prepared to select a complex wood project for construction in class.

## AUTOMOTIVE OWNERSHIP Elective 1 credit

This course is an introduction to automobile ownership. It will provide fundamental knowledge and experience of owning and maintaining an automobile. Through the semester students will learn about basic maintenance, learn how a car works, the process of buying and selling cars, insurance, and costs associated with owning a vehicle. Auto Ownership will utilize their own vehicle to learn car components and basic maintenance like changing tires, to checking fluids under the hood.

## BUILDING TRADES

Elective
1 credit
This is a course designed for the student interested in a career in the building trades. This class will give students an understanding of the beginning process of building a building. Concrete
will be the main topic discussed in this course. While studying concrete students will build forms and may include the pouring of concrete. Students will also read blueprints, study plot plans and calculate slope through hands on activities. Through hands-on structural activities, the students will learn application techniques of materials, terms, and tool utilization in the construction process. Other projects included may include field trips to construction sites.

## ADVANCED WELDING Elective 1 Credit

The welding disciplines covered in this course are Gas Metal Arc Welding (GMAW)/Flux Core Arc Welding (FCAW), Shielded Metal Arc Welding (SMAW) on plate and pipe welding, and Gas Tungsten Arc Welding (GTAW). Other areas of study include safety, basic trade math, equipment maintenance, welding terms/symbols, blueprint reading, pipe layout for pipefitters and welders, oxy-acetylene, plasma cutting training, and air carbon arc gouging.

## WELDING Elective 1 credit/ 3 NIACC Credits

This course is designed for both the student who has an interest in a career as a welder and the student who just wants to further his/her skills in welding techniques. Advanced metallurgy will be discussed. Students will also study stick welding, wire welding, oxy-acetylene cutting techniques. Students will have lab time to develop their welding skills. Students will also learn proper metal sharpening techniques. Students will further develop their skills in welding. Sharpening drill bits and plastic welding will be practiced in the lab. Students will also learn advanced techniques in oxy/acet. welding. Students will weld various types of welds and the students will select a complex welding project for fabrication in class. Students will also design and build their own project at the students cost for materials.

## GENERAL ELECTRICITY Elective 1 credit

This course is designed to introduce students to basic electrical circuitry theory and concepts in modern residential and commercial wiring. Through hands-on activities the students will learn to read electrical schematics and how electrical concepts are applied as well as safety techniques and tool utilization. This course includes home wiring techniques done on a module as well as making calculations relating to electricity as a electrician and a consumer. Many different circuit designs will be practiced through hands on activities. Completion of this class, students will have developed a good concept of residential wiring and reading the NEC code book.

## WORK-BASED LEARNING INTERNSHIPS (WBLI) Elective 1 credit

The St. Ansgar Work-Based Learning Internships (WBLI) program is a work-based learning experience that allows students to work with employers to learn job-specific objectives.
Students will be able to apply classroom experiences with on-the-job training through local businesses. Students will have the opportunity to gain experience while working with an employer to make an informed decision about careers goals after they graduate high school. Students will apply to the MOC program with a criterion based on: grades, attendance, and workmanship.

SAINTS MANUFACTURING
Elective 2 credits
Students will get hands-on experience in developing and running a small business. The semester will be based upon students designing, developing and manufacturing a product of their choice.

Through the process, students will learn how to be a successful entrepreneur, by learning about marketing, financial analysis, and the manufacturing process.

## MATHEMATICS

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Algebra I-A | Full Year | 1 Credit/Sem | 9 |
| Algebra I-B | Full Year | 1 Credit/Sem | 10 |
| Algebra I | Full Year | 1 Credit/Sem | $9,10,11$ |
| Geometry | Full Year | 1 Credit/Sem | $9,10,11,12$ |
| Algebra II | Full Year | 1 Credit/Sem | $10,11,12$ |
| Pre-Calculus | Full Year | 1 Credit/Sem | 11,12 |
| Intermediate Math | Full Year | 1 Credit/Sem | $10,11,12$ |
| Career Mathematics | Full Year | 1 Credit/Sem | 12 |

## Suggested Math Sequences:

Algebra I, Geometry, Algebra II, Pre-Calculus, NIACC Calc $1 \&$ II
Algebra I, Geometry, Algebra II, Pre-Calculus
Algebra I, Geometry, Algebra II, Career Mathematics
Algebra I, Geometry, Intermediate Math
Algebra 1-A, Algebra 1-B, Geometry, Algebra II
Algebra I-A, Algebra 1-B, Geometry, Intermediate Math
Algebra I, Geometry, Algebra II and Pre-Calculus sequence is for students planning to continue their formal education after high school. The number of colleges, vo-tech schools, and careers that require at least 3 years of mathematics has increased. If you are not sure of the math requirements for a particular school or career, check with the guidance office.

## ALGEBRA 1-A <br> Req/Elective 2 credits

This is the first of a two-year course which is designed to meet the same objectives as Algebra I, but at a slower pace. All of the concepts in Algebra I (see course description) will be met, but over the course of two years instead of one. This course sequence is intended to replace the previous Pre-Algebra/Algebra I plan for students may not be ready for the rigor of the Algebra I course.

## ALGEBRA 1-B

Req./Elective 2 credits
This is the second of a two-year course, which is designed to meet the same objectives as Algebra I, but at a slower pace. All of the concepts in Algebra I (see course description) will be met, but over the course of two years rather than one. This course is intended for those who took Algebra A the previous year, or those who are retaking Algebra I and have been recommended by the teacher to take Algebra B.

ALGEBRA I Prerequisite: 8th Grade Math teacher recommendation Req./Elective 2 credits This course is designed to prepare the student for the more advanced ideas of mathematics, as well as meet college and vocational entrance requirements. Algebra helps the student develop an understanding of directed numbers, linear equations in one and two unknowns, inequalities, formulas, graphs, roots and powers, ratio and proportion, factoring fractions and quadratics and their applications. These ideas are fundamental to all further mathematics study.

GEOMETRY Prerequisite: Algebra I or Algebra 1-B Req/Elective 2 credits

Emphasizes an abstract, formal approach to the study of geometry, including such topics as properties of plan and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proof; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

## ALGEBRA II Prerequisite: Geometry

Elective 2 credits
Algebra II reinforces the ideas from Algebra I and presents new material for a deeper understanding of these concepts. Students who plan to continue their education will find that the material presented in this course is considered a minimum requirement in almost any field they wish to pursue. The real number system, interpreting information and relationships through the use of equations and inequalities, acquiring a basic mathematical vocabulary, and introduction to basic geometric concepts are some of the areas covered in this course.

PRECALCULUS Prerequisite: Algebra II Elective 2 credits Precalculus is a continuation of Alg. III/Geometry. Previous mathematical concepts are reviewed and new ones are introduced that will continue to expand the student's knowledge of the mechanics and the theory of mathematics. This course is designed to allow most students to move on to more advanced math courses with little difficulty. Precalculus is considered necessary for any student planning on continuing on in mathematics, science or a related field. The Real and Complex number systems, geometric relationships and reasoning, equations and inequalities, matrices and determinants, functions, sequences and series, derivatives, and integrals are some of the areas covered in this course.

## INTERMEDIATE MATH

## Elective 2 credits

## (Prerequisite: Algebra I and Geometry)

This course will review and extend algebra concepts for students who have already taken Algebra 1 and Geometry. Includes a review of such topics as properties and operations of real numbers; evaluation and simplifying of rational algebraic expressions; solutions and graphs of first-degree equations and inequalities; solutions of systems of equations and inequalities; translation of word problems into equations; operations with factoring of polynomials; simplifying radical expressions; and solving quadratic equations.

## CAREER MATHEMATICS: A GUIDED APPROACH Elective 2 Credits

This class gives a solid foundation in the math needed for a wide range of technical and vocational careers, equipping students with the math skills required for allied health, electrical trade, automotive trades, plumbing, construction, and more- particularly in the area of physical trades. The math concepts are presented completely within the context of practical on-the-job applications, so students can make an impact on the job from day one. Students are given relevant, tangible, examples that they are likely to encounter in future careers.

## MUSIC

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Band | Full Year | 1 Credit/Sem | $9,10,11,12$ |
| Choir | Full Year | 1 Credit/Sem | $9,10,11,12$ |

## BAND

Open to any student wishing to participate in an instrumental music organization. The band music department is designed to challenge the students musically and provide music for various functions throughout the year. The performing groups are: Concert Band, Marching Band, Pep Band, Jazz Band, and various small ensembles. Private lessons are required for all students enrolled in concert band. Numerous concerts and performances are scheduled throughout the semester. The concert band also travels with the concert choir every other spring on an extended music tour.

Concert Band: The concert band is the core ensemble of the band program. This ensemble performs its own Winter Concert in December, the Band Bonanza in March, and the Fine Arts Show in the spring. The concert band also participates in the state Iowa large group music contest held during the second semester of school. Small instrumental ensembles and students wishing to perform a solo will participate in the state Iowa solo/small ensemble competition also held in the second semester of school. Students are eligible to audition for All-State Band, which is held in the fall and select students will participate in different honor bands throughout the year.

Marching Band/Pep Band: During most of the fall semester, marching band is the focus ensemble. All concert band members are required to participate in marching band and pep band. The marching band will play at all home football games, serving as a pep band during the first half of the game, and performing on the field during half-time. The pep band will continue to perform throughout the basketball season at most of the home games along with all pep rallies during school.

Jazz Band: Jazz Band involves the study of different styles of music that are not covered in concert band. This group is open to any students enrolled in concert band. The jazz band performs in the winter concert and band bonanza concert.

## CONCERT CHOIR

Elective 1 credit/sem.
General enrollment. Open to any student wishing to sing in a choral organization. All members participate in the required school calendar concerts and state small group and large group music competitions held in the second semester of class. In addition to regularly scheduled concerts, concert choir members are eligible to audition for the All-State Chorus. Choir tours to New York City and several other regional and domestic locations occur on a two-, three- and four-year cycle.

## SHOW CHOIR

Show choir involves the study and performance of contemporary music. Membership is by audition only in the fall of the school year. This group performs throughout the school year at concerts and various community events. This ensemble rehearses outside of school hours.

## PHYSICAL EDUCATION

General Requirement. All students must have four years of Physical Education to qualify for graduation.
Note: A student may be permanently excused from Physical Education only by written statement from a medical doctor.

Course
Credit
Grade level
Co-ed Physical Education
.5 credit/semester
$9,10,11,12$

## CO-ED PHYSICAL EDUCATION

Activities are offered to students that include team and individual sport, as well as leisure and lifetime activities. Students select a minimum of ten courses to attend during the school year. Each course is one to four days in length. Physical Fitness is required of all students once a week. Students are assessed on body fat percentage, cardiovascular endurance, strength, and flexibility. The fitness program is geared to individual fitness levels. The following courses are offered:

Orienteering
Pickleball
Table Tennis
Badminton
Golf
Canoeing
Cross Country Skiing
Scuba/Snorkeling

Dance (required $9^{\text {th }}-12^{\text {th }}$ )
CPR (required $9^{\text {th }}-12^{\text {th }}$ )
Archery
Cycling
Bowling
Roller Skating
Fishing/Ice Fishing
Volleyball

SCIENCE

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| Biology | Full Year | 2 Credits | 9 |
| Integrated Science | Full Year | 2 Credits | 10 |
| Chemistry (Must have taken or be enrolled in Algebra II) | Full Year | 2 Credits | 11,12 |
| Physics | Full Year | 2 Credits | 11,12 |
| Human Anatomy/Physiology | Full Year | 2 Credits | $10,11,12$ |
| Advanced Integrated Science | $1^{\text {st } / 2^{\text {nd }} \text { Sem }}$ | 1 Credit | 11,12 |
| Ecology | $1^{\text {st } / 2^{\text {nd }} \text { Sem }}$ | 1 Credit | 11,12 |

## Suggested Science Pathways:

$9^{\text {th }}$ Grade: Biology
$10^{\text {th }}$ Grade: Integrated Science
$11^{\text {th }}$ Grade: Chemistry (must have had or be taking Algebra II)
$12^{\text {th }}$ Grade: (Optional) Physics or Anatomy \& Physiology
$9^{\text {th }}$ Grade: Biology
$10^{\text {th }}$ Grade: Integrated Science
$11^{\text {th }}$ Grade: Advanced Integrated Science/Ecology
$12^{\text {th }}$ Grade (Optional) Chemistry, Physics, or Anatomy \& Physiology
*Students who have room in their schedule may double up on science after $9^{\text {th }}$ grade upon instructor recommendation.

## BIOLOGY Required 2 credits

This course will emphasize basic concepts in biology to make the student more familiar with the following topics: Ecology and environment; Local plants and animals; Cell biology, biochemistry, biotechnology, DNA, genetics, microbiology; Plants, animals, human anatomy and physiology Students will learn through lectures, laboratory work, field trips, computers, and videos. The student will gain appreciation for the complexity of life, mankind's impact on the environment, and the impact of the environment on mankind

## INTEGRATED SCIENCE <br> Required 2 credits

This high school science course is designed for all sophomores, and will follow the Next Generation Science Standards for earth and some physical sciences. This class will focus on development of models based on evidence on topics ranging from the life span of the sun, to nuclear fusion, how the Earth's internal and surface processes operate, to describe the cycling of carbon. Students will plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. Life cycle of stars, the flow of energy in and out of Earth systems, and the Earth's formation and early history will also be discussed. Newtons' laws of motion, chemical reactions and the structure and properties of matter will be introduced to prepare students for upper-level chemistry and physics courses.

CHEMISTRY Prerequisite: Algebra II Elective 2 credits
This course will include the basic concepts in inorganic chemistry with emphasis on the structure of the atom, nuclear reactions, chemical formulas and bonding, chemical reactions and equations,

Gas Laws, moles, thermodynamics, acids, bases, salts, pH , electrochemistry, and an introduction to organic chemistry.
Laboratory techniques, procedures, and safety will be practiced.
Students need to have completed two semesters of Algebra II.

## PHYSICS Prerequisite: Algebra II Elective 2 credits

This course will introduce the student to the physical properties of matter, motion, energy, and force through theory and practical applications, laboratory procedures, problem solving, and mathematical analysis.
Course Content: Topics such as Newtonian Mechanics, Thermodynamics, Waves, Optics, Electricity/Magnetism, and Nuclear Physics will be presented through both classroom instruction/demonstrations and student-led laboratory exercises. Completion of Algebra III is high recommend prior to taking Physics.

## HUMAN ANATOMY/PHYSIOLOGY Prerequisite: Biology grade of C or above

 Elective 2 creditsThe major systems of the human body will be covered. Students will link anatomy, histology and physiology of all the major organs and systems in the human body. Various health related topics and careers will also be included. The topics covered will be beneficial for students interested in nursing, physical therapy, or any other medical related field. Course will include several animal dissection labs.

## ADVANCED INTEGRATED SCIENCE <br> Elective 1 credits

This upper-level high school course is another option for students looking for more conceptual approach to physical science and a deeper understanding of earth and space science. Our curriculum will be an extension of Integrated Science, which will include: The Nature of Science, Force and Motion Energy and its Transformations, Atoms and Elements, Molecules and Compounds, Bonding and Chemical Reactions, Earth and Space Science. This course is designed for students who may not have completed the required math in order to be successful in chemistry or physics. The focus of this course will be conceptual, student-directed, and projectbased.

## ECOLOGY

Elective 1 Credit
This course will cover several categories of Ecology. Categories that will be studied include plant, forest, aquatic, mammal, prairie, conservation, and others. Ecology students will be required to collect data from the field and the outdoors. Students will work in the classroom and field to create several projects based on natural resource/ecology topics covered. Topics and information learned will be applied to field experiences in real-world settings.

## SOCIAL STUDIES

| Course |  | Credit | Grade Level |
| :--- | :--- | :--- | :--- |
| World History | Full Year | 2 Credits | 10 |
| U.S. History | Full Year | 2 Credits | 11 |
| Government | $1^{\text {st }} 2^{\text {nd }}$ Sem | 1 Credit | 11,12 |
| Economics | $1^{\text {st }} 2^{\text {nd }}$ Sem | 1 Credit | 11,12 |
| Psychology | $1^{\text {st }}$ Sem | 1 Credit | $10,11,12$ |
| Sociology | $2^{\text {nd }}$ Sem | 1 Credit | $10,11,12$ |
| Current Events I | $1^{\text {st }}$ Sem | 1 Credit | $10,11,12$ |
| Current Events II | $2^{\text {nd }}$ Sem | 1 Credit | $10,11,12$ |

## Social Studies Curriculum:

1. Sophomores will take World History.
2. All Juniors will take U.S. History.
3. Seniors will take one semester of Government and one semester of Economics.
4. Electives will be Psychology, Sociology and Current Events I and II.

## WORLD HISTORY Required 2 credits

World Cultures course has been expanded from a course studying Western European history from 1790 to the present, to a course studying world cultures.
Included are units covering the civilizations of Asia, the Middle East, Africa, and the Americas. Most of the course's time is spent on the study of Western European civilization.
Skills to be used include map work, obtaining information from paintings and illustrations, developing a sense of chronology, drawing conclusions from facts, reading and note-taking.
Students planning to attend a four-year college will take this course as good background for your general education classes in college.

## U.S. HISTORY Required 2 credits

In U. S. History, students study the forces which shaped our nations so that they will better understand their changing world. Topics covered will include war, immigration, industrialization, urbanization, political corruption, reform world leadership, change, depression, and the struggle of women and minorities to gain civil rights.
Through the use of charts, maps, current event articles, and text material, students will acquire information, develop vocabulary, improve rates of reading, and analyze information.

## GOVERNMENT

Required 1 credit
Government class includes the study of different forms of world government, a study of federalism, and the study of how our own government in the U.S. works.
Major emphasis is placed on the development of the Constitution, study of Congress, the presidency and the judicial system. Students will also learn of the similarities and differences between state and national forms of government.
Ability to read is very important, along with the ability to discuss and explain (in written form) relationships, forms, roles, differences and similarities between governments.
ECONOMICS Required 1 credit

Students will develop an understanding of the basic principles of economics, the structure, operations, and goals of the American economy, and the importance of their own role within the American free-enterprise system. Course is broken down into four broad units: Economic Systems and the American Free Enterprise System; Supply and Demand; Money, Banking, and Finance; and Credit.

## PSYCHOLOGY

Elective 1 credit
The goal of this course is to help students understand some of the motivations behind human behavior, and to help students find their individual way of meeting their own emotional needs in a manner enhancing their growth and humanity. Discussion of what learning can do for selfdevelopment, and the extent to which individuals and institutions resist meaningful learning and changes is included. Topics studied are: personality development, normal versus abnormal behavior, humanistic psychology, and behavior modification. The ability to think clearly and critically is a desired, but highly idealistic, goal.

## SOCIOLOGY Elective 1 credit

Offered to give the student the opportunity to study the science of sociology. The first part of the course will concentrate on the theoretical aspect of the science. Society, culture, cultural variations, cultural values, personality, psychosocial needs, defense mechanisms, and social change will be examined. The second half of the course will turn to the applicable part of sociology. Social problems such as the family, drugs and alcohol, war, unemployment, the elderly, death and dying, will be topics discussed. Reading and small group discussions are essential.

## CURRENT EVENTS I \& II Elective 1 credit

This class is designed for the student to immerse themselves in the events that are shaping our world on a local, national, and global level. This class will allow the students to improve writing and oratory skills as well as independent thought. Your textbook will be a variety of newspapers and magazines. We will focus on several subjects throughout the semester that help us understand how news impacts us. We will also look at the media and how the way news is reported can impact us as well. This isn't your ordinary class. If you are looking for something different yet challenging, then CURRENT EVENTS may be something that you are looking for.

## CONCURRENT ENROLLMENT

ONLINE:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :---: | :---: | :---: | :---: | :---: |
| BIO-206 | Anatomy \& Physiology I | 1 Credit | 4 Credits | 9, 10, 11, 12 |
| BIO-207 | Anatomy \& Physiology II | 1 Credit | 4 Credits | 9, 10, 11, 12 |
| AGS-109 | Animal Science I | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| MAT-801 | Applied Math A | 1 Credit | 1 Credits | 9, 10, 11, 12 |
| MAT-802 | Applied Math B | 1 Credit | 1 Credits | 9, 10, 11, 12 |
| MAT-803 | Applied Math C | 1 Credit | 1 Credits | 9, 10, 11, 12 |
| MAT-804 | Applied Math D | 1 Credit | 1 Credits | 9, 10, 11, 12 |
| BUS-102 | Introduction to Business | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| MAT-210 | Calculus I | 1 Credit | 4 Credits | 9, 10, 11, 12 |
| MAT-216 | Calculus II | 1 Credit | 4 Credits | 9, 10, 11, 12 |
| MAT-219 | Calculus III | 1 Credit | 4 Credits | 9, 10, 11, 12 |
| PSY-223 | Child/Adolescent Psychology | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| NET-213 | Cisco Networking | 1 Credit | 4 Credits | 9, 10, 11, 12 |
| ENG-701 | Communications I | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| ENG-702 | Communications II | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| ENG-105 | Composition I | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| ENG-106 | Composition II | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| PSY-121 | Developmental Psychology | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| BUS-161 | Human Relations | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| PHI-105 | Introduction to Ethics | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| PSY-111 | Introduction to Psychology | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| SOC-110 | Introduction to Sociology | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| MAT-156 | Introduction to Statistics | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| HSC-120 | Medical Terminology I | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| HSC-121 | Medical Terminology II | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| HSC-174 | Nurse Aide Clinical | 1 Credit | 1 Credits | 9, 10, 11, 12 |
| HSC-130 | Nurse Aide Theory | 1 Credit | 2.5 Credits | 9, 10, 11, 12 |
| BIO-151 | Nutrition | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| NET-136 | Operating Systems | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| AGA-114 | Principles of Agronomy | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| SPC-112 | Public Speaking | 1 Credit | 3 Credits | 9, 10, 11, 12 |
| SOC-115 | Social Problems | 1 Credit | 3 Credits | 9, 10, 11, 12 |

STA FACE TO FACE:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| WEL-335 | Ag \& Industry Welding | 1 Credit | 2 Credits | $10,11,12$ |
| AGS-109 | Animal Science I | 1 Credit | 3 Credits | $10,11,12$ |
| ENG-105 | Composition I | 1 Credit | 3 Credits | 12 |
| ENG-106 | Composition II | 1 Credit | 3 Credits | 12 |

## NIACC HALF DAY PROGRAMS:

Agriculture:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| AGB-133 | Intro to Ag Business | 1 Credit | 3 Credits | 12 |
| AGS-109 | Animal Science I | 1 Credit | 3 Credits | 12 |
| AGS-110 | Animal Science I Lab | 1 Credit | 1 Credit | 12 |
| AGA-154 | Fundamentals of Soil Science | 1 Credit | 3 Credits | 12 |
| AGA-114 | Principles of Agronomy | 1 Credit | 3 Credits | 12 |
| AGS-209 | Animal Science II | 1 Credit | 3 Credits | 12 |
| AGS-210 | Animal Science II Lab | 1 Credit | 1 Credit | 12 |
| BCA-215 | Computer Business Applications | 1 Credit | 3 Credits | 12 |
| ACC-111 | Intro to Accounting | 1 Credit | 3 Credits | 12 |
| BIO-196 | Introduction to Bio-Technology | 1 Credit | 4 Credits | 12 |

Automotive:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| AUT-105 | Intro to Auto Technology | 1 Credit | 4 Credits | 12 |
| AUT-115 | Auto Shop Safety | 1 Credit | 1 Credit | 12 |
| AUT-627 | Auto Electrical Systems | 1 Credit | 7 Credits | 12 |
| AUT-405 | Auto Suspension \& Steering | 1 Credit | 5 Credits | 12 |
| AUT-505 | Auto Brake Systems | 1 Credit | 5 Credits | 12 |
| AUT-113 | Transportation Fundamentals | 1 Credit | 3 Credits | 12 |

## Building Trades:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| CON-107 | Construction Safety | 1 Credit | 2 Credits | 12 |
| CON-110 | Construction Drawing | 1 Credit | 1 Credit | 12 |
| CAN-216 | Architectural CAD | 1 Credit | 2 Credits | 12 |
| CON-121 | Carpentry Fundamentals I | 1 Credit | 4 Credits | 12 |
| CON-123 | Carpentry Fundamentals II | 1 Credit | 4 Credits | 12 |
| CON-112 | Blueprint Reading \& Estimating | 1 Credit | 3 Credits | 12 |
| CON-255 | Carpentry I | 1 Credit | 4 Credits | 12 |
| CON-256 | Carpentry II | 1 Credit | 4 Credits | 12 |

## Diesel:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| DSL-636 | Air Systems \& Brakes | 1 Credit | 4 Credits | 12 |
| DSL-644 | Steering \& Suspension | 1 Credit | 4 Credits | 12 |
| DSL-101 | Diesel Shop Safety | 1 Credit | 1 Credit | 12 |
| DSL-142 | Electrical Systems | 1 Credit | 3 Credits | 12 |
| DSL-356 | Diesel Engines I | 1 Credit | 6 Credits | 12 |
| AUT-113 | Transportation Fundamentals | 1 Credit | 3 Credits | 12 |

Heating \& Air Conditioning (HVAC):

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| HCR-115 | Residential Heating Systems | 1 Credit | 4 Credits | 12 |
| HCR-155 | Troubleshooting Heating Systems | 1 Credit | 3 Credits | 12 |
| IND-190 | Skills \& Safety in Industry | 1 Credit | 1 Credit | 12 |
| HCR-210 | Residential Air Cond. Systems | 1 Credit | 4 Credits | 12 |
| HCR-240 | Troubleshooting Air Cond. Systems | 1 Credit | 3 Credits | 12 |
| ELT-745 | Maintenance Shop Operations | 1 Credit | 3 Credits | 12 |

Industrial Automation \& Robotics:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| ELT-170 | Introduction to PLC's | 1 Credit | 3 Credits | 12 |
| ELT-382 | Electronic Circuit Analysis | 1 Credit | 3 Credits | 12 |
| ELT-794 | Fluid Power I Pneumatics \& Hydraulics | 1 Credit | 3 Credits | 12 |
| IND-224 | Industrial Math \& Measurement | 1 Credit | 3 Credits | 12 |
| IND-190 | Skills \& Safety in Industry | 1 Credit | 1 Credit | 12 |
| ATR-102 | Introduction to Robotics | 1 Credit | 3 Credits | 12 |
| ELT-210 | Motor Control Circuits | 1 Credit | 3 Credits | 12 |
| ELT-318 | Analog \& Digital Electronics | 1 Credit | 3 Credits | 12 |
| IND-215 | Mechanical Systems I | 1 Credit | 3 Credits | 12 |
| WEL-335 | Ag \& Industry Welding | 1 Credit | 2 Credits | 12 |

## Tool \& Die:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| MFG-245 | Machine Theory \& Operations I | 1 Credit | 9 Credits | 12 |
| MFG-120 | Machine Trade Print Reading I | 1 Credit | 1 Credit | 12 |
| MFG-137 | Machinist Math I | 1 Credit | 2 Credits | 12 |
| MFG-138 | Machinist Math II | 1 Credit | 2 Credits | 12 |
| IND-190 | Skills \& Safety in Industry | 1 Credit | 1 Credit | 12 |
| BCA-119 | Computer Orientation | 1 Credit | 1 Credit | 12 |
| MFG-302 | CNC Fundamentals | 1 Credit | 3 Credits | 12 |
| MFG-248 | Machine Theory \& Operations II | 1 Credit | 7 Credits | 12 |
| MFG-130 | Machine Trade Print Reading II | 1 Credit | 1 Credit | 12 |
| PHY-720 | Career Physics | 1 Credit | 4 Credits | 12 |

Welding:

| Course Number | Course Name | HS Credit | College Credit | Grade Level |
| :--- | :--- | :--- | :--- | :--- |
| WEL-274 | SMAW I: SENSE I | 1 Credit | 3 Credits | 12 |
| WEL-280 | Flux Core are Welding-Self Shielded | 1 Credit | 2 Credits | 12 |
| WEL-281 | Flux Core are Welding-Gas Shielded | 1 Credit | 2 Credits | 12 |
| WEL-244 | GMAW Sh Cir Transfer: SENSE I | 1 Credit | 2 Credits | 12 |
| WEL-110 | Welding Blueprint Reading | 1 Credit | 2 Credits | 12 |
| WEL-251 | GTAW Carbon Steel: SENSE I | 1 Credit | 2 Credits | 12 |
| WEL-252 | GTAW Aluminum: SENSE I | 1 Credit | 1 Credit | 12 |
| WEL-253 | GTAW Stainless Steel: SENSE I | 1 Credit | 1 Credit | 12 |


| WEL-245 | GTAW Spray Transfer: SENSE I | 1 Credit | 2 Credits | 12 |
| :--- | :--- | :--- | :--- | :--- |
| WEL-275 | SMAW II: SENSE I | 1 Credit | 3 Credits | 12 |
| WEL-240 | Welding Fabrication | 1 Credit | 3 Credits | 12 |
| IND-190 | Skills \& Safety in Industry | 1 Credit | 1 Credit | 12 |
| MFG-108 | Computer Aided Drafting | 1 Credit | 2 Credits | 12 |
| WEL-262 | Thermal Cutting Process I | 1 Credit | 2 Credits | 12 |
| WEL-250 | Welding Automation | 1 Credit | 2 Credits | 12 |

