2025-2026

Course Description Book

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ALTA-AURELIA SENIOR HIGH SCHOOL

PURPOSE OF THIS BOOKLET

The purpose of this booklet is to acquaint students with the subject offerings of Alta-Aurelia High School and to provide information, which will assist in the selection of classes by students at the time of registration. Belinda Shea, our counselor, is available to students and their parents in the matter of selection of subjects.

CLASS LOAD

The minimum class load is 7.5 credits.

REQUIREMENTS FOR GRADUATION
(54 credits)

English	8 credits (English 1, English 2, and Composition or Career and Technical Writing required)
Science	6 credits (Physical Science and Biology required)
Mathematics	6 credits
Social Studies	6 credits (Geography, Modern American History, and Government required)
Computers	1 credit
Fine Arts	2 credits (Choir, Band, or Art)
Vocational	3 credits (Business, Family & Consumer Science, Industrial Tech, or Ag)
Physical Education	4 credits
Health	2 credit
Personal Finance	1 credit
Electives	15 credits

REQUIREMENTS PER GRADE LEVEL

9TH GRADE
Geography
English 1
Physical Science
PE
Algebra 1 or Extended Algebra 1

10th GRADE
English 2
Biology
PE
Health

11th GRADE
PE.
American History

12th GRADE
Government
Personal Finance

PE
Composition or Career and Technical Writing

DROP POLICY

Only students taking more than the minimum load (7.5 credits) may drop a course. A course that is dropped before the end of the first nine weeks of a reporting period of a semester will be recorded on the permanent record as a withdrawal. This will not affect their grade point average. All courses that are dropped during the second nine weeks of a semester, except those that are dropped for medical reasons, will be recorded as an "F" and will be figured into the student's grade point average. A student may not drop a required course. Those courses are as follows: English I, English II, Composition or Career and Technical Writing, Geography 1, American History, Government, Physical Science, and Biology, and Personal Finance.

* See Alta-Aurelia College Class Policies for information on dropping a college course.

Students may change their schedule during the first 3 days of classes.

REGISTRATION AND SCHEDULING PROCEDURES

Students may make schedule changes until final schedules are handed out at registration. Changes made after a student's final schedule is distributed will be subject to the following conditions:

1. School error
2. Graduation or entrance requirements not met
3. School personnel recommendation
4. Class dropped by school
5. Balance section – move from larger to smaller

EARLY GRADUATION

Early graduation will be permitted upon completion of the following criteria:

1. Formal written request by parents and student to administration prior to October 1st of the school year the student intends to graduate. The request shall have the reasons for early graduation and a plan for what the student is going to pursue after graduation.
2. Meeting all state requirements.
3. Meeting all local requirements.

If a student is interested in early graduation, they should begin planning no later than their sophomore year. If early graduation is granted, the student may take part in graduation ceremonies or have their diploma mailed to them.

SENIOR YEAR PLUS

Concurrent Enrollment are courses delivered through a contractual agreement between a school district and community college. Courses must lead to a two-year degree or diploma. Concurrent Enrollment is open to all students in grades 9-12 free of charge. This includes textbooks and materials. Students would pay for textbooks if they would like to own the book. Students are allowed to take classes any way they choose, for example: online, in-person at school, in-person at the community college, evening classes, early morning classes. Students are not limited on the number of courses or credits they take per semester or year, except those set by the postsecondary institution regarding full-time load.

Post-Secondary Enrollment Options (PSEO) are courses taken via an Iowa college or university when a course is not available through the district or contracted community college. PSEO is open to all students in grades 11-12 and identified GT students in grades 9 and 10.

Please see the counselor for information on eligibility requirements or other questions.

AGRICULTURAL SCIENCE

Agriscience
9-10
Year, Elective

The Introduction to Agriculture, Food, and Natural Resources course is intended to serve as an introductory course that enables all students to have a variety of experiences that will provide an overview of the fields of agricultural science and natural resources. In addition, students will understand specific connections between their lessons, Supervised Agricultural Experience (SAE) 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. They will also spend some time learning about FFA and what that organization has to offer student members.

Career & College Readiness: This course allows students to begin developing skills for their future career. Those include critical thinking, problem solving, record keeping and teamwork. This introductory course is one that students will build on when taking future agriculture courses. We also complete several career summaries where students pick any career to research things such as what skills are desired, how much education is required, what jobs are available, the job outlook in that career path, etc.

Animal Science
11-12
Semester, Science Credit

In animal science students will gain an understanding of the animal science industry. We will study animal cell structure and function, anatomy and physiology, and animal health. We will also cover proper animal handling, nutrition, and genetics including animal reproduction. The main goal of this class is to cover basic sciences and how it pertains to animal agriculture. Since we review some basic biology principles it is recommended that students are at least enrolled in biology or have previously taken it. Students will also document their Supervised Agricultural Experience (SAE) projects using a record book.

Career & College Readiness: This course encompasses the study of animal systems, including content areas such as life processes, health, nutrition, genetics, management and processing, as applied to small animals, livestock, dairy, horses and/or poultry. Students completing a program of study in this pathway will demonstrate competence in the application of principles and techniques for the development, application and management of animal systems in AFNR settings.

Veterinary Science
11-12
Semester, Elective
Prerequisite- Animal Science

Veterinary Science covers terminology, body systems, clinical information, and hospital procedures. We will also be learning about disorders, diseases, and different medicines. This class goes along with content previously covered in animal science, but further in depth. Along with these concepts we will cover animal management and career exploration.

Career and College Readiness: This course ties in a realistic preview of veterinary work and academics in relation to learning about veterinary science. In this class students will cover multiple systems within the body of an animal. As a part of the course we learn about actual cases a veterinarian may see in their line of work and how that ties back to the material being covered.

Plant Science
10-11-12
Semester, Science Credit
Prerequisite: Agriscience

A foundation-level course that will teach students about the form and function of plant systems. Students are immersed in inquiry-based exercises filled with activities, projects, and problems to teach them plant concepts through laboratory and practical experiences. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production.

Career and College Readiness: This career pathway encompasses the study of plant life cycles, classifications, functions, structures, reproduction, media and nutrients, as well as growth and cultural practices through the study of crops, trees, shrubs and/or ornamental plants. Students completing a program of study in this pathway will demonstrate competence in the application of principles and techniques for the development, application and management of plant systems that can be used in their own career.

Intro to Agricultural Business
11-12
Semester, Dual Credit
AGB 133

This course is an introduction to agribusiness management. It will emphasize the application of basic, practical business management skills in marketing, demand analysis, forecasting, production, finance, and leadership with a global perspective. It is a dual credit course through Iowa Central Community College.

Career and College Readiness: This course transfers into ICCC as 3 credits that can be applied to an Associate's Degree

Ag Leadership
11-12
Semester, Elective

This class will focus on post-high school career strategies for juniors and seniors. This class will strongly promote leadership, teamwork and other "soft" skills. Students will work on identifying themselves as a leader, creating job search resources and practicing their speaking skills. This class also will include keeping up to date on current happenings in the agriculture industry.

Career and College Readiness: This course will emphasize practicing soft skills all employers are looking for. Additional topics covered that relate to being career and college ready are resumes, cover letters, preparing for a job interview, careers in the industry and identifying personal leadership styles. These are all things that apply to students upon leaving high school and entering the next chapter in their lives.

Survey of the Animal Industry
11-12
Semester, Dual Credit
Prerequisite: Animal Science

Introduces students to the various species and breeds of domestic animals and to create an understanding of the principles of food animal production, product marketing, and issues confronting the animal industry.

Career and College Readiness: This course transfers into ICCC as 3 credits that can be applied to an Associate's Degree. This course is also a direct transfer to Iowa State University, the land grant college offering agriculturally related degrees in our state.

Introduction to Soils/Agronomy
10-11-12
Semester, Elective

This course covers agronomy, crop science and soil science with an emphasis on conservation practices. This course utilizes resources from Iowa State University Extension and their Agronomy department. The soils resources include some soil judging contest components and a series of local watershed conservation lessons. Students will also work on their Supervised Agricultural Experience project including, but not limited to, record keeping.

Course Outcomes:

- Define Integrated Pest Management and its importance
- Identify basic crop scouting procedures
- Describe corn and soybean plant growth and development
- Investigate plant pathology, insects and disease
- Identify common types of crop injuries
- Determine how to manage plant diseases, insects, and weeds
- Understanding pesticide resistance
- Recognize human health and environmental degradation interacting with pesticides

Career & College Readiness: This course allows students to create an idea for their own piece of precision conservation technology as well as study soil maps from locations all around our country. By learning about soil and plant health students can apply the things they have learned in a career related to plant or soil science. They can also gain understanding of how to properly raise successful plants in their own lives on either a large or small scale, depending on their desire.

Natural Resources and Ecology
10-11-12
Spring Semester, Elective
Prerequisite: Biology or Agriscience

N.R.E. is a CASE curriculum course that provides students with an overview of natural resources and ecology principles. Areas of study in this class include but are not limited to: biomes & ecosystem, soils, energy, flora, fauna, agriculture, forestry, mining, environmental policies, resource management, and human environmental impacts. The students will take part in class discussions, laboratory experiments, model building, research papers, and projects.
This class is recommended for students interested in pursuing vocational, two-year, and four-year degrees in conservation, environmental studies, and agriculture. This course is also recommended for students looking to pursue immediate careers in the agricultural industry.

ART

Art I
9-10-11-12
Year, Elective

Art I is a course that explores the Elements of Design while it provides a foundation of art mediums through an exploration of multiple means of art making. Students will explore drawing, painting, sculpture, and more while creating projects for each medium to showcase their understanding of each material.

College and Career Readiness: This course helps to prepare students for future encounters with art and design. Exposure to various artists and elements of art allow students to look at art more thoroughly and critically.

Art II
10-11-12
Year, Elective
Prerequisite: Art I

Art II is a course that continues to explore the Elements of Design while it provides a foundation of art mediums through an exploration of multiple means of art making. Students will explore drawing, painting, printmaking, sculpture, and more while creating projects for each medium to showcase their understanding of each material.

College and Career Readiness: This course helps to prepare students for future encounters with art and design. Exposure to various artists and elements of art allow students to look at art more thoroughly and critically. Students also learn basic design elements, which can be applied to future projects, advertising, etc.

Art III
11-12
Year, Elective
Prerequisite: Art II

Art III is a course that focuses on providing a foundation of the Principles of Design through an exploration of multiple means of art making. Students will explore (both independently and together) drawing, painting, printmaking, sculpture, and more while creating projects for each medium to showcase their understanding of each material.

College and Career Readiness: This course helps to prepare students for future encounters with art and design. Students will learn about the Principles of Design, which will allow them to make more successful art and allow them to critique other art thoroughly.

Art IV
12
Year, Elective
Prerequisite: Art III, instructor approval

Art IV is a course that provides students with a more independent exploration of art mediums, while focusing on the Elements and Principles of Design. Students will explore mediums while creating projects in familiar and new mediums to them to showcase their understanding of varying material.

College and Career Readiness: This course helps to prepare students for future encounters with art and design. Students practice applying the Principles of Design, which will allow them to make more successful art and allow them to critique other art thoroughly.

BUSINESS

Business Math
9-10-11-12
Semester, Elective
3 credit hours from ICCC
BUS 112

Students apply mathematical skills used in personal and business operations. This course includes fractions, decimals, percentages, trade and cash discounts, markups, markdowns, interest, depreciation, investments, insurance, payroll, and annuities. Students will be able to calculate solutions to basic math problems with and/or without the aid of a hand-held calculator.

Student Learning Outcomes:

After completing this course, the student should be able to:
- **Calculate decimal, fraction, and percent problems**
- **Compute interest-related problems**
- **Calculate and work with payroll**
- **Calculate and work with bank situations**
- **Calculate and work with credit and loan situations**

Students will acquire fundamental math concepts that can be applied to personal and/or job-related situations. Situations that the text provides represent real business situations that people in the workforce deal with on an everyday basis. These math concepts will translate into careers found in the business world, as well as everyday life situations as an employee and consumer.

Human Relations
9-10-11-12
Semester, Elective
3 credit hours from ICCC
BUS 161
Prerequisite: Intro to Business is highly suggested
This course introduces students to the importance of people skills and personal strategies needed for anyone working in business today.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Understand the nature of customer relationship management to show its contributions to a company
- Foster self-understanding to recognize the impact of personal feelings on others.
- Develop personal traits to foster career advancement.
- Apply ethics to demonstrate trustworthiness.
- Exhibit techniques to manage emotional reactions to people and situations.
- Identify with others' feelings, needs, and concerns to enhance interpersonal relations.
- Use communication skills to foster open, honest communications.
- Manage stressful situations to minimize potential negative impact.
- Implement teamwork techniques to accomplish goals.
- Employ leadership skills to achieve workplace objectives.
- Manage internal and external business relationships to foster positive interactions.
- Acquire self-development skills to enhance relationships and improve efficiency in the work environment.

By focusing on working with others in a business setting – co-workers, consumers, and vendors, the students will learn the dynamics occurring at every level of organizations by examining the people, practices, and events that make the world of business what it is today and will be tomorrow. With a diverse world, this course would be beneficial for any student wanting to understand more about communication in the workplace and why it is important.

Accounting

11-12

Year, Elective

Students will receive instruction in analyzing and recording various business transactions and in completing the accounting cycle by journalizing, posting, preparing worksheets, making adjusting and closing entries, and preparing financial statements for service and merchandising businesses. Instruction will be provided for accounting by using a petty cash fund, reconciling a bank statement, and utilizing the cash short and over account; calculating and journalizing employees' payroll; and calculating and journalizing employer payroll taxes. No previous accounting instruction is necessary.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Complete and explain the purpose of the various steps in the accounting cycle.
- Apply generally accepted accounting principles to determine the value of assets.
- Apply generally accepted accounting principles to determine the value of liabilities.
- Apply generally accepted accounting principles to determine the value of owner's equity.
- Prepare, interpret, and analyze financial statements using manual and computerized systems for service, merchandising, and manufacturing.
- Financial statement preparation and analysis.
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Accounting is a great course for those looking to go into a business career in the future. Accounting serves as one of the bases of the business world. This course can be beneficial for those wanting to own their own business in the future as well.

Introduction to Business
9-10-11-12
Semester, Elective
3 credit hours from ICCC
BUS-102

This course is an introduction to the trends and opportunities in today's dynamic business environment, surveying economics, global markets, social responsibility, ownership forms, entrepreneurship, management organization, marketing, accounting and financial management. Students who are interested in a career in business or want to further their knowledge of the business world would benefit from this course.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Understand the nature of customer relationship management to show its contributions to a company
- Understand fundamental factors about entrepreneurship to recognize its role and importance in the economy.
- Understand marketing's role and function in business to facilitate economic exchanges with customers.
- Acquire foundational knowledge of customer/client/business behavior to understand what motivates decision-making.
- Understand the nature of business to show its contributions to society.
- Foster positive relationships with customers to enhance company image.
- Apply knowledge of business ownership to establish and continue business operations.

Intro to Business is a great class to get students acclimated to different parts of the business world. This would be a beneficial course for those wanting to go into a specific business category, such as marketing, econ, and entrepreneurship while gaining a general base knowledge about different aspects of the business world.

Business Communication
9-10-11-12 Semester
Elective 3 credit hours from ICCC
BUS-121
Prerequisite: Intro to Business and Human Relations are highly suggested

This course introduces students to the fundamental principles of business communications and provides the opportunity to develop and practice communication skills; both written and oral. A simple three-step writing process that works for all types of writing/speaking projects, for school and work, addresses the strategies for today's communication challenges, including the job search. Business communication differs from personal and social communication in addressing business use of email, blogs, social networks, podcasts, and other technologies professionally in marketing, servicing, and creating strong business relationships.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Apply verbal skills to obtain and convey information.
- Write internal and external business correspondence to convey and obtain information effectively.
- Use social media to communicate with a business's stakeholders.
- Foster positive relationships with customers to enhance company image.

- Use communication skills to foster open, honest communications.
- Utilize critical-thinking skills to determine best options/outcomes.
- Use communication skills to influence others.

This course is beneficial for those students wanting to refine their own communication while learning about acceptable communication in the business world. This would be a great course for those going into business, but also for students just wanting to find out more about types of communication found in any and every workplace.

Personal Finance (Required for all Seniors)

12

Semester

Personal Finance is a required course for graduation that is designed to help students gain essential knowledge and skills to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. Topics covered will include income, money management, spending, credit, insurance, as well as saving and investing.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Identify monetary resources and distribution options for those resources.
- Demonstrate an understanding of the concept of credit.
- Recognize various ways to save and the reasons individuals decide to save.
- Distinguish between appropriate spending choices.
- Evaluate long term investments.
- Measure risk management tools.

Personal Finance focuses on subjects that people everywhere deal with on an everyday basis. The subjects discussed in this course will give students knowledge about financial situations and decisions they will encounter in their futures. Help yourself make more financially sound decisions.

Entrepreneurship
11-12
Prerequisite: Intro to Business is highly suggested
Semester, Elective
Class Limit: 5

This course will dive into the world of Entrepreneurship. We will discuss the ins & outs of owning and running a business including startup, business plans, product mix, economical benefits, success vs failure, and finances. Students will work with local small businesses to gain realistic experiences found within the business world.

COMPUTER SCIENCE

Computer Applications
9-10-11-12
Semester, Elective
Class limit: 16

This course is designed to refine student's skills in using various computer applications. Students will produce documents that can be used in their academic and personal activities. Upon completion students will have acquired a basic understanding of Word, Excel, and PowerPoint. Students will be able to edit and format different documents using these applications. We will also explore the differences between the Microsoft and Google suites while creating documents using applications from both. This class will also introduce the use of Photoshop, Movie Maker, Google Sites, and other applications used to create and produce visual outputs.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Students will build and strengthen communication and technological capabilities as it relates to the effective use of word processing software.
- Students will build and strengthen communication and technological capabilities as it relates to the effective use of spreadsheet software.
- Students will build and strengthen communication and technological capabilities as it relates to the effective use of presentation software.
- Students will use different types of software to create multimedia documents.
- This course introduces different applications and software that are used no matter the type of business you work for. These applications could also be helpful in high school and college.

Computer Science Principles

10-11-12

Semester, Elective

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

Photoshop
9-10-11-12
Semester, Elective
3 credit hours from ICCC
Limit: 16
CIS 255

Get a thorough grounding in Adobe Photoshop and Creative Suite, the must-have digital imaging programs for today's web and print designers. Hands-on projects include working with layers,

making selections, incorporating color technique, creating special effects with filters and more. Create complex web graphics such as rollovers.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Use computerized layering techniques to apply special effects, filters and blending modes.
- Define and apply the basic functions of pixel selection and painting and editing tools.
- Use color correction technique to adjust for lightness, contrast, brightness, color saturation, levels, curves, and color balance.
- Utilize digital editing tools to manage layers, transform selections, and work with selection masks.
- Convert an image for monitor display and use on the World Wide Web.
- Explain the difference between raster and vector graphics and the computer software appropriate for each.
- Combine multiple images into one composite digital representation.
- Describe the ethical considerations involved in image manipulation and copyright.
- Analyze and critique selected images for quality of design and proper use of color and composition.

This class is a great introduction to the world of digital media. Photoshop is one of the most used applications within the Graphic Design career field. Several projects within the class also relate to promotion & advertising which pertain to Marketing.

Computer Science

CSC 142

4 Credit Hours from ICCC

This is an introductory course in computer programming which emphasizes the design and development of structured programs. All standard topics are considered including input/output functions, logical constructs of sequence, selection and repetition, user-defined functions, object-oriented programming, and the use of simple variables, arrays, and structures. This course is one of the required courses in the Computer Programming Languages Certificate Program. The course will help students prepare for a career in computer programming and information services. The course will require students to persevere through challenging problems and manage time to meet deadlines which are both important to everyday life. Three hours lecture, two hours lab.

Requisites:

Take MAT-120 or MAT-127 or CIS-172 or CIS-189 or CIS-198 - Recommended to be taken either prior to or at the same time as this course, but is not required.

Python Programming

CIS 189

3 Credit Hours from ICCC

This is an introductory course in programming using the Python programming language. Python programs are utilized in business, industry, and scripting. This course introduces students to scripting including the basic data types, control structures, regular expressions, input/output, and

textual analysis. This course is one of the required courses in the Computer Programming Languages Certificate Program. The course will help students prepare for a career in computer programming and information services. The course will require students to persevere through challenging problems and manage time to meet deadlines which are both important to everyday life. Two hours of lecture, two hours of lab. This is an introductory course in programming using the Python programming language. Python programs are utilized in business, industry, and scripting. This course introduces students to scripting including the basic data types, control structures, regular expressions, input/output, and textual analysis. Two hours of lecture, One hour of lab.
Requisites:
Take NET-110 or CIS-162 or CIS-172 - Must be completed prior to taking this course.

FAMILY AND CONSUMER SCIENCE

Basic Food Preparation
9-10-11-12
Semester, Elective

This class is for students of all grade levels and is a hands-on, learn-and-apply, type of class. This is the first of two courses covering basic food preparation. Students will learn about nutrition and the MyPlate dietary guidelines. The rest of the class will focus on applying their knowledge by preparing recipes in all five sections of the MyPlate. Students will prepare a variety of dishes from alfredo sauce to muffins. Proper, practical use of kitchen equipment will be introduced in this class. Sanitary practices and food safety will also be taught. Students also learn teamwork skills while preparing their foods. **This class is a prerequisite for all other food classes.**

National Family and Consumer Sciences Standard Addressed:
- Food Production and Services - Standard 8: Integrate knowledge, skills, and practices required for careers in food production and services.
- Food Sciences, Dietetics and Nutrition - Standard 9: Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.

Career Pathways:
Chef, Food Scientist, Dietician, Nutritionist, Restaurant Manager, etc.

Advanced Food Preparation
9-10-11-12
Semester, Elective
Prerequisite: Basic Food Preparation

This class is for students of all grade levels and is a hands-on, learn-and-apply, type of class. This is the second of two courses covering basic food preparation. Menu planning for dinners, table settings, and etiquette will be incorporated into the curriculum where students will prepare a variety of cakes, yeast breads, pies, and meats. Food safety and sanitation will also be taught, as well as an expanded use of kitchen equipment. Students also learn teamwork skills while preparing their foods. **Students MUST take Basic Foods before taking Advanced Foods.**

National Family and Consumer Sciences Standard Addressed:

- Food Production and Services - Standard 8: Integrate knowledge, skills, and practices required for careers in food production and services.
- Food Sciences, Dietetics and Nutrition - Standard 9: Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.

Career Pathways:
Chef, Food Scientist, Dietician, Nutritionist, Restaurant Manager, etc.

Parenting
9-10-11-12
Semester, Elective
The purpose of this class is to increase self-understanding as well as to enhance student's knowledge of children and their age-appropriate behavior. The decision to parent and the responsibilities of parenthood are discussed. This coursework teaches the environmental and hereditary influences during prenatal development and details of the entire prenatal process. In addition, individual units cover the various developmental stages from intellectual, social, physical, and emotional growth.

National Family and Consumer Sciences Standard Addressed:
- Family - Standard 6: Evaluate the significance of family and its effects on the well being of individuals and society.
- Parenting - Standard 15: Evaluate the impact of parenting roles and responsibilities on strengthening the well-being of individuals and families.

Career Pathways: Parent Educator, Child Life Specialist, Social Worker, Child Welfare Worker, Childcare Center Director, etc.

Child Development
9-10-11-12
Semester, Elective

Child Development is a continuation of Parenting but no prior coursework is required before entrance into this class. Child Development teaches the four areas of growth (physical, social, emotional, and intellectual) with specific attention given to children between the ages of birth and age three. Coursework emphasizes that an individual's personality is almost completely established by the age of two. Knowledge gained from this class will help lay a good groundwork for developing the potential in children to its fullest capacity. Students will leave this course with a better understanding of infant and toddler's needs and patterns of development, as well as a better understanding of their own personal development.

National Family and Consumer Sciences Standard Addressed:
- Early Childhood, Education, and Services - Standard 4: Integrate knowledge skills, and practices required for careers in early childhood, education, and services.
- Human Development - Standard 12: Analyze factors that influence human growth and development.

Career Pathways: Parent Educator, Child Life Specialist, Social Worker, Child Welfare Worker, Childcare Center Director, Teacher, etc.

Housing Design
9-10-11-12
Semester, Elective
Housing design is a class that specifically emphasizes the design elements and art principles and how they apply to our homes. These design rules will be first applied to exterior housing styles where students learn the history of housing and the origins of current American architecture. Students will then study interior design specifically related to furniture styles, floor/wall/ceiling décor, and floor planning. Developing personal decorating tastes and styles and acquiring decorating skills will be class objectives. Furniture selection and placement will be a part of this one semester curriculum. A binder portfolio will be required as part of the course work. Actual paint and fabric swatches and flooring samples will be utilized to help students recognize and describe various options available in today's décor.

National Family and Consumer Sciences Standard Addressed:
- Housing and Interior Design - Standard 11: Integrate knowledge, skills, and practices required for careers in housing and interior design.

Career Pathways: Interior Designer, Architect, Graphic Designer, Design and Sales Associate, Furniture Designer, Furniture Sales, Housing Design Consultant, etc.

Independent Living
11-12
Semester, Elective

The course is designed to prepare high schoolers for life on their own. The curriculum is generated by the students themselves. It is based on their needs and interests. Parental input inspired the need for this course. Typical curriculum includes knowledge of apartment contracts, personal safety, basic food preparation, meal planning, clothing care, etc. Independent Living would be most beneficial for Juniors and Seniors.

National Family and Consumer Sciences Standard Addressed:
- Consumer and Family Resources - Standard 2: Demonstrate management of individual and family resources, such as food, clothing, shelter, health care, recreation,

Career Pathways: Realtor, Tailor, Chef, Social Worker, Therapist, Public Health, etc.

Creative Sewing
9-10-11-12
Semester, Elective

This course is designed to teach students the basics of sewing. Content might include pivoting, straight-stitching, Velcro, buttons, zippers and more. Overall, students will be able to understand how to use a sewing machine, sewing tools, and hand sew. Students will not only create several take-home projects for themselves, but will also have the opportunity to create a service project to give out locally. Opportunities to mend clothing and other textiles might occur to provide students the experience of using their new skills to be a wise consumer. No prior skills are necessarily, however students are encouraged to be willing to create!

National Family and Consumer Sciences Standard Addressed:
- Consumer and Family Resources - Standard 2: Demonstrate management of individual and family resources, such as food, clothing, shelter, health care, recreation,
- Textiles and Apparel - Standard 16: Integrate knowledge, skills, and practices required for careers in textiles and apparel.

Career Pathways: Tailor, Apparel Designer, Apparel Merchandiser, Textile Designer, and Patternmaker

Advanced Sewing
9-10-11-12
Semester, Elective
Prerequisite: Creative Sewing

This course is a continuation of Creative Sewing. Students will carry on with their sewing skills by discovering pattern reading in both quilts and apparels. The opportunity to learn fine needle arts such as embroidery, wool applique, and cross-stitching will be available. Students will not only create several take-home projects for themselves, but will also have the opportunity to create a service project to give out locally. Textile science will also be added into this course to help students understand what materials are for what project. Throughout this course students will discover the art of sewing and challenge themselves to reach a higher level of skill.

National Family and Consumer Sciences Standard Addressed:

- Textiles and Apparel - Standard 16: Integrate knowledge, skills, and practices required for careers in textiles and apparel.

Career Pathways: Tailor, Apparel Designer, Apparel Merchandiser, Textile Designer, and Patternmaker

FOREIGN LANGUAGE

Spanish I
9-10-11-12
Year, Elective

Emphasis is on language acquisition with the goal of communicating in a global society. The focus will be on acquiring high-frequency word structures through listening and reading. Beginning speaking and writing skills will also be developed. The course will be based on a combination of stories, in-class notes, making use of readings, songs, computer programs, and games to bring the Latin culture into the classroom. Classes will be conducted in Spanish and English. A minimum of a "C-" must be earned in the 1st semester in order to continue with this course in the 2nd semester. Active participation is required.

Spanish II
10-11-12
Year, Elective
Prerequisite: C- or better in Spanish I

This level includes those students who have completed the Spanish I program. Culture and current events concerning the Hispanic people will be discussed. Students will write and tell stories as well as act them out in class. Short stories and novels will be read and discussed in class. Classes will be conducted in Spanish with explanations in English as needed. A minimum of a "C-" must be earned in the 1st semester in order to continue with this course in the 2nd semester.

Spanish III
11-12
Year, Elective
Prerequisite: C- in Spanish II

This course continues and expands upon the skills of speaking, listening, reading, and writing. Students will read stories and some literature, as well as continue the storytelling begun in Spanish II. Classes are conducted in Spanish. The formal study of grammar will be conducted in English. A minimum of a "C-" must be earned in the 1st semester in order to continue with this course in the 2nd semester.

Spanish IV
12
Year, Elective
Prerequisite: C- in Spanish III
This course is a continuation of the work begun in Spanish III. Student's language and grammar growth, as well as cultural understanding through literature, current media and conversation, are emphasized. Almost all discussions and written work are in Spanish. A minimum of a "C-" must be earned in the 1st semester in order to continue with this course in the 2nd semester.

HEALTH

Health
10, Year Required

Health Education is a comprehensive course to provide students with the knowledge and skills necessary to make informed decisions about their physical, mental, and social well-being. Through a combination of classroom instruction, interactive activities, and real-world applications, students will explore various topics related to personal health, safety, and fitness.

INDUSTRIAL TECHNOLOGY

The Industrial Tech courses are designed to give the ambitious student a working knowledge of salable skills in the basic industries of our society today. The student is encouraged to enroll in math and science courses which will assist him or her in the Industrial Technology courses. Textbook readings, classroom discussion, and written assignments are important parts of the course as well as actual industrial work in the laboratory. If a student is interested in entering the "world of work" immediately
after graduation or entering a vocational/technical school or a four-year college, Industrial Education courses will be a very valuable part of the student's high school education.

Computer Aided Drafting-CAD Courses

INTRO TO HIGH SCHOOL CAD
10-11-12
Semester, Elective

Intro to High School CAD is the basic study of the procedures and practices used in the drafting industry. Students will learn basic commands in Computer Aided Drafting (CAD) using an industrial

grade program named AutoCAD. Intro to High School CAD is required for students who plan on taking Advanced Woods Technology and Welding Fabrication, industrial technology courses.

ARCHITECTURAL CAD
10-11-12
Semester, Elective
Prerequisite: Intro to High School CAD

Architectural CAD is the study of residential building design. Students will learn residential engineering by completing units of study on surveying and field notes, plots and maps, contour mapping and cut and fill charts. Students will learn about what is needed in a residential building design and how to create blueprints using the computer aided drafting system.

Woods Courses

WOODS TECHNOLOGY
9-10-11-12
Year, Elective

Students will construct a project from a predetermined project list, which will incorporate the application of hand tools, portable tools and stationary tools used in cabinet manufacturing and the construction trades. Measuring skills, and applied math will be emphasized. Problem solving skills acquired in this class will carry over to other construction manufacturing and engineering experiences. This course will cover the applications of woods in our society, design planning, finishes and finish applications. First time students at Alta – Aurelia High School taking Woods Technology will be required to construct a predetermined project. The project must be furniture grade quality and will include: Blueprints, Bill of Material and a Cut List. The predetermined project is designed to enhance the student's knowledge on how to properly: design, construct, sand and apply finished to a woods project.
*(Students who finish their project early may construct their own furniture grade project if time allows.)

ADVANCED WOODS TECHNOLOGY
9-10-11-12
Year, Elective
Prerequisite: Woods Technology

This course will have similar course content as Woods Technology. Students will employ more production and build their competencies to a job entry or high skill level. Students must produce their own project which must include a set of Blueprints, Bill of Materials, and Cut Sheet.

ADVANCED WOODS TECHNOLOGY II

11-12

Year, Elective

Prerequisite: Woods Technology and Advanced Woods Technology

This course will have similar course content as Woods Technology. Students will employ more production and build their competencies to a job entry or high skill level. Students must produce their own project which must include a set of Blueprints, Bill of Materials, and Cut Sheet.

Manufacturing Courses

INTRO TO WELDING
9-10-11-12
Semester, Elective

The Beginning Welding course offers students instruction in flat and horizontal position welding. The welding process covers Shielded Metal Arc Welding, Gas Metal Arc Welding, Oxy-Acetylene cutting and welding, braze welding, plasma arc cutting, and Gas Tungsten Arc Welding.

WELDING FABRICATION
9-10-11-12
Semester, Elective
Prerequisite: Intro to High School CAD and Intro to Welding

The reading and interpretation of welding prints will be covered as students will use their welding skills, they have developed in previous welding courses and apply them to fabricate a project or projects. Students must produce their own project which must include a set of Blueprints, Bill of Materials, and Cut Sheet. Projects will be done individually or in small groups. CNC Plasma Table operation can be incorporated into projects.

WELDING FABRICATION II

11-12

Semester, Elective

Prerequisite: Intro to High School CAD, Intro to Welding and Welding Fabrication

The reading and interpretation of welding prints will be covered as students will use their welding skills, they have developed in previous welding courses and apply them to fabricate a project or projects. Students must produce their own project which must include a set of Blueprints, Bill of Materials, and Cut Sheet. Projects will be done individually or in small groups. CNC Plasma Table operation can be incorporated into projects.

Combustion Engine Technology Courses

POWER MECHANICS
9-10-11-12
Semester, Elective

This course is for students interested in learning more about the operation, care, adjustment, and repair of small power equipment. Small gas-powered engines will be furnished for beginning lab exercises. Later in the semester individuals may bring small engines and motors from home for repair and maintenance.

Electrical Technology

Electrical Fundamentals
9-10-11-12
Semester, Elective

Electrical Fundamentals is designed to develop a background of electrical knowledge for students wanting to pursue occupations in the study of science, physics, automotive, industry, maintenance, or construction. Students will gain the knowledge of electricity by using electrical equipment, electronic components and operating multi-meters while controlling electrical flow in a lab situation. Students will learn how to calculate electrical usage using Ohm's Law of both Direct and Alternating Current circuits. Students will also complete a core of lab experiments. If time permits, students will experience basic residential wiring fundamentals in a lab situation of a simple room, as well as repairing house hold fixtures. Finally, students will become literate consumer shoppers by knowing the difference between electrical components as simple as light switches and fixtures or as complex as 3 phase electrical motors used to operate large machinery and Industry setups.

LANGUAGE ARTS

English I
9
Year, Required

English 1 is an introductory high school course that spans four areas: the writing process, academic writing, short stories, and novel units. The writing process provides instruction on how to find, develop, organize, and write effectively. Academic writing introduces the students to a variety of essays that utilize the writing process and require academic research. Short stories and novel units expose the students to fiction and nonfiction. The students will be exposed to a variety of literary devices and reading techniques to further advance their reading skills.

College and Career Readiness: English 1 helps students with writing, reading, and speaking. These skills are essential for success in the college environment and careers of choice.

English II
10
Year, Required

English 2 builds on English 1 with a review of the writing process, writing academic papers, short stories, and novel units. The students are exposed to a variety of literature, literary devices, novels, plays, and papers necessary for success in school.

College and Career Readiness: English 2 continues to help students with writing, reading, and speaking. These skills are essential for success in the college environment and careers of choice.

Genre Reading
10-11-12
Semester, Elective

This course is designed to give students choice and to help them find a passion for reading. Each student will choose their own books under the parameters of select genres. This class will entail not only independent reading, but also group discussions. Students will answer questions about their

reading and write book reviews over the novels they choose. Comparing two different mediums of the same story as well as digging into the censorship of books will also be included.

College and Career Readiness: Regardless of the career one chooses, reading will always be an essential skill. This class sets up students for success when it comes to being better readers, and allows students to make connections between literature and the world around them.

Advanced Novels
11-12
Semester, Elective
Prerequisite- Novels

Advanced Novels is an intensive reading class designed for readers who enjoy reading and literary analysis. This course will cover more material at a faster rate than Novels 1 (Genre Reading) and challenge the students to read material they may not have chosen on their own. Each novel will have a different project (debate, essay, pamphlet, etc.) to assess their understanding. This course is designed for college bound students.

College and Career Readiness: Regardless of the path one chooses, reading will always be an essential skill. This class asks students to dig deeper into the texts and analyze themes, character motives, plot structure, and more. The analysis skills taught will help them be stronger students in all areas

Literature
11-12
Year, Elective

Literature
This course offers students a comprehensive exploration of both American and British literary traditions. Designed to enhance critical reading, analytical thinking, and writing skills, this course takes students on a captivating journey through diverse literary landscapes. Students will spend first semester analyzing American literature, from its colonial roots to contemporary works. They will explore how American literature has evolved alongside the nation's history, reflecting its cultural, social, and political developments. The focus shifts to the British literature second semester, where students will examine works spanning from the Anglo-Saxon period to the modern era. Throughout the year, students will encounter a diverse array of texts, including prose, poetry, non-fiction, and drama.

Creative Writing
11-12
Semester, Elective

This semester long course provides an opportunity for high school students to pursue advanced creative writing work. Students will explore the components of literature through the lens of a writer. Concepts in this course collection include: characterization, building components of a plot, publishing, presentation, and more. Students can expect to create a portfolio of creative works pertaining to fiction and poetry.

Communications I
10-11-12
Semester, Elective

The first few weeks the student learns the fundamental of speaking (i.e. controlling fear, critiquing classmates' speeches, preparing introductions and conclusions; etc.). After performing a few fundamental speeches, the student will spend the rest of the semester preparing, presenting, and critiquing a wide range of speeches. .Some of the speeches require little preparation and are aimed at improving delivery, while other speeches involve several days of preparation and are assigned to enhance research and organizational skills. Speeches include debate, persuasive, informational, improve, and special occasion speeches.

College and Career Readiness: Communications 1 is a course designed to help students present information in a vocal format that will help students with public speaking in both college and career environments.

Communications 2
10-11-12
Semester, Elective
Prerequisite: Communications I; sophomores must have instructor approval

Communications 2 is a two-fold course; one half of the content is devoted to platform speaking and the other half is devoted to drama. The student is challenged with speaking situations more advanced than the speeches assigned in Communications I. On completion of this course, the student will feel confident in his communicative skills and will understand the essential qualities involved in becoming an excellent public speaker. Students will perform in a variety of acting scenes and platform speeches.
College and Career Readiness: Communications 2 is a course designed to help students present information in a vocal format that will help students with public speaking in both college and career environments.

12th grade students must take Composition or Career and Technical Writing.

Senior Composition
12
Semester, Required

Composition builds on the fundamentals of writing covered in English I and English II courses. The writing required in this class is rigorous and geared toward the college-bound student. The student prepares a narrative essay as well as several research-based expository papers: compare/contrast essay, cause and effect essay, argument essay, informative research essay, and literary analysis essay. Each writing assignment includes peer and teacher feedback and the opportunity for revisions. Shorter writing assignments and reflective questions will help prepare the student for writing in college.

Career and Technical Writing
Grade 12
Semester, Required

This semester long course builds on the fundamentals of writing covered in English I and English II and is geared toward those who plan to attend a two-year community college or tech school or enter the workforce.

College and Career Readiness: The writing required in this class will help students prepare for academic writing they will encounter in college as well as real-world types of writing such as blogs, newspaper articles, formal emails, thank-you notes, and incident reports. Students will also be introduced to writing scholarship essays.

MATHEMATICS

Extended Algebra I and Extended Algebra II-
9-10-11-12
Year (Each class is a year), Elective

Students will:

- Interpret the structure of Algebraic Expressions
- Write expressions in equivalent forms to solve problems
- Understand solving equations as a process
- Solve equations and inequalities in one variable
- Represent equations and inequalities graphically
- Create functions to illustrate the relationship between units
- Analyze functions with different representations in terms of context

College and career readiness: Algebra equips students with a foundation for mathematical representation, reasoning, interpretation, and analysis. These skills pave the way for studies within a wide range of fields such as business, fitness, engineering, architecture, medicine cooking, electricity, and systems analysis.

Algebra I
9-10-11-12
Year, Elective

Students will:

- Interpret the structure of Algebraic Expressions
- Write expressions in equivalent forms to solve problems
- Understand solving equations as a process
- Solve equations and inequalities in one variable
- Solve systems of equations
- Represent equations and inequalities graphically
- Perform arithmetic operations on polynomial expressions

- Understand the relationship between factors of polynomials and zeroes of a function
- Create functions to illustrate the relationship between units
- Analyze functions with different representations in terms of context

College and career readiness: Algebra equips students with a foundation for mathematical representation, reasoning, interpretation, and analysis. These skills pave the way for studies within a wide range of fields such as business, fitness, engineering, architecture, medicine cooking, electricity,
and systems analysis.

Algebra II
10-11-12
Year, Elective
Prerequisite: Algebra I

Students Will:

- Interpret the structure of Algebraic Expressions
- Write expressions in equivalent forms to solve problems
- Understand solving equations as a process
- Solve equations and inequalities in one variable
- Solve systems of equations
- Represent equations and inequalities graphically
- Perform arithmetic operations on polynomial expressions
- Understand the relationship between factors of polynomials and zeroes of a function
- Create functions to illustrate the relationship between units
- Analyze functions with different representations in terms of context
- Rewrite rational expressions
- Construct and compare linear, quadratic, and exponential models and solve problems.
- Interpret expressions for functions in terms of the situation they model.

College and career readiness: Algebra equips students with a foundation for mathematical representation, reasoning, interpretation, and analysis. These skills pave the way for studies within a wide range of fields such as business, fitness, engineering, architecture, medicine cooking, electricity, and systems analysis

Geometry
10-11-12
Year, Elective
Prerequisite: Algebra I or Instructor Approval

Geometry will foster logical and sequential thinking through learning basic geometry concepts, constructing congruence proofs using several geometric theorems. Students will also explore similarity of shapes using ratios and proportions. Students will also explore the area and volume several different two- and three-dimension shapes and how these skills can be put to work in making business and personal decisions outside of the classroom. These skills will be very valuable not only on a geometry level but also problem solving in a logical manner.

Advanced Algebra and Trigonometry
11-12
Year, Elective
Prerequisite: A letter grade of C or better in Algebra II

This course culminates the process of learning the fundamental skills of Algebra, Geometry, and Trigonometry. Students will analyze and graph advanced functions of quadratics and polynomial functions as well as higher degree functions. We will explore how equations help to explain the physical world around us such as the flight of a ball in the air. Trigonometric functions, exponential and logarithmic functions also will be dissected to see its place in our life. Several word problems on each section will be explored, giving real world relevance to concepts being discussed. Graphing calculators/apps. will be used when applicable to enhance material in text. This class will most likely be a prerequisite to students looking to pursue a math, business, science, electricians, etc. degrees at the college level.

Calculus
12
Semester, Elective
Prerequisite: Advanced Algebra & Trigonometry

After a quick review of pre-calculus/advanced algebra skills, students will be introduced to Calculus with discussions of limits. Next the study of instantaneous rate of change such as an accelerating cars or the speed of falling object will be explored using differentiation. This class will greatly help the student that has college plans for engineering, math teacher and other math related careers.

Probability/Statistics
11-12
Year, Elective
Prerequisite: Algebra II

Students will learn basic statistical methods and utilize them to analyze data. Developing surveys to collect data that will be analyzed for inferencing will be a major focus. Conditional probability, rules of probability, expected values confidence intervals and binomial statistical analysis are key concepts of this class. Interpreting data using these skills and concepts will be used throughout this year. The ability to master these concepts will be a great asset when continuing in the medical, science, nursing, actuarial studies and math majors.

Consumer Mathematics
11-12
Year, Elective
Prerequisite: Algebra I

In consumer math students will have the opportunity to see how basic math concepts are used in life beyond school. Shopping comparisons, buying a house, home owners costs, borrowing money, credit card information, car loans and others will be explored to see how students can make informed financial life decision as they enter the job market.

Technical Math
11-12
Semester, Elective
3 credit hours from ICCC
MAT 743

This is an applied mathematics course which will teach or reinforce basic mathematical skill. Fundamental mathematical concepts will be applied to the real-life problems of today's world. Upon completion of this course, the student should be able to:

1. Read and interpret information in math problems
2. Develop and execute strategies for the solution process
3. Solve problems with appropriate concepts, operations, and technology

MENTORING

Mentoring
11-12
Year, Elective
Prerequisite: Counselor Approval
½ credit per semester- Pass/Fail Grading

Mentoring is an opportunity for high school students to assist in an elementary, middle, or high school classroom. They attend class on a daily basis and assist in everyday activities that occur in the classroom. The students assist the teacher, as the teacher deems necessary. The students should have some goals of what they would like to learn or accomplish throughout the semester and communicate these goals to the cooperating teacher. The mentoring experience might be especially helpful for students who are interested in going into education as a career. This will give the high school students a brief overview of what occurs in a classroom setting. This class will be offered with pass/fail grading.

WORK EXPERIENCE

Workplace Internship
11-12
Semester, Elective

Prepare for success in the professional world with our internship class, equipping students with essential skills, career insights, and hands-on experience for a seamless transition from the classroom to the workplace. Students spend one week in the classroom before being paired with an internship placement in a career interest area. Pass/Fail grading based on attendance, completing reflections and assignments and evaluations by the cooperating employer.

MUSIC

Band
9-10-11-12
Year, Elective

High School Band is designed to provide a year-long study of instrumental music. High school students will continue developing the fundamentals of playing an instrument including: tone quality, intonation, rhythm, balance and blend within an ensemble, technique, interpretation/musicianship, articulation, and performance. Students will also be exposed to music theory concepts to grow themselves as musicians. All band students will participate in marching band, concert band, and pep band, and are expected to be present at all scheduled performances. Students will have scheduled weekly band lessons (between 15-20 minutes) with the Band Director on their main instrument. Students with ANY experience level (including none) are encouraged to participate in band! Students will have opportunities to participate in All State, District Honor Band Festivals, Solo/Ensemble Contest, Jazz Band, and Drumline. You must be enrolled in band to participate in any extra-curricular opportunities. Band is a full year elective course. Students who sign up for 1st semester need to plan on being in band for the entire year. If a conflict arises before 2nd semester, students must obtain permission from the Director to not participate during 2nd semester.

College and Career Readiness:

- Communicate and work productively with others, incorporating different perspectives and cross cultural understanding, to increase innovation and the quality of work.
- Demonstrate leadership skills, integrity, ethical behavior, and social responsibility while collaborating to achieve common goals.
- Demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life.
- Demonstrate productivity and accountability by meeting high expectations.

Choir
9-10-11-12
Year, Elective
High School students will work on and develop proper vocal technique, including: breathing, tonal placement, intonation, rhythmic accuracy, and range. Students will sing and study a variety of choral literature from several musical periods in history as well as develop an appreciation for different styles of music. Music will include English as well as foreign text which is suitable for ensemble. Students will develop performance skills and be expected to participate and perform in

all areas of the vocal program. This would include, but not be limited to: Concerts (as dated and specified at the beginning of the year), fall musical, large group contests, solo and ensemble contest, commencement and other performances for special community and school activities. Students will also be required to attend a weekly private lesson during each quarter. Each lesson will last an average of 15-20 minutes and will be scheduled during study hall, before school, or after school. Also, available to students participating in high school choir is jazz choir, All-State auditions, honor choirs and festivals.

Choir is a **full year** elective course. Students who sign up for the 1st semester need to plan on being in choir for the entire year. If a conflict arises before 2nd semester, students must obtain permission from the Director to not participate during 2nd semester.

High School Music Trip
9-10-11-12
Elective, Spring 2027

Once every four years, the high school music department plans a music trip to a pre-determined destination. The purpose of this trip is to provide an educational music experience including music appreciation, public performance, and sight-seeing in the destination of our choosing. Trip destinations in the past have included Nashville and Chicago. The next music trip is scheduled for Spring 2027; the location has yet to be determined.

Students are not required to participate in this trip, but are strongly encouraged to consider planning for this educational experience. In order for students to fully appreciate the musical offerings this trip provides, **students must be enrolled in band or choir for the 2025-2026 and 2026-2027 school years. Students entering 9th grade on the year of the trip should have band or choir on their schedule their 8th grade year. This is subject to administrative discretion.**

PHYSICAL EDUCATION

Physical Education
Grades: 9-10-11-12
Year

This course helps meet the physical, mental and social needs of students through physical activities. Students have the opportunity to learn new activities, become more knowledgeable of the rules, and improve their skill level in these activities. Students will also be given the opportunity to take a leadership role and to become a contributing member of a group.

The goal of physical education shall consistently and gradually improve the overall condition of each student. A variety of activities that are challenging, interesting and enjoyable are utilized to accomplish this. The students are provided the opportunity to develop an understanding of movement, an awareness of their body and how the parts function in movement. The student also gains knowledge of the rules and skills necessary to enjoy participation in a variety of activities. With an emphasis in sports that can be throughout their lifetime, it is anticipated that the students will continue participation in one or more activities as an adult. The physical education program shall encourage the students to develop a healthy attitude toward being physically fit.

Physical education is required by state law in Iowa and junior/senior high students are required to participate unless a medical doctor's excuse is presented to the instructor. Required dress consists of shorts or sweat pants, and t-shirt or sweat shirt, along with athletic type tennis shoes.

Weightlifting
Grades 9-10-11-12
Prerequisite: none
The emphasis in this course is on muscular strength, endurance, flexibility, and safety. Weight room safety, warm-up/cool down procedures, lifting technique and safety for major lifts, muscle identification, and goal setting are components in this course. Nutrition and programming of lifting will also be topics covered during this course. This class is for all experience and ability levels and an emphasis is placed on a non-judgmental atmosphere.

SCIENCE

Physical Science
9
Year, Required

Physical Science includes the study of basic chemistry and physics. The first semester will cover. Physics concepts such as basic science skills, electricity, magnetism, light, and sound. Chemistry concepts are primarily covered in the second semester: states of matter, atoms and atomic structure, the periodic table, and chemical reactions This is a freshman course that helps students develop the basic concepts and laboratory skills necessary for future science courses. Using the Iowa Core Standards as the basis for content students will engage in class discussions, laboratory experiments, model building, research papers, and projects.

Biology
10
Year, Required
Prerequisite: Physical Science

The goal of this class is for students to gain a deep and robust understanding of the fundamental concepts of the life sciences. Students will have the opportunity to explore and research their interests related to the Iowa Core Standards. The standards covered in this class will be the molecular biology, the cell, Interactions, energy and dynamics of ecosystems, heredity and adaptations. The class will be discussing the theory of evolution, ecology, and conservation. The students will take part in class discussions, laboratory experiments, model building, and have the opportunity to display their knowledge in a manner which best suits their talents.

Human Anatomy & Physiology I
11-12
Semester, Elective
4 Credit Hours from ICCC
BIO 168

A study of the structure and function of the human body. This course is the first course of a two-semester sequence. The study begins at the molecular and cellular level and proceeds through the integumentary system, skeletal system, muscular system, the central, and peripheral and autonomic nervous systems. At least one year of high school biology or chemistry or the equivalent is recommended.

Human Anatomy & Physiology II
11-12
Semester, Elective
4 Credit Hours from ICCC
BIO 173

The second course in a two-semester sequence. The study continues with the senses, endocrine system, blood and cardiovascular system, lymphatic system and immunity, respiratory, digestive, urinary, and the reproductive systems.

Forensic Science

10-11-12

Fall Semester, Elective
Prerequisite: Passing Grade in Physical Science

Forensic science is the application of basic biological, chemical and physical science principles. Students will take on the various roles of crime scene investigators, scientists, and medical examiner in order to collect and evaluate evidence in a problem-solving environment. Crime-solving techniques will be studied, as well as hands-on laboratory investigations in such areas as fingerprinting, physical evidence, forensic anthropology, entomology, and forensic serology. Standards-based grading may be utilized in this course.
This course is ideal for students who want a rounded science course for credit and recommended for students who have an interest in pursuing a career in the Criminal Science Field.

Zoology
11-12
Spring Semester, Elective
Prerequisite: Biology

Zoology is intended for students that are interested in knowing more about the Animal Kingdom. This class will focus on the major phyla and families starting with the invertebrates and working up to mammals. The first half of the class will focus on what defines an animal and how we have all the types of animals present today that we do. While the second half will focus on invertebrates and vertebrates, while also addressing animal behavior. The students will take part in class discussions, , research papers, and various projects. Standards-based grading may be utilized in this course.
This class is recommended for students interested in pursuing a two or four-year degree in animal sciences, conservation sciences, agricultural sciences, and ecological sciences.

Natural Resources and Ecology
11-12
Spring Semester, Elective
Prerequisite: Biology

N.R.E. is a CASE curriculum course that provides students with an overview of natural resources and ecology principles. Areas of study in this class include but are not limited to: biomes & ecosystem, soils, energy, flora, fauna, agriculture, forestry, mining, environmental policies, resource

management, and human environmental impacts. The students will take part in class discussions, laboratory experiments, model building, research papers, and projects.
This class is recommended for students interested in pursuing vocational, two-year, and four-year degrees in conservation, environmental studies, and agriculture. This course is also recommended for students looking to pursue immediate careers in the agricultural industry.

Earth Science
10-11-12
Fall Semester, Elective
Prerequisite: Physical Science

This course will cover the makeup of the Earth, such as rocks and minerals, the forces and processes that shape the surface of the Earth, such as erosion, glaciers, plate tectonics, and volcanoes. Geologic time will also be discussed throughout the course. If time permits oceanology and meteorology are also addressed. Standards-based grading may be utilized in this course.

This course is recommended for students who are interested in the Earth Sciences and/or considering pursuing careers in Earth Sciences, Environmental Sciences, and Meteorological Sciences.

Nature of and Explorations in Science
11-12
Spring Semester, Elective
Recommended: Communications I

This course will focus on philosophy and context related to science and its research practices and methods. It would cover current issues in science, as well as discuss views of science and address questions about science, particularly how does science relates to religion, if at all? This class would also address the progression of science throughout history. Classroom participation will be stressed. A variety of readings and activities will be provided and performed to enrich classroom discussions. Standards-based grading may be utilized in this course.
This course is recommended for students who are interested in understanding the practices behind scientific development and the overall function of science in societal and global functions.

Chemistry
11-12
Year, Elective
Prerequisite: Physical Science, Algebra I is also recommended

This chemistry course explores the fundamentals of chemistry. This course will focus on the types of matter and their categorization, the periodic table and its properties, including atoms and their behavior, and naming chemical reactions and equations, reaction rates, stoichiometric relationships, acids and bases, and brief introductions into the world of organic and nuclear chemistry. Standards-based grading may be utilized in this course.
This course is recommended for students who are planning on attending a two-year or four-year school.

Advanced Chemistry
11-12
Year, Elective
Prerequisite: Algebra I

This course will be a study of matter and its properties. The characteristics of the elements and the stoichiometric relationship between elements will be emphasized. The atomic structure will be studied with attention given to electron distribution in atoms and chemical bonding. Higher-level laboratory activities may be performed to enrich the classroom discussion. Standards-based grading may be utilized in this course.
This course is intended largely as a college-level chemistry preparation course and is recommended to students who will be required to take chemistry at a two or four-year college or university.

Astronomy
11-12
Spring Semester, Elective
Prerequisite: Physical Science, Geometry

Astronomy is a science that focuses on celestial bodies and the processes that form them. This course will cover the properties of various celestial bodies to include but not limited to stars, stellar evolution and structure, and galaxies and galactic evolution, as well as orbital models. Standards-based grading may be utilized in this course. This course is recommended for students who need to complete a science credit and are interested in learning more about the "things" beyond Earth's atmosphere.

Physics
11-12
Prerequisite: Algebra I and Geometry

Physics is the study of physical laws and characteristics with applications from everyday experiences designed primarily for seniors in high school. It is intended as a course for applying science to everyday events and to keep abreast of present-day technology. Students will study the interactions of matter, force, and energy. This course is intended largely as a college prep course. Math skills of algebra, geometry, and trigonometry will be used in this course. Basic laboratory activities will be performed to enrich the classroom discussion. Standards-based grading may be utilized in this course. This course is recommended for anyone pursuing a four-year college or university degree where physics is a part of the required college courses of that degree path.

SOCIAL STUDIES

Early American History
9-10-11-12
Year, Elective

This class is an overview course spanning America's birth through the end of the Civil War and Reconstruction. The goal is to provide students with a background to understand their culture and appreciate their history, and to provide a basis for evaluating or interpreting American history so they can intellectually participate in American democracy as informed citizens. Strong focuses include the development of democracy, the Constitution, and the different interpretations of the

Constitution that lie behind the choices of political philosophies of today. We will also extensively cover the divisiveness of the institution of Slavery and the Civil War.

College and Career Readiness: The study of history prepares a student for the dynamics of business, government, or nonprofit careers. Historical scholarship trains the mind to think on many levels, to deal with partial evidence and with ambiguity. Historical knowledge provides details of past experience with which to test the feasibility of new solutions. This class also prepares students by developing critical thinking skills which are necessary for a successful college career and beyond.

Modern American History
11-12
Required for 11th grade

This class uses higher order mental processing and inquiry to explore topics of interest in our country's modern history, from 1877 to present. Students have the opportunity to explore topics of their own interest while informing others of their discoveries. There is much to learn from our recent past and understanding that gives us a firm grasp of the world's current events.

College and Career Readiness: The study of history prepares a student for the dynamics of business, government, or nonprofit careers. Historical scholarship trains the mind to think on many levels, to deal with partial evidence and with ambiguity. Historical knowledge provides details of past experience with which to test the feasibility of new solutions. This class also prepares students by developing critical thinking skills which are necessary for a successful college career and beyond.

Contemporary Issues
10-11-12
Semester, Elective

In this project based course, students will stay up to date on current issues to better understand the impact on them and the world around them.

Anthropology and Early Civilizations (Early World History)
10-11-12
Semester Elective

Anthropology and Early Civilizations is an engaging and interdisciplinary course that delves into the origins of humanity and the development of humankind's first civilizations. We will use multiple lenses throughout the semester including, cultural, linguistic, biological and archeological. This course format will include but is not limited to, lectures, projects, presentations and hands-on activities.

World History
10-11-12
Year, Elective

The Modern World History course is designed to teach students about the civilizations, events, ideas, conflicts, and people who have shaped human history. Some specific topics include the enlightenment, world religions, industrialism, imperialism, World War I, totalitarianism, and World War 2.

World Geography
Required for 9th grade
Year

This course uses inquiry and projects to explore the five themes of geography. We will cover every continent as it applies to those five themes, fully understanding what geography is, and gaining a general knowledge of the rest of the world. We explore location, human characteristics, physical characteristics, human-environment interactions, movement, and regions. We also gain extensive knowledge of the countries of the world and their location on the globe.

College and Career Readiness: This class teaches about different cultures and understanding the dynamics of human interaction, which is an essential skill for success in an increasingly diverse culture. Geography will expose you to a number of issues including conflict, human-environment interaction, and political decisions that impact the world; these issues will become an ongoing part of your life academically and professionally. This class also prepares students by developing critical thinking skills which are necessary for a successful college career and beyond.

American Government
12
Semester, Required

This semester long course explores our country's government with special emphasis on how it functions to serve us. We will focus on what we can do to be good citizens and the role we can take in the political process. We will explore current politics and how our values and ideals compare. We will use Iowa's government as a comparison to the national level and in doing this, get a good grasp of our own state government.

ICCC CLASSES AND INTERNET CLASSES

On-Line Courses
On-Line courses are taught via the internet using CANVAS. The available course listings can be found at this website: https://www.iowacentral.edu/online_learning/dl_courses.asp
Students needs to fill out an application with the school counselor.

Auto Technology 1- Iowa Central, Storm Lake
This program is designed to teach the theory necessary for success in the fields related to Engine Mechanics. Practical experiences are conducted in a laboratory setting. The topics covered include: small engine, maintenance & repair, auto engine repair, engine performance, automatic trans/transaxle, brakes, electrical systems, heating and air conditioning. Limit 24. Classes: AUT-108 Introduction to Transportation, AUT-163 Automotive Engine Repair, AUT-503 Automotive Brake Systems.

Automotive Electrical Systems- Iowa Central, Storm Lake
This introductory course covers basic electronic theory and utilization of electrical measuring instruments. Emphasis will be on the application of Ohm's Law and the proper utilization of electronic test equipment, including instrument selection, interpretation of results, and maintenance of equipment. Classes: AUT-604 Auto Electrical Measurements, AUT-632 Auto Electrical/ Electronic Systems.

Auto Technology 2- Iowa Central, Storm Lake
This is a level 2 course and is intended for students going into a mechanical career.
AUT-881 Automotive Lab 1.

Storm Lake Career Academy

Advanced Manufacturing

This program is for students who are mechanically inclined, the advanced manufacturing career pathway is a great start to finding out what career interests them. The course sequence has been designed to build skills in fundamental welding, metal working, blueprint reading, and general machining. Students will develop a solid foundation in basic machining tools such as lathes and milling machines, as well as general shop equipment and tools.

Fall

·	WEL107	Welding Technology Fundamentals	2
·	WEL322	Intro to Blueprint	2
·	WEL181	Gas Metal Arc Welding	2
·	WEL381	Gas Metal Arc Lab	2
·	WEL190	Gas Tungsten Arc Welding	2

Semester Total 10

Spring

·	WEL178	Gas Metal Arc Welding	2
·	WEL196	Advanced Gas Tungsten Arc Welding	2

·	WEL298	Thermal Cutting and Welding	1
·	MAT743	Tech Math	3
·	MFG266	Introduction to Mill Operations	2

Semester Total 10
Career Pathway Total 20

Certifications: Production Welding Certificate

Business

The Business career pathway is designed for students interested in Accounting, Business, Economics, Management or Marketing. It consists of a well-rounded curriculum that hosts numerous core business classes that will transfer directly in either the Associate of Arts or Associate of Science degrees at Iowa Central or into any business program at a four-year university or college.

Fall

·	ECN130	Microeconomics	3
·	ACC111	Introduction to Accounting	3
·	ENG105	Composition I	3
·	MGT101	Management	3

Semester Total 12

Spring

· ECON120	Macroeconomics	3
· ENG106	Composition II	3
· ACC142	Financial Accounting	3
· MKT110	Principles of Marketing	3
	Semester Total	**12**
	Career Pathway Total	**24**

Certifications: NA

Computer Science/Programming

Students in the Computer Science/Programming career pathway will be exposed to the technology woven into our daily lives. The devices and applications that we use are changing rapidly, and these students will be exposed to the diverse fields of the modern world to introduce the latest computer science and programming technology.

Fall

· CSC162	Computer Science	4
· CIS189	Python	3
· ECN120	Principles of Macroeconomics	3
	Semester Total	**10**

Spring

· CIS153	Data Structures	4
· POL125	Comparative Government and Politics	3
· PSY121	Developmental Psychology	3
	Semester Total	**10**
	Career Pathway Total	**20**

Certifications: NA

Electrical/Mechanical

The Electrical Technologies career pathway provides training essential for entry-level positions as residential electricians, plant maintenance electricians, and wind farm technicians. During the year, students will develop a solid electrical foundation essential to the many fields of the electrical and electronics industry.

Fall

· ELE111	AC Fundamentals	3
· ELE114	DC Fundamentals	3
· MFG256	Intro to Lathe	3
· IND184	Mechanical Processes	3
	Semester Total	**12**

Spring

·	ELE155	National Electrical Code I	2
·	ELE195	Motor Controls	3
·	ELE124	Tools/Adapters	2
·	IND116	Pneumatics/Hydraulics	2
·	WEL122	Beginning Welding	3
	Semester Total		**12**
	Career Pathway Total		**24**

Certifications: NA

Health Science

This pathway is for the student that wants to explore the Health Sciences pathway. Students will take courses that help prepare them to enter a variety of programs within the Health Science field, as well as the opportunity to earn credentials to become a Certified Nursing Assistant.

Fall

·	BIO168	Human Anatomy & Physiology I	4
·	BIO151	Nutrition	3
·	HSC104	Introduction to Health Care	2
·	ENG105	Composition I	3
	Semester Total		**12**

Spring

· BIO173	Human Anatomy & Physiology II	4
· HSC172	75 Hour Nurse Aide Course T9905	3
· REL105	Religion	3
	Semester Total	**10**
	Career Pathway Total	**22**

Certifications: Certified Nursing Assistant (CNA)

Liberal Arts – Transfer

This pathway is designed for students who plan on gaining a bachelor's degree but are not yet sure what specific content area they are interested in. The Liberal Arts pathway will provide a variety of courses from the Science, Social Science, and Humanities categories from the Associate of Arts degree at Iowa Central. These courses are often direct transfers into four-year universities and colleges.

Fall

· LIT101	Introduction to Literature	3
· POL111	American National Government	3
· REL105	Introduction to Religion	3
	Semester Total	**9**

Spring

· SOC110	Introduction to Sociology	3
· HIS111	Western Civ: Early Modern to Present	3
· MUS110	Music Appreciation	3
· SDV130	Exploring Careers	1
	Semester Total	**10**
	Career Pathway Total	**19**

Certifications: NA

Teacher Academy

To become a teacher, a student must graduate from an accredited teacher training program. Designed specifically for those students interested in the career field of academic teaching, the Teacher Academy introduces students to the principles and pre-professional courses required to gain an understanding of the

education field, as well as gaining coursework that will lead directly into the education major at a four-year university or college.

Fall

·	EDU213	Introduction to Education	3
·	POL111	American National Government	3
·	PSY281	Educational Psychology	3
·	SDV130	Exploring Careers	1
		Semester Total	**10**

Spring

·	EDU255	Technology in the Classroom	3
·	POL125	Comparative Government & Politics	3
·	SOC110	Introduction to Sociology	3
·	PHI101	Intro to Philosophy	3
		Semester Total	**12**
		Career Pathway Total	**22**