Anamosa High School

2019-2020 Program of Studies



Anamosa High School 209 Sadie Street Anamosa, IA 52205 Phone 319-462-3594 Fax 319-462-2332 www.anamosa.k12.ia.us

Inspire Learn Lead

Welcome to Anamosa High School!

We are student-centered and futurefocused. We believe each student is
unique and it is our responsibility to provide
the best education possible in an environment
that is challenging, yet caring and inviting.
We are very proud of our students and
faculty. We look forward to sharing our
school and successes with you.

Administration

Jacqueline Lahey Principal

Bret Jones Assistant

Principal &

Athletic Director

Counseling Department

Kori Leighty Counselor

Trent Jeffrey Counselor

Barb Switzer Counseling

Secretary

This handbook will...



help parents and students plan a sequence of classes that fulfill graduation requirements and prepare students for further education, additional training, or immediate jobs. The classes offered at Anamosa High are grouped by departments. All classes are open to every student as long as prerequisites are fulfilled. Suggestions for appropriate class choices are given in each department's introduction. The final choice of classes should be based on requirements, student needs, and student interests. You are encouraged to read the information on the registration process very carefully.

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High School Graduation Requirements

To graduate from Anamosa High School, a student must earn a minimum of 56 credits. This program fulfills the requirements of the State of Iowa. To receive a diploma, the student must also have attended Anamosa High School for their final semester of their academic career.

ANAMOSA HIGH DIPLOMA REQUIREMENTS – 56 CREDITS

Anamosa High Courses	Minimum Requirements	Credits
English	4 years	8 credits
Math	3 years	6 credits
Science	3 years	6 credits
Social Studies	3 years	6 credits
Physical Education	4 Semesters	4 credits
Health	1 Semester	1 credit
Personal Finance	1 Semester	1 credit
Advisory	4 years	1 credit
Electives	4 years	Minimum 24 credits

Notice of Nondiscrimination

Students, parents, employees, and others doing business with or performing services for the Anamosa Community School District are hereby notified that this school district does not discriminate on the basis of race, color, creed, gender identity, religion, socioeconomic status, national origin, gender, marital status, sexual orientation, or disability in admission or access to, or treatment in, its programs and activities. Any person having inquiries concerning the school districts compliance with the regulations implementing Title VI, Title VII, Title IX, or the Americans with Disabilities Act (ADA). 504 is a direct contact: Superintendent, Anamosa Community School District, 319-462-4321, who has been designated by the school district to coordinate the school district's efforts to comply with regulations implementing Title VI, Title VII, Title IX, and the ADA, 504.

EXAMPLE FOUR YEAR PLAN WORKSHEET

9th	Fall	Credit	Spring	Credit
	English 9	1	English 9	1
	Math	1	Math	1
	Earth Science	1	Earth Science	1
	World History	1	World History	1
	Health & Development (PE credit)	1	Health & Development (Health Credit)	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Advisory	.125	Advisory	.125
	Total Credits		Total Credit	

10th	Fall	Credit	Spring	Credit
	English 10	1	English 10	1
	Math	1	Math	1
	Biology	1	Biology	1
	US History	1	US History	1
	Physical Education	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Advisory	.125	Advisory	.125
	Total Credits		Total Credits	

11th	Fall	Credit	Spring	Credit
	English 11	1	English 11	1
	Math	1	Math	1
	Science (student choice)	1	Science (student choice)	1
	Government	1	Personal Finance	1
	Physical Education	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Advisory	.125	Advisory	.125
	Total Credits		Total Credits	

12th	Fall	Credit	Spring	Credit
	College Prep Writing / Senior Seminar / Speech	1	College Prep Writing / Senior Seminar / Speech	1
	Math (Optional)	1	Math (Optional)	1
	Science (Optional)	1	Science (Optional)	1
	Economics	1	Elective	1
	Physical Education	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Elective	1	Elective	1
	Advisory	.125	Advisory	.125
	Total Credits		Total Credits	

^{*}PE is required one semester per school year and will be scheduled where it fits best. Students should not register for more than one PE course unless it is necessary to make-up a previously failed PE class

High School Requirements

Specific Requirements

- 1. A minimum of 8 credits of English is required for graduation.
- 2. The social studies requirement includes one year of World History, one year of U.S. History, one semester of Government, and one semester of Economics.
- 3. The physical education requirement requires the student to be registered in PE one semester each year of attendance.

 Medical Waiver The requirement may be waived for those students with a doctor's medical excuse filed in the Health Office.

 This waiver must be filed annually.
- 4. The State of Iowa requires the student to be registered in health for one semester unless a parent waiver request is approved

Grade Point Average (GPA)

GPA is one of the most important records maintained at Anamosa High School. The student's cumulative GPA is recalculated at the end of each semester, using all the courses that have been completed. Anamosa uses a 4-point system. GPA points are calculated by converting the letter grades:

A+=4.33	C+=2.33
A = 4.0	C = 2.0
A = 3.67	C - = 1.67
B+=3.33	D+=1.33
B = 3.0	D = 1.0
B- = 2.67	D - = .67
	F = 0

Anamosa High School does not weight grades except for AP courses that are on a 5-point Scale.

Credits

The school year is on a semester pattern. Students may not sign up for only one semester of a full year class unless they are repeating due to failure.

Course Load

All students are required to take a minimum of eight courses each semester. All students are required to carry the minimum class load to be considered full-time students in good standing at Anamosa. Students are required to demonstrate a minimum level of proficiency prior to enrolling in advanced level courses.

Schedule Adjustments

All schedule changes must be made prior to the start of the semester. Students are not allowed to change their schedules unless a special circumstance exists. Students may drop/add courses for the following reasons: to correct deficiencies, to correct an error in placement or obvious errors in scheduling, or to assure graduation credits.

Withdrawal From a Course

Students are encouraged to complete the courses they start; however, in the event a student wishes to withdraw from a course, the following guidelines will be used. A student may withdraw from the course with parent permission and administration approval. The transcript will reflect an "F" (Failing) grade. Student will be assigned to another valuable course if possible.

Alternative Education (**REVIVE**)

Students at risk of withdrawing from high school or those far behind in credits may be considered for a referral to the Anamosa High School alternative program, REVIVE. The REVIVE classes may not be used to accelerate the date of graduation.

Course Level Changes

- 1. All level change requests must be made by the seventh day of each semester. All requests made after this time must have administrative approval.
- The request to change will reflect input from a counselor, course instructor, and must have parent approval.
- 3. The student will be moved to a section meeting at the same period as the course dropped unless the section is filled or there is no section at that time. Capacity levels of classes will not be exceeded to grant the request.
- 4. The student's grade-in-progress will be transferred to the new class.

Early Graduation

Early graduation is not encouraged because it generally provides only a minimum program; however, there are circumstances under which it is possible. Arrangements must be made through the counseling office. Students must submit a proposal for early graduation for Board approval. The proposal should be submitted to the Counseling Office. This proposal shall contain a completed parent consent form and a letter to the principal stating why the student wishes to graduate early. Once a Student reaches 56 credits, they are eligible to graduate.

Credit Recovery

If students are behind in credits, they may elect or be referred to take courses through an on-line credit recovery program, called Edgenuity.

Special Programs

Special programs are offered to meet the individual needs of students and include the full continuum of supports and services. Participation requires referral and staffing procedures; the following support services are available every semester and students receive one credit per semester.

English Language Learner

These services support non-native English speakers for their experiences and course work in an American High School. English is taught as a foreign language with emphasis on comprehension of both written and oral English. Areas of study include vocabulary, structure, pronunciation, spelling and composition. Placement is determined through an individual evaluation; students may receive support that is intensive (beginning), intermediate, or transitional.

Special Education Supports

Services and supports are available for students with Individual Education Plans. Specific supports and service are determined with input from parents, students, counselor, and case manager.

New Students to Anamosa High School

Transfer students, students who have been attending another high school outside of Anamosa Community School District and whose parents/guardians have moved legal residence to Anamosa may enroll at Anamosa High School and begin classes anytime during the school year.

*Note: A transcript from the last school attended is required before the student is allowed to enroll at Anamosa High School. Grade Transfer Policy: Anamosa High School will accept previous school's letter grades as the official grades.

Senior Year Plus Programs

Senior Year Plus is an important part of high school reform efforts in Iowa. To prepare students for a competitive, knowledge-driven global economy, schools must prepare students for the demands of college and work. Senior Year Plus includes requirements specific to particular programs including: Advanced Placement (AP), concurrent enrollment, career academies, and regional academies. To participate in Senior Year Plus programming, students must meet the academic requirements of both the school district and postsecondary institution. Students are determined to be proficient if they score at or above the 41% in each of the subject areas: reading, mathematics, and science. Students also have to have a score of 81 or better on the Accuplacer test in order to take Arts and Science 1. High school students may not enroll full-time in college credit coursework through Senior Year Plus at any one postsecondary institution. The full-time enrollment is defined as 24 or more credit hours per academic year. Any student who participates in Senior Year Plus Program is highly encouraged to file a FERPA form for ongoing communication between parents and program.

Dual Credit Options

The Dual Credit Program gives motivated, eligible high school students the opportunity to get a "jump start" on college by earning college credit before attending on a full-time basis. Options include Concurrent Enrollment, Kirkwood Academies, Project Lead the Way (PLTW) and AP courses. A course assessment or final exam may be required Options include Concurrent Enrollment, to receive college credit.

Concurrent Enrollment Option

Anamosa High School students have the opportunity to take approved courses at Kirkwood Community College under the state's Senior Year Plus legislation, if they meet certain requirements. (Students are not limited to Kirkwood.) The intention is to provide a wider variety of options by enabling students to enroll part-time in approved courses at eligible postsecondary institutions. This includes courses in mathematics, social studies, humanities, and vocational technical education. Students who successfully complete college courses may earn both high school and college credit. Interested students should contact the counseling office regarding the state guidelines.

Kirkwood Regional Center

The Kirkwood Regional Center at Monticello offers students from all Jones county school districts the chance to earn both college and high school credit in career academies in a state-of-the-art facility. Students may choose from 11 different academies that provide a head start to post-secondary education or lead directly to a post-high school career. In addition to academies, also available are college and high school "companion" courses. Transportation to and from the regional center is provided. If students wish to transport themselves they must complete the Activity Transportation Release Form. Form must be turned in with signatures before students can transport themselves.

Kirkwood Career Academies

Anamosa High School students may attend the Kirkwood Jones Regional Education Center in Monticello to participate in the Career Academy classes.

The academies include:

- Arts & Sciences I & II (Academic)
- Automotive Technology
- Graphics & Media
- Health Science
- Information Technology
- Engineering: Project Lead the Way
- ACE: Architectural Construction
- Advanced Manufacturing
- Hospitality Management
- Emergency Medical Service

(Please see page 56 – for more detailed descriptions on the academies.)

Recommendations

AHS strongly recommend, that students take certain courses at AHS before they take advanced courses at Kirkwood. Our goal is to ensure that our students are prepared and will be successful in these college courses. Please see page 59 for recommendations for specific courses. The grade earned in each completed course becomes part of the student's permanent records and can affect their ability to get financial aid at Kirkwood or other colleges or universities. Students, also receive a high school credit.

Kirkwood/AHS Programs Kirkwood Make-Up Credits

AHS students deficient in credits may earn up to five credits at the Kirkwood Learning Resource Center as part of the Jones Regional Education Center (JREC) in Monticello. The cost for each course is \$150 plus a \$60 book deposit of which the student is responsible. It is refundable at the completion of the class. Students interested in this cooperative program must make arrangements and obtain a referral from the high school guidance office.

Kirkwood High School Completion Diploma (HiSET)

AHS students who make the choice to drop out of high school or who are unsuccessful in the REVIVE program should consider a Kirkwood High School Diploma, which can be earned by enrolling in the High School Completion Program at the Monticello Kirkwood Learning Center. There is no cost for this program if referred by AHS counselors. Kirkwood also offers the complete HiSET (Formally known as GED) high school equivalency program at no cost. All arrangements and referrals must be done through the counseling office.

ADVANCED PLACEMENT

(AP): AP provides an academically challenging curriculum that allows students to take college-level courses while still in high school. Students have the opportunity to earn credit or advanced standing at most of the nation's colleges and universities. Colleges and universities use the AP results to determine college preparedness, student motivation, and placement. For each AP course, an AP Exam is administered in May. At Anamosa, students are required to take the AP exam if enrolled in and AP course. When signing up for an AP Course you are signing up for the entire year. A fee is required to take the AP exam, which is administered in May. Please refer to the College Board website at

www.collegeboard.com/student/testing/ap/about.html for further information. AP Courses taught at Anamosa High School include:

- Calculus
- Statistics
- English Language
- English Literature
- US History
- US Government

College Entrance Requirements Admissions Requirements

The State Board of Iowa Higher Education, has adopted minimum subject requirements for public universities in an effort to help high school students improve their academic preparation for a baccalaureate degree program. Anamosa High School strongly recommends that students take courses to meet these requirements.

Individual public universities and community colleges may have additional subject requirements in effect, as well as, requirements involving test scores and grade point averages. Applicants must contact each college or university individually for details about all of its requirements. Research has shown that students who take courses that match these requirements generally have higher ACT or SAT scores. For more information, check "Building Your Future: Preparing for Academic Success" at Regent Universities of Iowa.

Minimum Iowa Regent University Requirements

English: 4 years, emphasis on analysis and interpretation of literature.

Mathematics: 3 years, including 2 years of Algebra, 1 year of Geometry
Science: 3 years, including 2 years from any two of the following – biology, chemistry, physics
Social Studies: 3 years
World Language: 2 years of a single foreign language

Eligibility Center NCAA Guidelines

In order to earn a scholarship and play an interscholastic sport at a Division I or II college, a high school student must meet specific requirements set forth by the National Collegiate Athletic Association (NCAA). Not all course work at the high school level is accepted as core under NCAA preview. Please check for your courses on the 48-H approved courses roster located in the NCAA Eligibility Center website.

In addition, students must meet the guidelines for the composite score on the ACT or SAT exams. The NCAA accepts national and state official test scores. Anamosa High School does not send testing information. The students must code #9999 on the ACT test grid for the official score to be mailed directly to the Eligibility Center.

Students should see their coach and/or counselor for further details.
Please refer to the NCAA Eligibility
Center for further details at
eligibilitycenter.org. Students can register
on-line and find additional information at
the Eligibility Center website,
http://www.ncaa.org/

NAIA Eligibility Requirements

First time National Association of Intercollegiate Athletics (NAIA) students who wish to participate in athletics must have their eligibility determined by the NAIA Eligibility Center. In the NAIA, a student-athlete can compete during four "seasons of competition" within the first 10 semesters (15 quarters) in college. A season of competition is counted when you participate in one or more intercollegiate contests whether at the varsity, junior varsity or freshman level. To compete, student- athletes must be enrolled in at least 12 hours every semester and be making normal progress toward a baccalaureate degree. They must also meet freshman and/or continuing eligibility rules. Every student interested in playing sports at an NAIA college needs to register online. http://www.naia.org/

NCAA & NAIA Academic-Eligibility Requirements for Freshmen

An entering freshman must:

- Be a graduate of an accredited high school or be accepted as a regular student in good standing as defined by the enrolling institution; and
- Meet two of three requirements. If as an entering freshman you do not meet at least two of three standards, you cannot participate in athletics for the first full year of attendance (two semesters, four quarters, or equivalent).
- Achieve a minimum on ACT or SAT.
- Achieve a minimum cumulative GPA
- Graduate in the top half of the class

So What's Your RAI Score?

(2 x ACT composite score)

- + (1 x percentile high school rank)
- + (20 x high school GPA)
- + (5 x number of high school core courses)

Regent Admission Index Score

Effective fall semester 2009, if you wish to enter any of the lowa Regent universities as a freshman, you must meet the new Regent Admission Index (RAI) requirement. If you meet the minimum high school course requirements listed below and you earn an RAI score of at least 245, you will automatically qualify for admission to any of the lowa Regent universities. If you meet the minimum high school course requirements and you earn an RAI score below 245, you may still be considered for admission to any of the Regent universities on an individual basis.

The most effective way to increase your RAI score is to take additional core courses (i.e., college-prep courses offered by your high school in any of the following subject areas: English, math, science, social studies, or foreign language). It will not only enhance your chances for gaining admission, it will also increase your likelihood for academic success after you've entered college! If you have questions about which of your high school's courses are considered core courses, just ask your guidance counselor.

Go to www2.state.ia.us/regents/rai/ to calculate your own RAI score.

	OPTIMUM				
SUBJECT	Iowa State University The University of Iowa		University of Northern Iowa	PREPARATION	
English	4 years emphasizing writing, speaking, reading, as well as an understanding and appreciation of Berature.	Years with an emphasis on the analysis and interpretation of literature, composition, and speech.	4 Years including one year of composition, also may include one year of speech, communication, or journalism.	4 Years with an emphasis on the communication skills of writing reading and listening, and the analysis and interpretation of literatural in addition, courses in journalism and media literacy will be valuable. Extracurricular activities in debate, speech context, newspaper, and yearbook will further develop essential competencies.	
Math	3 year's including use year each of algebra, prometry, and advanced algebra.	3 YEATS including two years of algebra and one year of geometry for admission to the College of Libertal Arts and Sciences. 4 YEATS including two years of algebra, one year each of geometry and high math (trigonometry, subyra, or takulus) for admission to the College of Engineering.	3 YEHS including the equivalent of algebra, geometry and advanced algebra.	4 years, one in each year of high school While advanced course like calculus and statistics are good, it's more important that you gai a complete understanding of advanced algebra and trigonometry.	
Natural Science	3 years including one year each from any two of the following biology, chemistry, or physics.	Year's including one year each from any two of the following biology, chemistry, or physics for admission to the College of Liberal Aris and Sciences. Year's with at least one year each in chemistry and physics for admission to the College of Engineering.	Years including courses in general science, blokgy, chemistry, earth science, or physics. Laboratory experience is highly recommended.	4 Years, one in each year of high school. To be really well prepare take at least one year each of biology, chemistry, and physics. These can be taken in any order and may be taught productively in either a separate or an intergraded fashion, depending on your school's offerings.	
Social Studies	2 years for admission to the College of Agriculture and Life Sciences, Authors, Derign, Engineering, and Muran Sciences. 3 years for admission to the College of Elberal Arts and Sciences.	Years with US history and world history recommended for admission to the College of Liberal Arts and Schenoca. Years with US history and world history recommended for admission to the College of Intignenting.	3 yEGIS including courses in anthropology, economics, geography, government, history, psychology, or molology.	YPATS is essential, but four in better 'to be at least one year each of US and world history. Additional courses in authropology economics, political science, psychology, and occiology provide as important understanding of political, accial, and economic institutions.	
Foreign Language	Years of a single foreign language for admission to the College of Liberal Arts and Sciences (and effective fall 2009, for the College of Engineering).	2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation.	Foreign language courses are not required for admission. However, two years of foreign language in high school with a C- or above in the last course will, need the university graduation requirement.	4 years of a single foreign language. By taking foreign language during all four years of high school, you'll go beyond the basic skills and begin to use the language and reinforce your fluency.	
Other Courses	Specific elective courses are not required for admission.	Specific elective courses are not required for admission.	2 YEARS of additional courses from the required subject areas, foreign language, or the line arts.	Explore! Courses in the line arts, performing arts, computers, or technology will help round out your high school experience. Your titums field of concentration or career may be in one of those areas. Follow your interest, takens, and the strengths of your school. Remember to choose courses with high academic tandards.	

Note: For purposes of calculating the RAI, SAT scores will be converted to ACT composite equivalents, 99% is the top value for high school rank, 4.00 is the top value for GPA, and the number of high school core courses completed is expressed in terms of years or fractions of years (e.g., one semester equals 0.5 year).

Agri-Science

The Agriculture courses are designed to prepare all students for college, technical training, apprenticeships and careers, including striving for higher achievement in science, math and communication. This diverse Career Cluster prepares learners for careers in the planning, implementation, production, management, processing and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, and other plant and animal products. It also includes related professional, technical, and educational services.

Scope and Sequence

Elective / Science

9th	10th	11th	12th
Introduction to Agriculture Food & Natural Resources (AFNR)	Animal Science Pathway AFNR Animal Science Plant Science Pathway AFNR Plant Science Ag Mechanics Pathway AFNR Ag Power & Technology Small Gas Engines	Animal Science Pathway AFNR Animal Science Vet Tech KCC- Survey of Animal Industry Plant Science Pathway AFNR Plant Science Horticulture Landscape / Nursery	Animal Science Pathway AFNR Animal Science Vet Tech KCC- Survey of Animal Industry Plant Science Pathway AFNR Plant Science Horticulture Landscape / Nursery
	Ag Business Pathway AFNR Environmental Science	Ag Mechanics Pathway AFNR Ag Power & Technology Small Gas Engines Ag Business Pathway AFNR Environmental Science Agribusiness Mgt/Marketing	Ag Mechanics Pathway AFNR Ag Power & Technology Small Gas Engines Ag Business Pathway AFNR Environmental Science Agribusiness Mgt./Marketing

050/051 Intro to Agriculture, Food & Natural Resources (AFNR)

2 credits (Science) Year Long

Grades 9-12 Prerequisite: None

Students participating in the Introduction to Agriculture, Food and Natural Resources course will experience hands-on activities, projects, and problems. Student experiences will involve the study of communications, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. For example, students will work in groups to determine the efficiency and environmental impacts of fuel sources in a practical learning exercise. Woven throughout the course are activities to develop and improve employability skills of students through practical applications. Students will explore career and post-secondary opportunities in each area of the course. In additions, students will understand specific connections between their lessons and Supervised Agricultural Experience and FFA components that are important for development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

078 Animal Science

2 credits (Science) Year Long

Grades 10-12 Prerequisite: AFNR or Instructor Approval

The major focus of the Animal Science course is to expose students to the world of agriculture, animal science, and career options. Students participating in the Animal Science course will have experiences in various animal science concepts with exciting hands-on activities, projects, and problems. Students' experiences will involve the study of animal anatomy, physiology behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. In addition, students will understand specific connections between animal science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

056/057 Plant Science

2 credits (Science) Year Long

Grades 10-12 Prerequisite: AFNR or Instructor Approval

This Plant Science course will expose students to the world of agriculture, plant science, and career options. Students will have experiences in various plant science concepts through exciting "hands-on" activities, projects, and problems. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production and its impact on the individual, the local, and the global economy.

058 Agribusiness Management/Marketing

1 credit 1 Semester

Grades 11-12 Prerequisite: AFNR, Animal or Plant Science or Instructor Approval

In Agribusiness Management/Marketing, students will learn to apply accounting principles and economic concepts to farm and agribusiness situations. Concepts/ topics that will be learned include comparing the single and double entry accounting systems, purpose of the financial statement, cash flow statements and profit-loss statement, money and banking, credit requirements and procedures for getting an agricultural loan, financial analysis, investment analysis, marketing options, and Federal government programs and agencies. This course will also introduce students to the role of agribusinesses, which is the coordination of all activities that contribute to the production, processing, marketing, distribution, financing and development of agricultural commodities and resources. Business organizations, marketing concepts, sales techniques, customer relations considerations, satellite systems and computer databases and spreadsheets will be studied.

080 AG Power and Technology

1 credit 1 Semester

Grades 11-12 Prerequisite: AFNR or Instructor Approval

The focus of Agricultural Power and Technology (APT) is to expose students to mechanics, power, technology, and career options in the world of agriculture. Students participating in the APT course will have experiences in various mechanical and engineering concepts with exciting hands-on activities, projects, and problems. Student's experiences will involve the study of energy, tool operation and safety, material properties, machine operation, and structural components.

Students will acquire the basic skills to operate, repair, engineer, and design agricultural tools and equipment. Throughout the course, students will apply the engineering principles to the construction of machines and structures. Students will explore projects and problems similar to those that a mechanic, technician or engineer may face in their respective careers. In addition, students will understand specific connections between science, math, and technical skills applied to Supervised Agricultural Experiences and FFA components that play an important role developing an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

The APT course of study includes: • Shop Safety • Tool Operation • Material Selection and Uses • Fabrication • Energy and Power Production • Machine Components and Design • Agricultural Structures • Engineering • Technical Applications of Math and Science

072 Horticulture (Floriculture)

1 credit (Science) 1 Semester

Grades 11-12 Prerequisite: AFNR or Plant Science or Instructor

Approval

Horticulture is an introduction to the principles and practices in the development, production and use of horticultural crops (fruits, vegetables, greenhouse, turf, nursery, floral and landscape). This includes the classification, structure, growth and development, and environmental influences on horticultural plants, horticultural technology, and an introduction to the horticultural industries.

067 Landscape/Nursery (Spring)

1 credit 1 Semester

Grades 11-12 Prerequisite: AFNR or Plant Science or Instructor

Approval

The Landscape/Nursery course is for those students who love plant materials used in landscaping residential homes, schools, government buildings and businesses. Students will be able to identify ornamental grasses, vines, ground covers, shrubs and trees commonly used in Iowa landscaping situations. Students will study the environmental requirements needed for good plant establishment and growth. Computer technology will be used to make several landscape plans using the principles of landscaping. Establishing, maintaining and renovating lawns will also be studied. Student will practice what they have learned through or by completing landscaping projects.

066 Veterinary Technology

1 credit (Science) 1 Semester

Grades 11-12 Prerequisite: AFNR or Animal Science or Instructor

Approval

The Vet Tech course is intended to prepare students for college, technical training, apprenticeships, and careers related to health and care of domesticated farm animals, companion animals, and small pets. Students interested in zoology and marine biology may also want to take this course. Cell biology and animal anatomy and physiology concepts/topics will be studied in depth. Common ailments and ideas will also be investigated. Case studies will be used to help student develop problem-solving skills.

055 Environmental Science

1 credit (Science) 1 Semester

Grades 10-12 Prerequisite: AFNR or Instructor Approval

The Environmental Science course is for those students interested in the great outdoors. General scientific and technological concepts will be used to investigate biomes, national and private forests and parks, soil conservation, water quality, fish and game management, and forestry managements. Students will take field trips to local areas, participate in the IOWATER Volunteer Monitoring Program, and listen to representatives from related educational institutions, community organizations, and others.

070 Small Gas Engines

1 Credit 1 Semester

Grade Level: 10-12 Prerequisites: none

The Small Engines course is an introductory course on the four-stroke cycle, single cylinder engine. The student will study the four strokes, engine parts identification, and engine operation. The student must tear down a four-stroke engine, inspect and repair, reassemble, trouble-shoot, and work to get the engine running. Student evaluation will be outcome based. Students will understand and be able to demonstrate: proper safety procedures in the small engines laboratory, proper use of tools and measuring instruments, proper use of fasteners, sealants, and gaskets, basic engine construction and principles of operation, differences between four and two stroke engines, basic theory of carburetion, basic theory of ignition systems, basic theory of the lubrication system and basic theory of cooling systems. It is strongly recommended that students take this course before enrolling in Automotive Technology at the Jones Regional Education Center.

Dual Credit Courses:

081 Survey of the Animal Industry

1 credit 1 Semester

Grades 11-12 Prerequisite: AFNR or Instructor Approval

(Part of the Kirkwood Agriculture Science Academy-3 college credits awarded after successful completion)
This course is an introduction to the uses of animals and animal products. It will include basic terminology, production practices, management and marketing of animals. Survey of the Animal Industry is a Kirkwood Community College Academy course. Students will be registered through Kirkwood and receive three college credits.

Business Education

The business field is a broad term comprising the largest employment of people in the United States. Students who take advantage of the wide variety of business course offerings at the high school level will find themselves better prepared for entry into college business courses or the business world. The Anamosa High Business Department offers a complete core of elective courses that teach the essentials for today's world: courses that teach practical skills, courses that provide career information to help students relate their interest, needs, and abilities to occupational opportunities in business, and courses that effectively teach both oral and written communications in order to develop interpersonal and human relation skills. These courses build a firm foundation for entry-level jobs and post-secondary education.

Scope and Sequence

Elective Courses

9th	10th	11th	12th
Intro to Business	Intro to Business Entrepreneurship Accounting Principles of Marketing	Intro to Business Entrepreneurship Accounting Principles of Marketing	Entrepreneurship Accounting Principles of Marketing

150 Introduction to Business

1 credit 1 Semester Grades 9-11 Prerequisite: None

The Introduction to Business course allows students to explore basic business concepts and structures in a collaborative, team environment. Through project-based activities and computer simulations students will gain experience in business ownership, entrepreneurship, marketing, accounting, management, ethics, and employability skills. Students will also explore the relationship of business with economics, government, and the global economy. This course provides students with knowledge that will greatly aid them in more advanced business classes offered at Anamosa. It is recommended that freshmen and sophomores take this course before taking a more advanced business course.

155/156 Accounting

2 credits Year Long Grades 10- 12 Prerequisite: None

The Accounting course gives students a thorough background in the basic accounting procedures used to operate a business and also prepares them for college accounting classes, which are required of all business majors. Students will learn the accounting cycle and use double entry accounting for a variety of business organizations, including proprietorships, partnerships, and corporations. Students will prepare monthly journals, ledgers, payrolls, and worksheets as well as end-of-fiscal-period financial statements. Both manual and automated accounting procedures are covered. Several projects and business simulations are used during the course to add realism and to give the students practical experience during both terms. Accounting is designed to prepare students for employment in business, provide a background for personal recordkeeping, and create a knowledge base for advanced accounting study in college. This course can be articulated into credit at Kirkwood Community College if students meet competency requirements.

147 Principles of Marketing

1 Credit 1 Semester

Grades 10-12 Prerequisite: None (Preference: take Intro to Bus.

First)

The Principles of Marketing course will familiarize students with the basic terminology, functions of marketing, and the marketing mix related to businesses within our global economy. Students will focus on understanding and analyzing consumer motivation and how to use that understanding to develop a successful marketing campaign using the most effective marketing mix. Students will participate in real-world project-based learning, case studies, technology, and simulations to gain a deeper understanding of marketing and develop 21st Century Skills in the areas of technology, creativity, innovation, collaboration, problem-solving, and communication skills. Students will develop an idea for a new cereal, design a cereal package, and develop a marketing plan to introduce it. This course is highly recommended for students considering a business major or career after high school.

151 Entrepreneurship

1 credit 1 Semester Grades 10-12 Prerequisite: None

The Technology and Entrepreneurship is designed to allow students to use technology to solve problems in the real world. The focus of this course is developing minds to form solutions to problems through the use of invention and technology. Students will explore invention literacy using inventor's kits as well as other methods of allowing students to work in a self-directed and creative laboratory environment to create, explore, and problem-solve.

Information Technology

Students need to know the latest technologies and develop cutting edge skills for use in current jobs, future careers, and in their homes. All individuals use some form of technology, whether they watch television, send faxes, or interact with others around the world via satellite and the World Wide Web. Information Technology courses are designed to give students a broad base of expertise within the field. Students interested in furthering their education in the technical field will benefit from this program of studies.

Scope and Sequence

Elective Courses

9th	10th	11th	12th
	Desktop Publishing (KCC) Fund of Web Programming (KCC) Emerging Tech Trends (KCC) Computer Science	Desktop Publishing (KCC) Fund of Web Programming (KCC) Emerging Tech Trends (KCC) Computer Science	Desktop Publishing (KCC) Fund of Web Programming (KCC) Emerging Tech Trends (KCC) Computer Science

164 Desktop Publishing (Part of the Kirkwood Information Systems Management Academy-**3 college credits awarded after successful completion**)

1 credit 1 Semester Grades 10-12 Prerequisite: None

The Desktop Publishing course allows students to create professional-quality documents, such as one-page bulletins for short newsletters, magazine covers, and layouts using desktop publishing software. The students learn to use a variety of application software such as Adobe InDesign, Adobe Photoshop, Adobe Illustrator, and Microsoft Publisher. Desktop Publishing is a Kirkwood Community College Information Systems Management Academy course and students will receive three college credits and will be registered through Kirkwood.

169 Computer Science

1 credit 1 Semester Grades 10-12 Prerequisite: None

The computer science course will provide students with basic computer programming language skills using scratch and a corresponding curriculum through code.org. These programs are intended to help a student gain basic knowledge and will not fully prepare students for a computer programming job, but will set a foundation for those interested in the field. Students will use self-directed learning, collaboration, and instructor guidance to complete a variety of programming projects, including simple computer game creation. Students will have the opportunity through this course to explore whether there is an interest or aptitude to pursue computer programming as a potential career. This course will include various elements of computer programming career exploration. Students will further develop 21 Century Skills needed for future personal career success.

148 Fundamentals of Web Programming (Part of the Kirkwood Information Systems Management Academy-3 college credits awarded after successful completion)

1 credit 1 Semester Grades 10-12 Prerequisite: None

In Fundamentals of Web Programming, students must have strong computer skills – 95% of class time is working on a computer. In this college credit course students will learn the basics of writing Hypertext Markup Language (HTML) to create Web pages that include graphics, links, tables, frames, forms and styles. Students will also learn the basics of Cascading Style Sheets (CSS), JavaScript, and Dynamic HTML on an introductory level. Using project-based learning in the lab students will create Web pages and develop a Web site that includes text, tables, graphics, and Web forms. Fundamentals of Web Programming is a Kirkwood Community College Academy course. Students will be registered through Kirkwood and receive three college credits.

170 Emerging Technology Trends (Part of the Kirkwood Software Specialist Academy-**3 college credits** awarded after successful completion)

1 credit 1 Semester Grades 10-12 Prerequisite: None

Emerging Technology Trends works to improve communication skills by using multimedia technology which is the goal of the class. Multimedia technology means different things to different people. It can be a communications tool, a teaching tool, a sales tool, or an artistic medium. Multimedia technology is a tool--not an end in itself. Students will move through the basics of PowerPoint and then add advanced features. Students will learn and use basic design strategy for presentations. Students will use clip art, download graphics from the Internet, edit graphics, and use photo editing software. Students will learn to capture and edit sound using a music mixing and editing software. Students will capture and edit video files. Students will use these newly learned skills to create movies using a video creation and editing software. Students will be registered through Kirkwood Community College.

Family & Consumer Sciences

Our Family and Consumer Science program seeks to enable students to become independent and autonomous adults by providing functional learning experiences. Student who take advantage of the wide variety of Family and Consumer Science courses will better prepare themselves for everyday living, no matter what field they choose. The courses provide career information to help the students relate their interest and skill to job opportunities. The skills practiced in these courses also enable students to learn entry-level job skills, especially teamwork. They build a firm foundation for post-secondary education.

Scope and Sequence

Elective Courses

9th	10th	11th	12th
Design:	Design:	Design:	Design:
Fabric Arts	Fabric Arts	Fabric Arts	Fabric Arts
Fashion	Fashion	Fashion	Fashion
Housing & Interiors	Housing & Interiors	Housing & Interiors	Housing & Interiors
Intro to Design	Intro to Design		
		Foodservice/ Hospitality:	Foodservice/ Hospitality:
Foodservice/ Hospitality:	Foodservice/ Hospitality:	Foods 1	Foods 1
Foods 1	Foods 1	Foods 2	Foods 2
	Foods 2	Introduction to Hospitality	Introduction to Hospitality
Development:	Introduction to Hospitality		
Child Development		Development:	Development:
1	Development:	Child Development	Child Development
	Child Development	Child Care Professional	Child Care Professional
	Child Care Professional	Parenting	Parenting
	Parenting	Relationships	Relationships
	Relationships	Adult Living	Adult Living

254 Child Development

1 credit 1 Semester

Grades 9-12 Prerequisite: None

In the Child Development course, students will study the emotional, social, physical, and intellectual development of children. The course includes development the first year through age six. This course will provide useful information for anyone who plans to be a mother, father, teacher, or caretaker of young children.

255 Child Care Professional (Formally Child Development 2)

1 credit 1 Semester

Grades 10-12 Prerequisite: Child Dev. 1

The Child Care Professional course will introduce students to the field of early childcare education. Students will examine types of early childhood programs, observation techniques, health and safety, guidance skills and learning experiences for children. Students will create their own preschool or kindergarten and plan a variety of lessons based around a theme. Students will also spend multiple days working with preschool, kindergarten, or first grade students. This course will provide all the information necessary to pass the test for the Child Development Associate (CDA) credential.

250 Foods 1

1 credit 1 Semester

Grades 9-12 Prerequisite: None

The Foods I course has been designed to help students understand basic food preparation, terminology, and equipment. Students will complete units on kitchen safety, measuring, cookies, quick breads, yeast breads, eggs, fruits, vegetables and ground beef.

252 Foods 2

1 credit 1 Semester

Grades 10-12 Prerequisite: Foods

This advanced foods course will take a deeper look into the culinary field. Students will study different types of careers in the foodservice industry along with experimenting with a variety of cooking methods. Other units include: types of chefs, knife skills, garnishes, spices, sauces, soups, salads, casseroles, and cake decorating.

253 Intro to Hospitality

1 credit 1 Semester

Grades 10-12 Prerequisite: Foods

Introduction to Hospitality introduces students to the five segments of the hospitality industry-foodservice, lodging, travel, tourism and recreation. The business aspects: hospitality management, human resources and marketing will be covered. Career paths in the hospitality industry will also be examined.

258 Fabric Arts

1 credit 1 Semester

Grades 9-12 Prerequisites: None

The Fabric Arts course is for the student who is interested in any aspect of sewing. Students will cover information on various types of fabrics, hand stitching techniques, basic sewing skills and using a sewing machine. Students will create multiple projects using different types of fabrics, patterns and techniques.

261 Fashion

1 credit 1 Semester Grades 9-12 Prerequisite: None

This Fashion course will cover information on various types of fabrics and clothing care. We will also take a look into the principles and elements of design, color schemes, fashion history and fashion trends. Multiple fashion designers and their clothing or shoe lines will be studied. Careers in retail and fashion merchandising will also be examined.

256 Relationships

1 credit 1 Semester

Grades 10-12 Prerequisite: None

This Relationships course is designed for the student who wishes to better understand themselves, their family, and their roles in society. Students will complete projects centered around communication, leadership and teamwork. Other units covered will be: healthy vs. unhealthy relationships, family relationships, dating / marriage, and workplace relationships.

259 Housing & Interior (Formerly Interior Design)

1 credit 1 Semester

Grades 9-12 Prerequisite: None

Housing and Interiors is a project-based class that covers many aspects of housing. Units include: exterior housing styles, interior styles, color schemes, principles and elements of design, furniture selection and furniture arrangement. Students will complete many projects and use websites to design a layout and furnish a home.

257 Parenting

1 credit 1 Semester

Grades 10-12 Prerequisite: None

The Parenting course content includes: the decision to parent, the family life cycle, the reproduction process, the nine months of pregnancy, labor and delivery, newborn needs, and the roles of being a parent. This class also requires taking home a computerized baby for four evenings or one weekend.

263 Adult Living

1 Credit 1 Semester

Grade 11-12 Prerequisite: None

This Adult Living course prepares students for everyday life ad helps them prepare for living on their own. Course content includes: everyday household tasks, cooking simple meals, job skills, travel and transportation, managing money, health and safety, and many other topics.

264 Intro to Design

1 credit 1 Semester

Grades 9-10 Prerequisite: None

Intro to Design is an introductory class that will cover many aspects of design. Units include: types of fabric, clothing care, basic sewing skills, color schemes, and elements and principles of design. This class would be a great starting point for students that want to learn more about design in Fabric Arts, Fashion, and Housing and Interiors.

Human Growth and Development

1 Credit REQUIRED

1 Term during grades 9-12

Courses that will meet this graduation requirement are:

Health & Development
Child Development 1
Relationships
Parenting
(See descriptions under Family & Consumer Science)

605. Health & Development

1 Credit 1 Semester

Grade 9 Prerequisite: None

1 Credit Human Growth

Topics for Health and Development include: Substance abuse, Human Sexuality, Contagious Disease (STI's), and Dimensions of Health.

Art

Art Department courses are elective courses. The content area of the Art Department provides a foundation for all students to pursue life-long learning skills and possible art careers. Knowledge and skill in this content area also provide many advantages in choices and decisions the students make over their lifetime. The content area will include, but not limited to career potential, work ethic, life-long learning, critical thinking, problem solving, decision-making, and collaborative learning. The learning goals of the art department are:

- To understand and apply media, techniques and processes;
- To use knowledge of structures and functions;
- To understand the visual arts in relation to history and cultures;
- Reflect upon and assess the characteristics and merits of their work and the work of others;
- To make connections between visual arts and other disciplines

Scope and Sequence

Elective Courses

9th	10th	11th	12th
9th 3-D Studio Printmaking Ceramics 1 Drawing 1 Painting 1 Graphic Design	3-D Studio Printmaking Ceramics 1 Ceramics 2 Drawing 1 Drawing 2 Painting 1 Painting 2 Video Production 1 Video Production 2 Graphic Design	3-D Studio Printmaking Ceramics 1 Ceramics 2 Drawing 1 Drawing 2 Art Portfolio Painting 1 Painting 2 Video Production 1 Video Production 2 Graphic Design	3-D Studio Printmaking Ceramics 1 Ceramics 2 Drawing 1 Drawing 2 Art Portfolio Painting 1 Painting 2 Video Production 1 Video Production 2 Graphic Design

109 3-D Studio 1

1 credit 1 Semester

Grades 9-12 **Prerequisite: None**

The 3-D studio course consists of basic sculptural processes and concepts with an emphasis on developing personal ideas and skills (wire, plaster, cardboard, and found object).

104 Ceramics 1

1 credit 1 Semester

Grades 9-12 **Prerequisite: None**

The Ceramics I course is intended for the beginning student who will learn terms and techniques for successful clay projects. Basic ceramic processes and concepts include, wheel throwing, hand-building, glazing, and firing.

105 Ceramics 2

1 credit 1 Semester

Grades 10-12 Prerequisite: Ceramics 1

The Ceramics II course is designed to learn how to carve, apply, and stamp their ceramics projects. Students will refine their throwing abilities and will investigate clay further with more in-depth projects. Larger objects will also be thrown on the wheel, including a tall pot made of two small ones.

101 Drawing 1

1 credit 1 Semester

Grades 9-12 **Prerequisite: None**

The Drawing I course will focus on the Elements of Art, which are the fundamentals of visual art. Students will develop their drawing skills through observation, instruction and experimentation with an overall introduction to drawing concepts with practical applications (basic drawing and portrait). Several forms of media will be used.

102 Drawing 2

1 credit 1 Semester

Grades 10-12 Prerequisite: Drawing 1

The Drawing II course will focus on composition and advanced techniques in landscape, still life, etc. A variety of mediums will be used be focusing more on looser mediums and on a larger scale.

103 Art Portfolio

1 credit 1 Semester

Grades 11-12 Prerequisite: Drawing 1,2 or Painting 1,2 or Ceramics 1,2

and Instructor Approval

The Art Portfolio course is Loosely based on the AP Drawing Portfolio, students will work towards a body of work to be used for possible portfolio submission. The personal development of ideas, skills, creativity, and self-expression will be emphasized. A highly recommended course for the students with an interest in majoring in art in college or a strong appreciation of art. Students must be highly self-motivated.

106 Printmaking

1 credit 1 Semester

Grades 9-12 Prerequisite: None

The Printmaking course is an introduction to various printmaking processes and lettering, with design projects.

107 Painting 1

1 credit 1 Semester

Grades 10-12 Prerequisite: None

The Painting I course is an introduction to the basic media of painting with watercolor and acrylic. Projects will provide opportunities to explore abstraction and realism while playing with mediums to enhance their work.

108 Painting 2

1 credit 1 Semester

Grades 10-12 Prerequisite: Painting 1

The Painting 2 students will choose their media for each project and investigate shaped canvas, multiples and the work done by famous painters.

112 Video Production 1

1 credit 1 Semester

Grades 10 -12 Prerequisite: None

The Video Production 1 course is an introduction to basic video production techniques: storyboarding, and editing on a Mac computer. It will include individual and group projects as well as viewing some of the American Film Institute's "100 Best Movies".

113 Video Production 2

1 credit 1 Semester

Grades 10 -12 Prerequisite: Video Production 1

The Video Production 2 course will focus on studio experimentation of video with individual and group projects and include a multimedia approach as well as viewing some of the American Film Institute's "100 Best Movies".

171 Graphic Design

1 Credit 1 Semester

Grades 9-12 Prerequisite: None

The Graphic Design course introduces students to the graphic design process and the principles of design. Emphasis will be placed on problem solving and relating graphic design to communication. Students will study the principals of design, color theory, typography, and will use major design software including Adobe Photoshop and Adobe InDesign, as well as some work with Microsoft Publisher. Students will also explore career options in the graphic design industry. Graphic Design is an excellent course to prepare for a school yearbook/newspaper staff position.

Music

The Anamosa High School Music Department provides learning opportunities and performance experiences in music that are pertinent, articulated, meaningful, and accountable, as a means to developing the aesthetic potential that exists in all students. Courses are available to account for all levels of ability and experience, and each course promotes the development of attributes (such as critical thinking, problem solving, and self-discipline) that contribute to improved student performance in all curricular areas.

Scope and Sequence

Elective Courses

9th	10th	11th	12th
Men's Choir Women's Choir Instrumental Music (Band) Music Appreciation	Men's Choir Women's Choir Chamber Choir Instrumental Music (Band) Music Appreciation Music Theory AP Music Theory	Men's Choir Women's Choir Chamber Choir Instrumental Music (Band) Music Appreciation Music Theory AP Music Theory	Men's Choir Women's Choir Chamber Choir Instrumental Music (Band) Music Appreciation Music Theory AP Music Theory

466 Men's Choir

2 credits Year Long Grades 9-12 Prerequisite: None

Men's Choir is an un-auditioned ensemble for men's voices. Concepts of tone production and proper technique are emphasized. Men's Choir will perform at each quarterly concert and State Large Group contest.

465 Women's Choir

2 credits Year Long

Grades 9-12 Prerequisite: None

Women's Choir is an un-auditioned ensemble for women's voices. Concepts of tone production and proper technique are emphasized. Women's Choir will perform at each quarterly concert and State Large Group contest.

450 Chamber Choir

2 credits Year Long

Grades 10-12 Prerequisite: 1 year of choir

Chamber Choir is a select, auditioned ensemble. Student must audition in the spring. Skills of independent singing, strong sight reading, and established vocal tone are emphasized. Chamber Choir will perform an advanced set of repertoire and quarterly concerts, and will also perform for community functions, holiday caroling, and State Large Group Contest.

452 Instrumental Music

2 credits Year Long

Grades 9-12 Prerequisite: A current physical is required for Marching

Band.

Instrumental music class gives students the opportunity to learn more about music and culture through participation in ensembles and private instruction. Students perform various types of repertoire from a variety of genres and eras. Also, students learn about basic concepts of music including note identification, chord and scale construction, and performance skills. When enrolled in this class, students are required to participate in marching band and concert band. Participation in concerts and marching band performances will be graded. Students receive private instruction with the teacher on a signup basis. Additional opportunities available to instrumental music students include Jazz Band, Show Band, pep band, various honor bands, chamber ensembles, and solo performances.

0461 Music Appreciation

1 credit Grades 9-12 1 Semester Prerequisite: None

Music Appreciation is designed for students who have a genuine interest in learning more about music as a unique aspect of our culture. The course begins with an overview of basic musical concepts such as rhythm and pitch. Then, this knowledge is applied to music of various time periods and world cultures. Students will have the opportunity to participate in learning activities by playing various instruments and listening to different types of music. Also, students will be encouraged to attend outside performances and reflect on these experiences. This course is open to all students, regardless of their enrollment in other music classes.

454 Music Theory

1 credit Grades 10-12 1 Semester

Prerequisite: Successful completion of at least 1

year of a performing ensemble, either choral or instrumental.

Music theory serves as an extension of the music concept knowledge gained in performing ensembles and is meant to give music students a deeper understanding of various aspects of music to increase knowledge and improve performance. Some of the concepts included in this course include notation, scales, tonality, key, modes, intervals, form, and chord structure and function. Additionally, this course will include an ear training component consisting of basic harmonic and melodic dictation and interval identification. This course is highly recommended for students seeking post-secondary musical instruction of any kind.

455 AP Music Theory

1 credit Grades 11-12 1 Semester

Prerequisite: Successful completion of at least two

years of a performing ensemble, either choral or instrumental, successful completion of the Music Theory course.

AP (Advanced Placement) Music Theory will further extend students' musical knowledge gained in performing ensembles and the first music theory course in order to prepare students to take the AP Music Theory Examination at the end of the course. In addition to furthering students' knowledge of the concepts taught in the first music theory course, this course will include transposition, arranging, composition, counterpoint, part-writing, modulation, and theoretical concepts relating to various musical eras and styles. Students will also better their aural skills through the sight singing and ear training portions of this course. This course is highly recommended for students seeking post-secondary musical instruction of any kind.

Spanish

Our mission is to help students become communicative, insightful world citizens. We encourage students to enroll in Spanish. Students need to check with their prospective colleges to inquire about world language requirements as they vary from college to college.

Scope and Sequence

Elective Courses

9th	10th	11th	12th
Spanish 1	Spanish 1 Spanish 2	Spanish 1 Spanish 2 Spanish 3	Spanish 1 Spanish 2 Spanish 3 Spanish 4

208/209 Spanish 1

2 credits Grades 9-12

Year Long

The goal of Spanish 1 is for students to be able to communicate in Spanish on an elementary level about everyday situations, such as greetings, telling time, school, food, etc. Students will develop and understand the language through knowledge to interpret, present, and show interpersonal skills. Emphasis will be placed on speaking, listening, reading and writing. Hispanic culture is introduced and taught to increase awareness of other people. Some of the class is in the target language, therefore participation is required.

210/211 Spanish 2

2 credits Year Long

Grades 10-12 Prerequisite: Spanish 1 or Instructor Approval.

The Spanish 2 course will be taught primarily in the target language. Students will be able to communicate in Spanish on an intermediate level about everyday situations. Grammar and vocabulary of Spanish 1 is reviewed and supplemented. More verb tenses are taught and the grammar structures are advanced. Emphasis will be placed on speaking, listening, reading and writing. Throughout the year, the Hispanic culture will be integrated into the course.

212 Spanish 3

2 credits Year Long

Grades 11-12 Prerequisite: Spanish 2 or Instructor Approval.

Spanish 3 is a course for college and career bound students. Students will continue to refine and advance their communication skills. The course is taught primarily in the target language. Grammar study and vocabulary building will continue to be stressed. Students will actively participate using their attained skills to communicate in both every day and creative situations Emphasis will be placed on speaking, listening, reading and writing. Throughout the year, the Hispanic culture will be integrated into the course.

214 Spanish 4

2 credits Year Long

Grade 12 Prerequisite: Spanish 3 or Instructor Approval.

Spanish 4 is recommended for the college and career bound student. The course will be taught in the target language except when explaining grammar. Students will be engaged in conversation about everyday topics. Students must communicate with one another and with the teacher in the target language. Emphasis will be placed on speaking, listening, reading and writing. Throughout the year, the Hispanic culture will be integrated into the course.

Industrial Technology

Course work is designed to introduce the students to technical fields as they relate to life-long learning within chosen career paths. Our goal is to equip the learner with proper safety orientation and terminology and to provide hands-on learning in the applied areas. Students are encouraged to explore all areas of interest. The courses within the department offer students the ability to focus their course of study to one of the following areas: architecture, engineering, manufacturing, robotics, woodworking, and construction. Students will become self-directed as they complete advanced level courses and apply math, science, and communication skills.

Scope and Sequence

Elective Courses

9th	10th	11th	12th
Construction Pathway Beginning Ind. Technology	Construction Pathway Beginning Ind. Technology	Construction Pathway Beginning Ind. Technology	Construction Pathway Beginning Ind. Technology
Construction Woodworking	Construction Woodworking	Construction Woodworking I	Construction Woodworking I
Manufacturing Pathway	Arch CAD	Woodworking II Arch CAD	Woodworking II Arch CAD
Beginning Ind. Technology Welding Manufacturing (Cold Metals)	Manufacturing Pathway Beginning Ind. Technology Welding Manufacturing (Cold Metals)	Manufacturing Pathway Beginning Ind. Technology Welding	Manufacturing Pathway Beginning Ind. Technology Welding
Automotive Pathway Beginning Ind. Technology	Robotics Automotive Pathway	Manufacturing (Cold Metals) Robotics	Manufacturing (Cold Metals) Robotics
Engineering Pathway Beginning Ind. Technology	Beginning Ind. Technology Principles of Technology Small Gas Engines	Automotive Pathway Beginning Ind. Technology Principles of Technology Small Gas Engines	Automotive Pathway Beginning Ind. Technology Principles of Technology Small Gas Engines
	Engineering Pathway Beginning Ind. Technology CAD Design	Engineering Pathway Beginning Ind. Technology CAD Design PLTW	Engineering Pathway Beginning Ind. Technology CAD Design PLTW

300/301 Beginning Industrial Technology

2 credits Grades 9-12

Year Long Prerequisite: None

Beginning Industrial Tech would be an excellent first course for any student to take in the Industrial Technology area. This course involves short introductory units of study in all the new technology areas, which include energy and power, graphic communications, transportation, manufacturing, and construction. It is a "taste of industrial technology," covers a study of time where everyone builds a clock or similar time keeping or telling machine, a study of transportation where we might build model racecars or fly rockets and a unit in communication where each student will use the darkroom to create a photograph or screen print a garment. The computer and the language of the computer is studied. Everyone does numerous projects on the computer. Manufacturing could involve a mass-produced project and construction could involve the study of house building and the actual construction of a scale model house. This course would have to be considered one of the best overall programs any student could become involved in. Various careers are examined and each student will study certain careers that they think they might like to pursue someday.

318 Architectural CAD

1 credit 1 Semester

Grades 10-12 Prerequisite: Algebra I

The emphasis of Architectural CAD will be the design of and model building of residential housing systems. Both single and multiple-dwelling units will be designed and built. Conventional board drafting and Computer-Aided-Drafting, using AutoCAD, will be used in the design process throughout the course. Anamosa area homes will be toured throughout the term. The residential architectural variety in this area is unique for a community of its size.

322 Manufacturing

1 credit 1 Semester

Grades 10-12 Prerequisite: Algebra I

Cold Metals (Manufacturing) is a one term course that will include the study of industrial metals, their composition, their workability, and match inability. Foundry, forge and heat-treating metals will be studied. Sheet metal projects will teach students methods of mechanically fastening steel. Students will learn to drill and tap holes by hand and on machines. Students will first learn to machine metals by hand on the vertical mill and lathe, and then learn to program the machines and run their computer programs on our C-N- C machines (Computer-Numerical Control). Students will also use the C-N-C plasma cutter to make whatever design they choose out of metal up to ½ inch thick.

312 Construction

1 credit 1 Semester Grades 9-12 Prerequisite: None

Residential construction will be the emphasis of this course. All aspects of the construction of a new home will be covered. Selecting and buying a lot, lot layout, zoning and building codes, interpreting drawings and details, and financing used and new homes. Units in concrete block laying, residential electrical wiring, plumbing and finish carpentry will also be introduced to help prepare students as future home owners. The second half of the term will be used to construct lawn sheds of various sizes. This small hands-on project has emphasis on flooring, wall, and roofing systems.

321 Welding

1 credit 1 Semester Grades 9-12 Prerequisite: None

Hot Metals (Manufacturing) is a one term course that will include the study of industrial metals, their composition, their workability, and their ability to be heat-treated. Students will use oxy-acetylene torches to heat, bend, cut and weld steel. They will also use plasma cutters to cut steel and do fine decorative cutting. The students will learn to weld steel and aluminum using MIG, TIG and stick welders. Students will also use the C-N-C plasma cutter to make whatever design they choose out of metal up to ½ inch thick.

304 Materials & Process: Woodworking 1

1 credit 1 Semester

Grades 9-12 Prerequisite: None

The safe and proper use of woodworking, power tools, and machines is the emphasis of this course. Design and layout techniques will be learned. A series of small projects will be completed by course's end including one wood lathe project. Course work will include: biology and life span of a tree, wood species, hard and soft woods, wood materials, U.S. forest lands, U.S. national forests, joinery, assembly, and finishing.

305 Materials & Process: Woodworking 2

1 credit 1 Semester

Grades 11-12 Prerequisite: Finish Carpentry 1

The manufacture of furniture projects is the emphasis of this course. Students will take the knowledge learned in Woodworking 1 and apply it to the completion of a term-long project. Course work will include: step-by-step design and plan of procedure, advanced joinery, mechanical fastening, and fine furniture finishes.

316/317 Principles of Technology (Science Credit)

2 credits Year Long

Grades 10-12 Prerequisite: Algebra 1

This is an "Applied" Physics course. Any student who wishes to pursue any form of postsecondary education will benefit from this course. It blends an understanding of basic principles of physics and illustrations of practical applications. It will give you a firm foundation for understanding today's and tomorrow's technology. Students can take the course as either an elective or as a science credit. This course may be taken in sequence with Physics for a 2nd year of science credit. The topics covered are: force, work, rate, resistance, energy, power, and force transformers. In each of these seven units, the topic will be covered as related to mechanical, electrical, fluid, and thermal systems. Because technology is changing the way we live, work, and play, we need to keep current and understand it, if we are to control it and use it to our advantage.

310 CAD Design

1 credit 1 Semester

Grades 10-12 Prerequisite: Algebra 1

The CAD-Design course content will include: Pre-design sketching skills, Autodesk, Inventor fundamentals, and design skills. Inventor is the industries most popular 3-dimensional design software. Drafting topics covered will include: orthographic projection, isometric drawing, perspectives, section views and auxiliary views. Engineering principles addressed will include: Space geometry, Vector geometry, and Graphical mathematics.

319 Robotics

1 Credit 1 Semester

Grades: 10-12 Prerequisites: Algebra 1

In our Robotics course, students will develop skills in mechanical design (CAD), CNC programming, and construction as they work in teams to build simple and complex robotic devices. We will explore usage of robotics in modern business and industry. We will also examine how robotic devices are affecting our lives and shaping our culture. Students will apply concepts learned in physical science and physics classes to mechanical devices.

070 Small Gas Engines

1 Credit 1 Semester

Grades 10-12 Prerequisites: None

Small Engines is an introductory course on the four-stroke cycle, single cylinder engine. The student will study the four strokes, engine parts identification, and engine operation. The student must tear down a four-stroke engine, inspect and repair, reassemble, trouble shoot, and try to get the engine running. Student evaluation will be outcome based. Students will understand and be able to demonstrate: proper safety procedures in the small engines laboratory, proper use of tools and measuring instruments, proper use of fasteners, sealants, and gaskets, basic engine construction and principles of operation, differences between four and two stroke engines, basic theory of carburetion, basic theory of ignition systems, basic theory of the lubrication system and basic theory of cooling systems. It is strongly recommended that students take this course before enrolling in Automotive Technology at the Jones Regional Education Center.

English

In order to graduate from Anamosa High School, students must earn eight credits of English. Junior Year teachers will recommend the most appropriate course for the student's senior year. Additional elective English courses can be taken from a selection of journalism, drama, and literature courses.

Scope and Sequence

Required are **Bold**

9th	10th	11th	12th
English 9 Creative Writing Intro to Journalism AHS Yrbk/News Publications Intro to Theatre Reading Lab	English 9 English 10 Speech Creative Writing Intro to Journalism AHS Yrbk/News Publications Intro to Theatre Reading Lab	English 9 English 10 English 11 Speech Creative Writing Intro to Theatre Intro to Journalism AHS Yrbk/News Publications Reading Lab AP Language/Composition	English 9 English 10 English 11 College Prep Writing / Senior Seminar Speech Creative Writing Intro to Theatre Intro to Journalism AHS Yrbk/News Publications AP Literature/Composition

0330 Reading Lab

2 credits Grade 9-11 Year Long

Reading Lab students are enrolled based on standardized test results, reading level, or counselor/teacher recommendation and is taken in the same semester as other English courses. The goal of the course is to raise each student's reading level and the focus will be on reading comprehension and fluency. Instruction will accommodate the individual students and personal growth will be tracked. Students will be asked to choose books that suit their tastes and challenge their thinking. Students will be expected to monitor their reading outside of class."

0332/0333 English 9 (REQUIRED)

2 credits **Grade 9-12** Year Long

English 9 is a required course for graduation. Students are introduced to high school level of study of language arts, which includes reading, writing, speaking, listening skills, along with test-taking strategies and practices. Units of study include basic composition, drama, novels, and grammar. Vocabulary will be literature-driven, as well as those found on standardized tests.

0336/0337 English 10 (REQUIRED)

2 credits **Grade 10-12** Year Long

Prerequisite: English 9

English 10 is a required course for graduation. Students will continue their study of high school level language arts, which includes reading, writing, speaking, listening, and test-taking strategies and practices. Units of study include composition, drama, short stories, novels, and grammar. Vocabulary will be literature driven, as well as those found on standardized tests.

0341/0342 English 11 (REQUIRED)

2 credits

Year Long

Grade 11-12

Prerequisite: English 9 & 10

English 11 is a required course for graduation. Students who have completed English 9 and 10 are not eligible for this course. (See AP Language/Composition for appropriate selection.) This course will cover composition, public speaking, and literature. Composition will include basic structure and style with an emphasis on writing research based informative and argumentative essays as well as creative stories. Literature will include a study of fiction, nonfiction, and drama.

0343 College Prep Writing (required if not taking Senior Seminar)

1 credit Grade 12 1 Semester

Prerequisite: English 9, 10 & 11

The College Prep Writing course is designed for any student who is considering college or interested in improving reading or writing skills. Students will improve their writing through practices in organization, developing ideas, research papers, college admission essays, and scholarship writings. Skills to improve reading comprehension will also be included.

0344 Senior Seminar (required if not taking College Prep Writing)

1 credit

1 Semester

Grade 12

Prerequisite: English 9, 10 & 11

The Senior Seminar course is designed for any student who is planning to pursue careers directly after high school to explore the use of reading and writing in everyday life. Student will improve writing skills through practices of job related writings and look at the value of literature in everyday reading.

0369 Creative Writing

1 credit 1 Semester

Grades 9-12 Prerequisite: None

This Creative Writing class is designed for students who are interested in writing fiction and non-fiction stories for a variety of purposes. We will engage in different kinds of writing including memoirs, short stories, children's stories and your own choice. The goal of this class is to assist you in your ability to tell stories as well as on how to get started, and where to go once you are "done." Students will refine their writing skills and share with others to receive feedback and critiques.

0396 Introduction to Theatre:

1 credit Semester

Grades 9-12 Prerequisite: None

Introduction to Theatre students will study the elements of theatre, its literature and production techniques. The craft of acting will be explored and an emphasis will be placed on scene and character analysis. Students are required to perform with the class as part of the semester project.

363 Speech (REQUIRED)

1 credit 1 Semester

Grades 10-12 Prerequisite: None

Students enrolled in this course will be creating and delivering a variety of speeches with the purpose of learning to better deliver and organize content. Units of study include digital media, special occasion speech, and persuasive speech.

361 Intro to Journalism

1 credit 1 Semester

Grades 9-12 Prerequisite: None

In Intro to Journalism a strong emphasis will be placed on students developing skills in journalistic writing, creativity, leadership, and graphic design principles, needed for a future in communications or journalism. Students will learn how to report and write a feature story, interview skills, design, marketing, and journalistic ethics. Intro to Journalism needs students who are responsible, organized, problem solvers, team players, committed, and that can meet deadlines.

362 AHS Yearbook / News Publications

1 credit 1 Semester

Grades 9-12 Prerequisite: Intro to Journalism, Graphic Design, or

Teacher consent

Students in Yearbook Publications will work to create the Raider Yearbook and issues of the A-Town Low Down (school newspaper); as well as additional miscellaneous publications for the high school. AHS Yearbook/News Publications operates as a student run business organization so students will be working as a team to see production of their products from idea to publication. Each student will have a staff job. Technology introduced in Journalism includes DSLR Photography, Google Classroom, Yearbook creation software, InDesign, and Photoshop.

Advanced Placement (AP)

Students who choose to take an AP course, are required to take the AP Exam in May!

0383 AP Language/Composition

2 credits Year Long

Grade 11 Prerequisite: English 9, English 10 and Instructor

Approval

Students will do college-level work with a chance to earn college credit while in high school. A test is administered in May to determine the exact amount of credit. Advanced Placement Language and Composition focuses on reading techniques, literary devices, rhetorical/logic skills, writing techniques, and various types of analytical writing. A weighted scale will be used for all AP courses: A=5, B=4, C=3, D=2, F=0.

0384 AP Literature/Composition

2 credits Year Long

Grade 12 Prerequisite: English 9, English 10 and Instructor

Approval

Students will do college-level work with a chance to earn college credit while in high school. A test is administered in May to determine the exact amount of credit. Advanced Placement Literature and Composition focuses on the critical analysis of poetry, drama, and prose of material from the Renaissance through modern literature. A weighted scale will be used for all AP courses: A=5, B=4, C=3, D=2, F=0.

Mathematics

The Math department offers a traditional program, which stresses algebra and geometry. Course offerings will challenge gifted students as well as those students who may be seeking entry into the world of work or the college environment. The minimum college entrance requirements include completion of Algebra, Geometry, and Algebra 2. AHS recommend a successful completion of 4 years of mathematics for students going into a four-year college or tech school.

Scope and Sequence

6 Credits Required

9th	10th	11th	12th
Pre-Algebra Algebra I Geometry Math Lab	Pre-Algebra Algebra I Geometry Algebra 2 Math Lab	Pre-Algebra Algebra I Geometry Algebra 2 Pre-Calculus AP Calculus AP Statistics Math Lab	Pre-Algebra Algebra I Geometry Algebra 2 Pre-Calculus AP Calculus AP Statistics

432 Pre-Algebra

2 credits Year Long

Grades 9-12 Prerequisite: Faculty recommend- based on middle school

ITBS & MAP tests

Pre-Algebra is designed to teach and reinforce the skills necessary for success in Algebra 1. Topics covered in Pre-Algebra include linear operations, understanding the coordinate plane, developing problem solving skills that can be applied to real-world situations, the basics of linear functions, and exponent rules.

406/407 Algebra 1

2 credits Year Long

Grades 9-12 Prerequisite: None

In Algebra 1, students discover how a system of algebra is developed and learn to justify their mathematical statements by logical argument. The work is designed to generate thought as well as to develop mathematical skill. The student gains a vocabulary of algebraic terms including concepts such as variable, equation, inequality, solution set, and graph. Students will strengthen their ability to perform operations with real numbers. The student is also introduced to the concepts of relation and function. Students must receive a passing grade at semester to continue into 2nd semester. Students completing this course with a "C" or better will be prepared to enroll in Geometry.

412 Geometry

2 credits Year Long

Grades 10-12 Prerequisite: Algebra 1

Students will explore Geometry by using a discovery approach. Working on their own and in small groups, students will investigate, construct, observe patterns, measure figures and discuss their findings to formulate their own definitions and conjectures. Students must receive a passing grade at semester to continue into 2nd semester.

409 Algebra 2

2 credits Year Long

Grades 9-12 Prerequisite: Geometry

After a very brief review of the concepts from Algebra 1, such as: proofs, logic, and basic equation solving, these concepts are broadened and elaborated on in Algebra 2. Many new concepts are introduced such as, the arithmetic and geometric sequences and series, careful study of linear sentences, the quadratic formula, the number system is enlarged to include the complex number system, and the exponential and logarithmic functions and computation. Students must receive a passing grade at semester to continue into 2nd semester.

424 Pre-Calculus

2 credits Year Long

Grade 11-12 Prerequisite: "B" or better in <u>Alg. 2</u> & <u>Geometry</u>

The primary purpose for this course is twofold:

- 1. Broaden the mathematical horizons of the student, and
- 2. To prepare the student for more advanced work in college.

The major emphasis of the course is the examination of functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions. Additional topics are in: system of equations, matrices and determinants, analytic geometry, sequences and probability, conics and polar coordinates, trigonometry, and vectors. There will be a chapter on limits and an introduction to calculus for college bound students. Students must receive a passing grade at semester to continue into 2nd semester.

Student is required to have a graphing calculator.

425 AP Calculus

2 credits Year Long

Grades 11-12 Prerequisite: Algebra 1, Algebra 2, Geometry, Pre-

Calculus

Calculus is a rigorous course primarily concerned with developing students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes limits, derivative, differentiation, the differential elementary applications of calculus and introduction to integration. This course requires a graphing calculator. (The TI-89 and TI-92 are not recommended). Students who choose to take an AP course, are required to take the AP Exam in May!

428 AP Statistics

2 credits Year Long

Grades 11-12 Prerequisite: Alg. 1, Alg. 2, & Geometry

AP Statistics includes the study of the following topics: Statistical Descriptions, Probability, Discrete Probability Distributions, Normal Probability Distributions, Confidence Intervals, Hypothesis Testing and Correlation, Regression, Exploring Data, Statistical Inference, Anticipating Patterns, Sampling and Experimentation. **Students who choose to take an AP course, are required to take the AP Exam in May!**

407 Math Lab

2 credits Year Long Grades 9-11

Students will learn the fundamental mathematics that are the foundation of high school Algebra. Students will master mathematical concepts that are based upon the needs of each student. Individual students will be given screeners to identify areas of need. Students will track their progress and growth for success. The goal of Math Lab is for the student to gain confidence in mathematical skills with support. Math Lab will be taken in addition to another high school math course and will be for elective credit.

Physical Education

The Iowa Department of Education requires a student to successfully complete a course in Physical Education for each year he/she is enrolled in school. Students are required to complete a Physical Education class during one semester each year. All classes will meet every other day during each semester. Any student may take additional Physical Education class for elective credit.

Scope and Sequence

4 Credits Required

9th	10th	11th	12th
Strength & Speed	Strength & Speed	Strength & Speed	Strength & Speed
Lifetime Fitness	Lifetime Fitness	Lifetime Fitness	Lifetime Fitness

610 Strength & Speed

1 credit 1 Semester

Grade 9-12 Prerequisite: Instructor Approval

This course is designed for competitive athletes. Each student will participate in a fully structured Speed and strength training program. Maximizing athletic potential and leadership skills for student-athletes to excel in competition and life. Course objectives are as follows.

1. Decrease Injury, Increase Durability

The top priority is to keep students safe, both in the weight room and on the field, track, or court. By perfecting technique and proper movement mechanics through the strength and conditioning program, our students will develop the necessary physical traits to help withstand the mechanisms of injury.

Healthy muscles and joints decrease the chances of injury. When an injury does occur, a well-conditioned, well-trained athlete will recover from the injury quicker.

2. Enhance Sport Performance & Lifetime Wellness

The Blue Raider Strength Program will help student-athletes reach their top athletic potential through a variety of proven training methods. The goal is for every student-athlete to experience improvements in strength, power, speed, agility, body composition, mobility, and flexibility to help them perform at the highest level possible.

3. Build / Continue a Championship Culture

To develop an elevated level of focus, maturity, accountability, discipline, competitiveness, and a genuine commitment to the team.

Success in sport is as much mental as physical. Our student-athletes will be challenged in the weight room both physically and mentally. They will leave the weight room confident that they can handle the demands of life and sport with success.

4. Educate on Nutrition Habits

For student-athletes to reach their top potential, they must fuel their body accordingly. The REFUEL nutrition education program teaches student-athletes the daily habits they need to adopt to promote proper nutrition for peak performance.

5. Develop the foundations of AHS.

- Inspire
- Learn
- Lead

622 Lifetime Fitness Activities

1 credit 1 Semester Grade 9-12 Prerequisite: None

This course will provide the students with opportunities to develop an individual optimal level of physical fitness. A variety of team activities will be offered, but the emphasis will be on fitness activities. Students will be required to complete fitness testing, including the mile run.

Science

Science is a constantly changing way of thinking, a systemic process for producing the knowledge necessary to comprehend the natural world. Science includes observation and data collection, as well as the manipulation, evaluation, and interpretation of that data. The study of science focuses on critical thinking and logical reasoning. The Anamosa High School science program facilitates these processes through lab-intensive environments, including extensive use of technology, that emphasize inquiry and experimentation rather than memorization.

Scope and Sequence

6 Credits Required

9th	10th	11th	12th
Earth Science	Earth Science Biology Physical Science – Chem. Physical Science – Phys. Chemistry Principle of Technology	Earth Science Biology Chemistry Physical Science – Chem. Physical Science – Phys. Principle of Technology Anatomy & Physiology	Earth Science Biology Chemistry Physics Physical Science – Chem. Physical Science – Phys. Principle of Technology Anatomy & Physiology

500/501 Earth Science (REQUIRED)

2 credits Year Long Grade 9 Prerequisite: None

This course presents basic concepts in Earth Science, which is the study of Earth and its matter, processes, and history. Constructive and destructive forces involved in shaping the planet are discussed.

504/505 Biology (REQUIRED)

2 credits Year Long

Grades 10 Prerequisite: Earth Science

This course is designed to provide a basic understanding of the characteristics and requirements of living things, cellular structure and function, including the basic processes of metabolism and reproduction, and the gradual changes in living things and the environments in which they dwell over time, leading to the vast diversity of life and ecosystems on the earth.

510/511 Chemistry

2 credits Year Long

Grades 10-12 Prerequisite: taking or have taken Algebra 1

This class is intended to prepare students for first year college chemistry. Considerable emphasis is put on problem solving. Students explore the fundamental principles of chemistry, which characterize the properties of matter and how it reacts. Computer-based and traditional laboratory techniques are used to obtain, organize, and analyze data. Conclusions are developed using both qualitative and quantitative procedures. Topics covered in the course include, but are not limited to: measurement, atomic structure, electron configuration, the periodic table bonding, gas laws, properties of liquids and solids, solutions, stoichiometry, reactions, kinetics, equilibrium, acids and bases, and nuclear chemistry.

513 Physical Science – Chemistry

1 Credit 1 Semester

Grade 10-12

This class is one-semester applied Chemistry course that provides students with a fundamental understanding of the big ideas of Chemistry. These overarching concepts include structure, properties, and interactions of matter, chemical and nuclear reactions, and energy. Focus is on learning through the use of activities and laboratory experiments using a hands-on problem-solving approach to real world issues. No math prerequisite is required.

514 Physical Science – Physics

1 Credit 1 Semester

Grade 10-12

This class is one-semester applied Physics course that provides students with a fundamental understanding of the big ideas of Physics. These overarching concepts include motion and forces, energy, and electromagnetic radiation and waves. Focus is on learning through the use of activities and laboratory experiments using a hands-on problem-solving approach to real world issues. No math prerequisite is required.

508/509 Physics

2 credits Year Long

Grade 12 Prerequisite: Taking or have taken Algebra 1 &

Algebra II

This class is intended to prepare students for first year college physics. Considerable emphasis is put on problem solving. Students explore the fundamental principles of physics, which characterize the basic physical laws of our world. Computer-based and traditional laboratory techniques are used to obtain, organize and analyze data. Conclusions are developed using both qualitative and quantitative procedures. Topics in this course include, but are not limited to: forces and motion, Newton's Laws, energy, thermodynamics, waves (sound and light), optics, electricity, and magnetism.

515/516 Anatomy & Physiology

2 credits Year Long

Grades 11-12 Prerequisite: Biology & Chemistry

This course focuses on the structure, function, growth, and development of the organ systems of the human body. The process of science is stressed through the use of student projects, laboratory activities, and group discussion. This course requires the student to participate in laboratory dissection.

316/317 Principles of Technology

2 credits Year Long
Grades 10-12 Proroquisit

Grades 10-12 Prerequisites: Algebra I

This is an "Applied" Physics course. Any student who wishes to pursue any form of postsecondary education will benefit from this course. It blends an understanding of basic illustrations of practical applications. It will give you a firm foundation for understanding today's and tomorrow's technology. Students can take the course as either an elective or as a science credit. This course may be taken in sequence with physics for a second year of science credit. The topics covered are: force, work, rate, resistance, energy. Power, and force transformers. In each of these seven units, the topics will be covered as related to mechanical, electrical, fluid, and thermal systems. Because technology is changing the way we live, work, and play, we need to keep current and understand it if we are to control it and use it to our advantage.

The courses listed below may also be used as a science graduation credit:

050 Introduction to Agriculture, Food & Natural Resources
056 Plant Science
078 Animal Science
072 Horticulture
66 Vet Technology

Course descriptions for the above courses may be found in the Agriculture section of this booklet.

Social Studies

In order to prepare your students for life in the 21st century, the Social Studies department has designed courses to give students a strong base of knowledge and skills with an emphasis on literacy. Emphasis is placed on the developing of rigorous academic skills with process skills: retrieving information, organization and analyzing data, written and oral communication, and working effectively as individuals an in groups. Six credits are required along with several elective credits that students will find interesting and challenging.

Scope and Sequence

6 Credits Required in Bold

9th	10th	11th	12th
World History Geography	World History Geography US History Psychology Sociology	World History Geography US History AP US History Government AP Government Economics Psychology Sociology Modern Issues	World History Geography US History AP US History Government AP Government Economics Psychology Sociology Modern Issues

552/553 World History (REQUIRED)

2 credits Year Long

Grades 9-10 Prerequisite: None

World History is a required social studies course, which is usually completed during the freshman year. The course includes an emphasis on both historical content and historical thinking skills to prepare students with a strong foundation of significant history content, and with the skills necessary to apply historical thinking to any historical context.

550/551 U.S. History (REQUIRED)

2 credits Year Long

Grades 10-12 Prerequisite: None

United States History is a required course, which is usually completed during the sophomore year. United States History will include both historical thinking standards and content specific standards. The historical thinking anchor standards include, analyzing continuity, change, and context; examining perspectives; engaging with historical sources and evidence; and describe causation and argumentation. The themes include: identity, power and politics; work, exchange, and technology; people and ideas; environment and geography; and international relations.

578 AP U.S. History

2 credits Year Long

Grades 11-12 Prerequisite: World History/US. History/Instructor

Approval

AP United States History provides college level work and a chance to earn college credit in high school. An exam is administered in May to determine amount of credit. AP U S History is a course designed to be equivalent of a two-semester college history class usually taken during their first year. It will include topics regularly covered in a college U S History course. It differs significantly from the usual high school history course with respect to the kind of textbook used, the range and depth of topics covered, and the time and effort required. A weighted scale will be used for all AP courses: A=5, B=4, C=3, D=2, F=0 Students who choose to take an AP course, are required to take the AP Exam in May!

564 Government (REQUIRED)

1 credit 1 Semester

Grades 11-12 Prerequisite: U.S. History & World History

This class is a productive civic engagement in the U.S. context, requires knowledge of the historical foundations and principles of American democracy; understanding the unique processes of local, state and national institutions; and the skills necessary to apply civic dispositions and democratic principles. Government will provide students will the knowledge and skills to analyze civic and political institutions; apply civic dispositions and democratic principles; and interpret processes, rules and laws.

577 AP US Government

1 credit 1 Semester

Grades 11-12 Prerequisite: U.S. History/World History/Instructor

Approval

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. A weighted scale will be used for all AP courses: A=5, B=4, C=3, D=2, F=0 **Students who choose to take an AP course, are required to take the AP Exam in May!**

554 Economics (REQUIRED)

1 credit 1 Semester

Grades 11-12 Prerequisite: Government

Economics is grounded in knowledge about how people choose to use resources. Decision making within economics involves setting goals and identifying the resources available to achieving those goals. This class provides students with the concepts and tools necessary for an economic way of thinking and helps students understand the interaction of buyers and sellers in markets, workings of the national economy, and interactions within the global marketplace.

556 Modern Issues

1 credit 1 Semester Grades 11-12 Prerequisite: None

Modern Issues examines current issues and explores solutions through student-led projects.

562 Psychology

1 credit 1 Semester Grades 10-12 Prerequisite: None

Psychology investigates human behavior from biological, cognitive, behavioral, and sociocultural perspectives. Students are given a chance to see, think, and act in ways that reflect the paradigm of psychologists.

563 Sociology

1 credit 1 Semester Grades 10-12 Prerequisite: None

Sociology is the study of human society. We will examine sociological perspectives, scientific method, culture, groups and socialization, social inequality, and social change. Students are given a chance to see, think, and act, in ways that reflect the paradigm of sociologists.

557 Geography

1 credit 1 Semester Grades 9-12 Prerequisite: None

Geography covers the human and physical characteristics of the Earth and how people interact with the environment. Students will gain an understanding of how resource availability, economics, politics, culture, and the environment influence human migration and settlement. Through the use of multiple geographic tools, students will also develop the ability to practice geography (i.e., use of geographic tools, mapping, etc.) Geography is critical for framing contemporary issues and solving problems in both a local and global context. Students will create geographic representations, evaluate human environment interaction, analyze human population movement and patterns, and analyze global interconnections.

Other Programs - Electives unless specified

0652 Directed Studies

2 credits Year Long

Grades 9-12 Prerequisite: Student staffing required

Directed Studies will focus on study skills, organizational skills, note taking, test taking, independent study skills, learning strategies, behavior, job skills, and social skills. One credit per block.

640 SCI Program

2 credits Year Long

Grade 9-12 Prerequisite: Student staffing required

Students who have been staffed into the program will spend a designated number of minutes per day as required by individual's IEP and needs. Instruction will be done in study skills, organizational skills, note taking, test taking, independent study skills, learning strategies, behavior, job skills, and social skills. Individual and group instruction will be done in a variety of academic subjects such as math, English, science, career education, life skills, and job experience. All SCI students need to complete at least two Career Education Classes and one non-paid job experience and/or job search projects

SCI students need to complete one of the following options:

- 1. AHS Academic Requirements
- 2. Completion of IEP Goals

641 Behavior Disabilities (BD) Program

2 credits Year Long

Grades 9-12 Prerequisites: Student staffing required

The BD program is designed to meet the needs/challenges of each student on an individual basis, based on the student's IEP and/or other behavioral goals. Students who have been staffed into the program will spend a designated number of minutes per month in the Behavior Management classroom as indicated on their individual IEP. Students will be monitored in the general education and behavior classrooms based on a behavior rubric that has been individualized for each student based on their goals listed on their IEP. Each student will attend general education classes outside the BD room with supports in place to meet the individual needs of that student. The Child Study Team will determine what setting is most appropriate. Instruction will be done in study skills, organizational skills, note taking, test taking, independent study skills, learning strategies, behavior, job skills, and social skills. Individual and group instruction will be done in a variety of academic subjects such as Math, English, Science, Career Education, Life Skills, Job Experience, Behavior Modifications, and Self-Advocacy Skills.

SCI students need to complete one of the following options:

- 1. AHS Academic Requirements
- 2. Completion of IEP Goals

Driver Education

TWO SESSIONS OF DRIVER EDUCATION CLASSES ARE AVAILABLE DURING THE SUMMER. DETAILS AVAILABLE IN THE HIGH SCHOOL OFFICE.

No high school credit is awarded for Driver Education Grade 8-12 Prerequisite: None

The minimum program for an approved driver education course shall consist of thirty (30) clock hours of classroom instruction and six (6) clock hours of driving instruction.

The course requirements consist of the following:

- 1. The student must be 14 years of age or older by the starting date of the session for which the student is enrolled.
- 2. The student must have an "Instruction Permit" this is issued to you after you have passed the written and vision tests as administered by the D.O.T. (Department of Transportation) Driver's License Division. You must have this permit in your possession when driving in the "Driver Education Program." Complete details are available in the "Iowa Driver Manual."

690 ELP Projects

Credit determined by project 1 Term

Grades 9-12 Prerequisite: Consent of Instructor

This course is designed for those students with aptitude and interest in a particular field whose needs are not/cannot be met in the regular classroom. It is based upon the George Betts' Autonomous Learner Model of the self-motivated, life-long learner. The student will design and pursue his/her own course of study with the approval and regular guidance of the instructor. Both student and instructor evaluate goal setting, resource use, time management, journaling, and final product(s).

644 Work Experience

1 credit 1 Semester

Grade 11-12 Prerequisite: Application process

Students will use School to Work skill development activities during class. The instructor will have direct contact with the student's work supervisor. Employment of at least ten (10) hours per week is required. If student discontinues their employment during this course, they will receive a failing grade. Work site must be within Anamosa School District. Work Log/Journal will be required. Regular attendance is required. Work Experience and Internship cannot be registered for the same term. Job site approval is REQUIRED.

680 Internship

1 credit 1 Semester

Grade 11 -12 Prerequisite: Application process

Internship is an unpaid opportunity for seniors to experience the career setting they plan to train for after high school. Internship must be arranged before the end of the prior school year. The student will be required to do pre- internship preparation on work skill development, meet with the instructor every two weeks, and keep a daily journal of their internship. Students are required to submit site evaluations as requested by the instructor. Journaling about experiences and insight are also required. Students will complete a final portfolio as part of the final grade. Application and interview process through Workplace Learning Connection are required before they can be assigned to internship site.

Credit Acquisition

With many options to choose from, our credit acquisition program helps all students acquire credits needed for graduation. Credit Acquisition is designed for students who have failed a course and need to recover credit or credits to stay on track, new students who are coming in the middle of the year, or students who are taking courses through an on-line option. A selection of on-line courses that are self-paced include Edgenuity, AP On-Line, and Iowa On-line Academy.

Alternative Concurrent Course

AHS students are offered the opportunity to take college level classes on several communications networks. Students interested in taking an Alternative Concurrent Course college level work must:

- 1) Pre-register during the pre-registration process the year before the class is to be taken.
- 2) Demonstrate the ability to do college level course work by scoring at the 41st percentile on the Iowa Assessments test in reading, math and science or Accuplacer Test scores. There is no cost for these classes providing arrangements are completed in the guidance office. These classes are offered to any 11th or 12th grade student and 9th and 10th grade students who have participated in expanded learning programs for gifted students.

001 REVIVE

Grades 9-12 Prerequisite: Application process

With a small student to staff ratio, the REVIVE Alternative Education Program is designed to meet the academic, social, and/or emotional needs of students which hinder their progress toward high school graduation. The REVIVE Program offers self-paced academic classes. Students take *Edgenuity* online classes, North Dakota Center for Distance Education paper packets classes, and/or *Flipped Math* classes which combine online instructional videos and paper packet work. Students are expected to earn academic credit and participate in class activities to earn additional PE/Health and/or elective credit. Individual and group counseling will be provided and social/emotional skills will be taught.

386 Leadership & Character Development (Formally Teen Leadership)

1 Credit 1 Semester Grade 10-12 Prerequisite: None

In this class, students develop leadership, personal, and business skills. They learn to develop an understanding of Emotional Intelligence and the skills it measures, which include self-awareness, self-control, self-motivation, and social skills. Students will develop skills in public speaking and communication and an understanding of personal image. They will develop an understanding of the concept of principle-based decision-making and develop their own personal mission statement. They will develop an understanding of the effects of peer pressure and will develop skills to counteract those effects. They will develop an understanding of the principles of parenting, enabling them to become better family members and citizens. They will also develop an understanding of the need for vision in goal setting, personally and professionally.

416 Personal Finance

1 Credit 1 Semester Grade 11-12 Prerequisite: None

This course is designed to help juniors and seniors develop the financial literacy skills needed to be successful as individuals related to their personal finances after high school. Students will be informed and prepared to be effective managers of financial resources, enabling them to achieve long and short term financial goals and security. Students will use real-life scenarios and simulations to demonstrate an understanding of personal financial planning and money management using sound decision-making and goal setting. Students will learn about various strategies and methods related to savings, investing, career planning, insurance, money management, and credit that will help ensure financial stability. In addition, students will examine the personal and societal consequences of financial decisions. Students will also learn how to complete a simple income tax return. The Personal Finance course curriculum is tied to the Iowa CORE Financial Literacy standards.

Kirkwood Jones Regional Education Center High School Academies Changes

According to state legislation, all high schools in Iowa have to meet the Iowa Core. Due to this, we are making some positive changes in order to ensure that our students are meeting the core standards. We strongly recommend that students take these courses through AHS before they can take them at Kirkwood. Our goal is to ensure that our students are prepared and will be successful in their college courses.

Recommended courses	Kirkwood Class
Psychology Speech Sociology	Intro to Psychology Fundamentals of Oral Communications Intro to Sociology
Computer Applications	Intro to Computers
Intro to Business	Intro to Business
Economics	Macroeconomics
Marketing	Principles of Marketing

In order for a student to enroll in Kirkwood **Comp I & Comp II** courses for AHS credit, they must meet the College readiness standard that will be assessed by Kirkwood's Accuplacer Placement Exam.

Kirkwood Jones Regional Education Center <u>High School Academies</u>

Primarily offered for juniors and seniors, Career Academy programs are designed to help students start exploring career options while still in high school. Offered for both high school and college credit, Career Academies are groups of career-focused classes that focus on academic and technical preparation for today's workforce. Whether students are interested in a specific technical career, or looking to pursue a college degree with a more liberal arts focus, there's a Career Academy designed to meet both interests. Please review the options below.

Arts & Sciences

Are you ready for college? Give yourself an edge over other graduating seniors by starting your college classes early. No matter what you are planning to major in, every college requires students to take a core set of arts and science offerings that are commonly referred to as "general education requirements." College readiness will be assessed by ACT Test Scores or by Kirkwood's Accuplacer Placement Exam and the Anamosa District English Assessment. Pre-requisite coursework and qualifying placement scores are required to enroll in the academic academy courses. Here are several options to chooses from:

Path A:	Path B:	Path C:	Path D:
Traditional Business	Health-Related Field	Gen Eds	Flex 6
Start With:	Start With:	Start With:	
Statistics	Comp I	Comp I	US Hist. to 1877 Intro to Ethics Environ Science Music Appreciation Exploring Teaching
Macroeconomics	Comp II	Comp II	
Bus Innovation	Fund of Oral Comm.	Fund of Oral Comm.	
Choose 3 More from Social Problems Intro to Business Survey of World Religions Financial Accounting	Choose 3 More from Nutrition Intro to Psychology Intro to Sociology Intro to Ethics	Choose 3 More from US Hist. to 1877 Intro to Ethics Environ Science Music Appreciation Exploring Teaching Criminal Justice	Exploring Teaching Criminal Justice Social Problems Intro to Business Survey of World Religions Financial Accounting Statistics Macroeconomics Bus Innovation Nutrition Intro to Psychology

A la carte Companion Courses

AP Calculus HS Government Computer Science Principles Intro to Computers Fund of Oral Communication

Automotive Technology Program

In this academy, students acquire the basic skills necessary to service and maintain today's more sophisticated automobiles. In this yearlong academy program, students will earn 12 credits, each of which are aligned with the National Automotive Technician Education Foundation (NATEF), and the Automotive Service Excellence (ASE) standards. The following courses are included in this program:

9th	10th	11th	12th
		Introduction to Automotive Technology	Introduction to Automotive Technology
		Maintenance & Light Repair Industrial Math I	Maintenance & Light Repair
		Automotive Electricity	Industrial Math I
			Automotive Electricity

Graphics and Media Communication Academy

This academy allows students to explore cutting edge technology and software used by today's commercial artists. Students will build on their creative foundational art skills to explore a new level of creativity and skill required of today's graphic design professionals. Classroom lectures and projects provide hands-on opportunities to use creative design and desktop publishing software to explore layout and design fundamentals, edit images and produce outstanding digital artwork. The following courses are included in this program:

9th	10th	11th	12th
		Illustrator I Digital Imaging Digital Photography Digital Layout	Illustrator I Digital Imaging Digital Photography Digital Layout

Health Science: Patient Care Academy

Have you ever been interested in helping others? If so, you may want to consider the high school health science academy program. In this college credit program, students will be introduced to the health care system and a variety of health careers, participate in classroom, laboratory, and community clinical experiences, and study the language of medicine. Students will learn and develop the basic skills expected of a health care provider, and demonstrate the professionalism required in today's health care field. The following courses are included in this program:

9th	10th	11th	12th
		Professionals in Health	Professionals in Health
		Medical Terminology	Medical Terminology
		Explorations in Healthcare Careers	Explorations in Healthcare Careers
		Nurses Aids	Nurses Aids

Information Technology Academy

The IT Academy provides students with a jump start to earning an associates, bachelors and/or a graduate degree in customer support, computer programming, computer information systems and CISCO.

9th	10th	11th	12th
		Networking Plus Computer Hardware Basics Programming Concepts Advanced PC Concepts	Networking Plus Computer Hardware Basics Programming Concepts Advanced PC Concepts

Engineering: Project Lead the Way Academy

Project Lead the Way is a nationally recognized, high school pre-engineering curriculum designed to help students develop better problem-solving skills by immersing them in real-world engineering challenges. The course uses all project-based, hands-on experiences to teach students the key elements and skills of engineering and technology-based careers. By completing a series of Project Lead the Way courses, students will be preparing themselves for the demanding rigor of two-year engineering technology and four-year engineering program. The following courses are included in the program:

9th	10th	11th	12th
		Intro to Engineer Design TM Principles of Engineering	Intro to Engineer Design TM Principles of Engineering

ACE: Architectural Construction & Engineering Academy

This program provides entry-level skills and knowledge for students who want to pursue one of the many careers available in the construction industry. It would best benefit juniors as a preparation for the "build a house" course in their senior year. A second pathway would be to take it at any time in preparation for transfer into a number of programs like Construction Management, Architectural Technology, Carpentry, Masonry, Plumbing, HVAC, and more.

9th	10th	11th	12th
		Architectural Plans & Specs	Architectural Plans & Specs
		Residential Construction Lab	Residential Construction Lab
		Civil Engineering & Architecture	Civil Engineering & Architecture
		Construction Modeling	Construction Modeling
		Construction Project	Construction Project

Advanced Manufacturing & Welding Academy

The Advanced Manufacturing Academy can lead to certificates, diplomas, associates, bachelors and graduate degrees in CAD/Mechanical Engineering, CNC Machining, Welding, Manufacturing, and Industrial Engineering.

- AutoCAD for Applied Engineering
- CNC Mill Operator
- CNC Lathe Operator
- Manual Press Brake Operations
- Introduction to Computers (Pre-/co-requisite for Adv. Manu. Academy, offered as a companion course)

9th	10th	11th	12th
		CNC Mill Operator CNC Lathe Operator Manual Press Brake Operations	CNC Mill Operator CNC Lathe Operator Manual Press Brake Operations
		Welding Intro to Welding Gas Metal Arc short Circuit Transfer Welding Gas Metal Arc Spray Transfer Gas Tungsten Arc Welding Virtual Reality Info	Welding Intro to Welding Gas Metal Arc short Circuit Transfer Welding Gas Metal Arc Spray Transfer Gas Tungsten Arc Welding Virtual Reality Info

Hospitality Management Academy

The goal of the Hotel Management Academy is to prepare students for entry-level positions in front-of-house operations within the hospitality industry. Successful completion of the Hotel Management Academy will set students on a career path that encompasses all aspects of hotel operations including food and beverage management. Students in this Academy will learn about the day-to-day operations of a lodging facility and the wide range of career options that exist within the hospitality industry, many of which are based upon the fundamental principles of business, marketing, and personnel management.

9th	10th	11th	12th
		Introduction to Lodging Operations	Introduction to Lodging Operations
		Hospitality Marketing	Hospitality Marketing
		Sanitation & Safety	Sanitation & Safety
		Nutrition	Nutrition
		Menu Planning	Menu Planning

Emergency Medical Services: EMT Academy

The Kirkwood Emergency Medical Technician Academy Program can lead students to college certificates such as diplomas, associates, bachelors, and graduate degrees. Examples of college majors include, but are not limited to: EMT, Paramedic, Nursing, or Pre-Med.

9th	10th	11th	12th
		Exploration of Health Careers	Exploration of Health Careers
		Medical Terminology	Medical Terminology
		Emergency Medical Technician I	Emergency Medical Technician I
		Emergency Medical Technician II	Emergency Medical Technician II
		Emergency Medical Technician II Clinical	Emergency Medical Technician II Clinical