



**Humboldt High School**

**Course Description Handbook**

**2022-2023**

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"It is the policy of the Humboldt Community School District not to discriminate on the basis of race, creed, color, age, sex, sexual orientation, gender identity, national origin, disability, religion, marital status or socioeconomic status in its programs, activities, or employment practices as required by the Iowa Code section 216.7. If you have questions or grievances related to compliance with this policy please contact the Humboldt Community School District, Assistant Finance Manager, 23 3<sup>rd</sup> St N, PO Box 130, Dakota City, IA 50529; 515-332-1330 or the Iowa Civil Rights Commission, Grimes State Office Building, 400 E. 14<sup>th</sup> St., Des Moines, IA 50319-1004; phone number 515-281-4121, 800-457-4416; web site: <http://www.state.ia.us/government/crc/index.html>."

## Introduction

This course description handbook has been designed to provide you with information which will help guide you through your high school years. This handbook includes the graduation requirements for Humboldt High School, policies relating to courses, course descriptions, and the entry requirements for the regent universities; University of Iowa, Iowa State University, and the University of Northern Iowa. We encourage students and parents to become familiar with this handbook as it will serve as a great resource when completing their four-year plans. Please ask any questions you may have regarding your course selections. Classroom teachers, homeroom teachers, school counselor, assistant principal, and principal are all available to help answer these or any other questions.

## Humboldt Student Essential Learning

### **R Responsible Citizen**

All students will know, understand, and demonstrate the knowledge and skills needed to be an independent, productive member of society who can effectively work with other people.

### **E Effective Communicator**

All students will know, understand, and demonstrate the knowledge and skills needed to effectively communicate using speaking, writing, reading, listening, and observation processes.

### **A Acquire and Apply Basic Knowledge**

All students will know, understand and demonstrate the knowledge and skills needed to apply foundational understanding in the arts, math, language arts, science, social studies, and the vocations.

### **C Critical and Creative Thinker**

All students will know, understand, and demonstrate the knowledge and skills needed for effective decision making, problem solving, reasoning, logic, and learning processes.

### **H Healthy Person**

All students will know, understand, and demonstrate the knowledge and skills needed for healthy life choices in their behavioral, emotional, ethical, intellectual, and physical aspects of their character.

### **I Information Processor**

All students will know, understand, and demonstrate the knowledge and skills needed to access, use, select, apply, and adapt information in useful ways.

### **T Technology User**

All students will know, understand, and demonstrate the knowledge skills needed to access, use, select, apply, and adapt technology in useful ways.

## Humboldt Community School District Educational Mission

The Board of Directors and staff of the Humboldt Community School District are committed to fulfilling their mission of “Learning and Success for All.” The objective of this mission is to provide an education for all students that will assist them in becoming responsible citizens, effective communicators, and appliers of basic knowledge, critical and creative thinkers, healthy persons, information processors, and technology users.

We believe that this objective can best be met through an educational experience broad enough in scope to encompass the social, emotional, intellectual, and behavioral aspects of the whole student.

An effective educational experience must be grounded in meeting the individual and common needs of all students. We believe that meeting the needs of all students must be a cooperative effort among the school staff, parents, and the community. Resources and services outside our school play a vital part in our ability to provide a quality educational experience. Families, churches, businesses, community organizations, and area agencies share the responsibility of educating all our youth.

Every effort is made to remain aware of and use changing technology, emerging instructional and assessment methods, and dynamic curriculum to provide “Learning and Success for All” in the 21<sup>st</sup> Century.

The Board of Directors recognizes that our educational system should be evaluated periodically to ensure that it remains consistent with our mission and beliefs about student learning.

Finally, the Board of Directors recognizes that the guardianship of public education is a trust and an obligation—that the goals of education and the goals of democracy are fundamentally the same. For that reason, the Board considers that the mission and objectives can best be realized when the educational experience is directed through written Board policies based on our seven belief statements regarding student learning, the constitution, the state statutes, and federal and state regulations.

# HIGH SCHOOL DIPLOMA

Students must demonstrate mastery of the District Standards and Benchmarks in the following areas:

## **Language Arts (8 semesters/4 years)**

This can be accomplished through the successful completion of two semesters of Language Arts 9, two semesters of Language Arts 10, two semesters of Language Arts 11 and one semester of Language Arts 12 or equivalent. Students must also take an additional elective course their junior or senior year. This will give them the equivalent of four full years of Language Arts.

## **Social Studies (6 semesters/3 years)**

This can be accomplished through the successful completion of two semesters of United States History during their ninth grade year, two semesters of Modern Civilizations during their sophomore year, one semester of United States Government their senior year, and one semester of a social studies elective during their junior or senior year. This will give them three full years of social studies.

## **Mathematics (6 semesters/3 years)**

This can be accomplished through the completion of two semesters their freshman year and two semesters their sophomore year with the remainder of the course work to be completed during their junior and senior years. All students need to complete one semester of Personal Money Management during their Junior or Senior year. This will give them three full years of math. \*Students are reminded that this graduation requirement will not satisfy the admission requirements of many post-secondary institutions.

## **Science (6 semesters/3 years)**

During students' freshman year they will complete one semester each of Earth Science and Environmental Science and two semesters of Biology their sophomore year. Students planning to attend a 4-year college should take a full year of Physics or Chemistry their junior or senior year. If a student is not planning on attending a 4-year college, they can take a semester each of Physical Science Chemistry and Physical Science Physics their junior and/or senior year. A physics class and a chemistry class are required for graduation. This will give them three full years of science. \*Students are reminded that depending on the path they choose, this graduation requirement will not satisfy the admission requirements of many post-secondary institutions.

## **Physical Education (4 credits/4 years)**

Physical education is required each semester you are enrolled at Humboldt High School.

**Students will need to take additional elective courses to achieve the required 48 semester credits necessary for graduation.**

Humboldt Graduation Requirements do not satisfy college admission requirements in some areas. Students planning on attending a four year university are encouraged to consider the admission requirements for their chosen post-secondary institution.

**Be especially alert to the requirements of the three state universities in Iowa that are listed on page 4.**

# POLICIES RELATING TO COURSES AT HUMBOLDT HIGH SCHOOL

Written below are several policies relating to such things as the number of courses you must take and when you may add or drop courses. These policies are in effect as of the 2022-23 school year:

-Students must be scheduled into a minimum of seven courses per day.

-Students may make schedule changes during the first three days of each semester with parent or guardian permission. This includes all dual credit courses. However, a student must go to their existing schedule for the first full day of classes at the beginning of each semester. \*\*

-Students may drop a course without penalty after the first three weeks of each semester by completing an everyday study hall application, only if the student has a full schedule (8 courses) and appropriate signatures. This excludes all dual credit courses. After that time, an "F" is given for any course dropped, even if passing work is being done at the time the course is dropped.

-Students that are withdrawn from a course, due to reasons approved by the administration, will receive a "WE" on their transcripts and they will not be deemed ineligible.

-Some courses may involve a cost to the student. If the student believes that this cost is a deterrent to taking that course, he or she should contact the high school principal.

**\*\*After the initial registration and scheduling, student schedule changes may only be made according to the following criteria:**

<b>Acceptable Reasons for Changing your Schedule:</b>	<b>Non-Acceptable reasons for requesting a schedule change:</b>
Computer and/or clerical error.	Student claims not to have requested the course at registration.
Failure of the first half of a yearlong course.	Students doesn't like the subject after he/she begins the class.
Students who must enroll in a course to meet graduation requirements.	Poor grade or potential failure, which will hurt GPA.
Students who must enroll in a course to meet college admission requirements.	Student is not with friends.
Administration and teacher adjustment in class size.	There is too much homework.
	Student is having trouble getting along with teacher or other students in the class
	Student needs a study hall.
	Student does not understand the material.

## Graduation Requirements for Humboldt High School

To ensure that all students have a sound education in fundamentals, the Board of Education requires that certain courses be taken for graduation. Other courses may be chosen to fit individual needs and plans. Students' programs of study should be the result of cooperative planning by the students with their parents, teachers, and the school counselor. A total of forty eight (48) credits are required to graduate. One credit is given for each subject satisfactorily pursued five days a week for a semester. Credits in grades 9-12 are included in computing graduation requirements. ALL GRADUATION REQUIREMENTS MUST BE MET BEFORE A STUDENT IS PERMITTED TO PARTICIPATE IN THE GRADUATION CEREMONY. The entire forty eight (48) credits required for graduation must be taken at the high school or the credit must be approved through the high school principal. A student's high school schedule must include seven courses for each semester in which they are enrolled in school. Each student is also urged to participate in the extra-curricular activity program of the school. However, no student should be overloaded with classes and extra-curricular activities to the detriment of his or her physical and mental health and/or scholarship.

In addition to the below required course work a student will have to take enough electives to fulfill the remainder of the 48 credits required for graduation.

<b>SCIENCE (6 Semesters)</b>	<b>SOCIAL STUDIES (6 Semesters)</b>	<b>MATH (6 Semesters)</b>	<b>LANGUAGE ARTS (8 Semesters)</b>
<p><i>Environmental Science</i> (1 Semester) <i>Earth Science</i> (1 Semester)</p> <p><b>BIOLOGY</b> (2 Semesters)</p> <p><b>CHEMISTRY</b> (1 semester) Either: Physical Science Chemistry (1 semester) OR Chemistry (2 semesters)</p> <p><b>PHYSICS</b> (1 semester) Either: Physical Science Physics (1 semester) OR Physics (2 semesters)</p> <p>One additional semester of Science must come from the courses listed below: Forensic Science Human Anatomy/Physiology I Human Anatomy/Physiology II Advanced Chemistry Organic Chemistry Principles of Biomedical Science (2 semesters)</p>	<p><b>U.S. HISTORY</b> (2 Semesters)</p> <p><b>MODERN CIVILIZATIONS</b> (2 Semesters)</p> <p><i>U.S. Government</i> (1 Semester) OR <b>AP Government</b></p> <p>One additional semester of social studies must come from the courses listed below: Minority Studies Contemporary Issues Sociology World Religions Historical Figures AP Macro Economics AP Micro Economics</p> <p><b>PHYSICAL EDUCATION (4 YEARS)</b> Physical education is required each semester you are enrolled at Humboldt High School.</p> <p>Recreational Activities Personal Strength Aerobics</p>	<p>ALGEBRA IA (2 Semesters)</p> <p>ALGEBRA IB (2 Semesters)</p> <p>ALGEBRA I (2 Semesters)</p> <p><i>Intro to Geometry</i> (1 Semester)</p> <p><i>Consumer Math</i> (1 Semester)</p> <p>GEOMETRY (2 Semesters)</p> <p>ALGEBRA II (2 Semesters)</p> <p>PRECALCULUS with TRIGONOMETRY (2 Semesters)</p> <p><i>ICCC Algebra</i> (1 semester)</p> <p><i>ICCC Trigonometry</i> (1 semester)</p> <p><i>Math Topics</i> (1 semester)</p> <p><b>Personal Money Management</b> (1 Semester)</p> <p><i>ICCC Statistics</i> (1 Semester)</p> <p>AP Calculus AB (2 Semesters)</p>	<p><b>LANGUAGE ARTS 9</b> (2 Semesters) Or <i>LA 9 Accelerated</i> (1 Semester)</p> <p><b>LANGUAGE ARTS 10</b> (2 Semesters) or <i>LA 10 Accelerated</i> (1 Semester)</p> <p><b>Language Arts 11A</b> or equivalent (1 Semester)</p> <p><b>Language Arts 11B</b> or equivalent (1 Semester)</p> <p><b>Language Arts 12</b> or equivalent (1 Semester)</p> <p>One additional semester of Language Arts are required from the choices listed below:  Composition Technical Writing Speech AP Literature/Composition AP Language/Composition ICCC Composition I ICCC Composition II</p>
<p><b>All Caps = Full Year Course</b> <b>Lower Case &amp; Italics = Semester Course</b> <b>Boldface = Required for all Students</b></p>			

# High School Course Requirements for Admission

	Iowa State University	University of Iowa	University of Northern Iowa
Foreign Language	Two years of a single foreign language for admission to the <b>College of Liberal Arts and Science and the College of Engineering</b> . Foreign language courses are not required for admission to the <b>Colleges of Agriculture, Business, Design, or Human Sciences</b> .	Two years of a single foreign language.	Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement.
English	Four years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.	Four years, with an emphasis on the analysis and interpretation of literature, composition, and speech.	Four years, including one year of composition; also may include one year of speech, communication, or journalism.
Math	Three years, including one year each of algebra, geometry, and advanced algebra.	Three years, including two years of algebra and one year of geometry, for admission to the <b>College of Liberal Arts and Science</b> . Four years, including two years of algebra, one year of geometry, and one year of higher mathematics (trigonometry, analysis, or calculus), for admission to the <b>College of Engineering</b> .	Three years, including equivalent of algebra, geometry, and advanced algebra.
Natural Science	Three years, including at least 2 years of courses which emphasize elements of biology, chemistry, and physics.	Three years, including courses in biology, chemistry, environmental science or physics for admission to the <b>College of Liberal Arts and Sciences</b> . Three years, including at least one year of chemistry and one year of physics, for admission to the <b>College of Engineering</b> .	Three years, including courses in general science, biology, chemistry, earth science, and/or physics; laboratory experience highly recommended.
Social Studies	Two years for admission to the <b>College of Agriculture, Business, Design, Human Sciences, Engineering</b> . Three years for admission to the <b>College of Liberal Arts and Science</b> .	Three years, with U.S. history and world history recommended, for admission to the <b>College of Liberal Arts and Sciences</b> . Two years, with U.S. and world history recommended, for admission to the <b>College of Engineering</b> .	Three years, including courses in anthropology, economics, geography, government, history, psychology, or sociology are acceptable.
Other Courses	Specific elective courses are not required for admission to Iowa State University	Specific elective courses are not required for admission to the University of Iowa	Two years of additional courses from the required subject areas, foreign languages and/or fine arts.

## Even or Odd School Years

Occasionally throughout the book, you will notice that a class is offered only in an even or an odd year. To determine an even or odd year, use the first year in a school year. (i.e. 2022-23 School Year would be considered an even year.)

## College Offerings Through Humboldt High School

Project Earlybird is a program in which college level courses are taught within a high school by qualified staff employed by the school district. The credits earned through this program are free to the student with the exception of one-third the cost of the textbook and some resource materials they may need. Students who take dual credit courses are reminded they are building their college transcript. Any dual credit course a student fails will receive an F on their high school and college transcripts. In order to qualify for financial aid at the college level, students must maintain a cumulative grade point average of 2.000. High School students taking college credit classes cannot withdraw from these classes unless it has been approved by the high school principal. Students who sign up for college classes are NOT allowed to drop/withdraw from the course after the first five days of each semester. This includes all dual credit courses taken at HHS, on college campus courses, Career Academy, Building Trades, Automotive Program and online courses. Students wishing to drop a course for an everyday study hall cannot drop a college course.

## Senior Year Plus

Senior Year Plus is a program which provides students the opportunity to take a rigorous college curriculum and receive, in many cases, both high school and college credit concurrently. To participate in Senior Year Plus programming, students must meet the academic requirements of both Humboldt High School and the postsecondary institution. At the school district level, students must demonstrate proficiency in each of three academic areas — reading, mathematics, and science. This is primarily determined using the students' most recent scores on the Iowa Statewide Assessment of Student Progress exams. Students are determined to be proficient if they score at or above average in all three subject areas. Students planning to enroll in career and technical education (CTE) courses delivered via concurrent enrollment are now exempt from the requirement that students demonstrate proficiency on the Iowa Statewide Assessment of Student Progress in reading, math, and science. Students may be required to complete and pass an initial assessment administered by the community college to determine their readiness to enroll in college-level CTE course work. With the bill, students do not need to demonstrate proficiency in reading, math and science to concurrently enroll in career and technical courses, but they must continue to demonstrate proficiency to be eligible to enroll in other concurrent enrollment courses. All students must continue to meet any expectations set by the community college (e.g. placement exam cut scores, prerequisites) to be eligible for concurrent enrollment.

For students who want to take ICCC Composition I they must score the following on any tests – Accuplacer 66/Writeplacer 4; or Writeplacer 4/Next Gen. Reading 250; ACT 18 or SAT 430. Students must pass Composition I with a C to take Composition II. Statistics – ALEKS score of 30-45, and College Algebra and Trigonometry – ALEKS score of 46 or above. For a complete listing of which classes have the above requirements and further information, please see the school counselor and/or ICCC's placement Chart for 2022-23.

The following is a list of Early-Bird courses offered by Humboldt High School or one of its partners. Credit from these courses will be accepted as transfer credit to all major state universities; however the class itself may not transfer as a replacement class at the university. It may only be accepted as an elective credit and the course may have to be taken again at that particular university. Be sure to check with the intended university or college admission counselor.

## Dual Credit Courses

<u>Course Number</u>	<u>Course</u>	<u>Semester Hours</u>
ENG 105	Composition I	3 semester hours
ENG 106	Composition II	3 semester hours
MAT 120	College Algebra	3 semester hours
MAT 130	College Trigonometry	3 semester hours
MAT 157	Statistics	4 semester hours
HSC 172	Nurse Aide	3 semester hours
HSC 104	Introduction to Health Care	2 semester hours
EGT 400	Introduction to Engineering	3 semester hours
EGT 410	Principles of Engineering	3 semester hours
EGT 420	Digital Electronics	3 semester hours
HSC 113	Medical Terminology	2 semester hours
PEH 141	First Aid/CPR	2 semester hours
ACC 110	Introduction to Accounting	3 semester hours
BUS 161	Human Relations	3 semester hours

### Construction Hub

CON 102	Intro to Residential Construction	2 semester hours
CON 130	Concrete Theory	1 semester hour
CON 131	Site Layout & Blueprint Reading	1 semester hour

### Auto Hub

AUT 632	Auto Electrical 1	3 semester hours
AUT 503	Auto Brake Systems	3 semester hours
AUT 163	Auto Engine Repair	3 semester hours

## Postsecondary Enrollment Options Act

The Post-secondary Enrollment Options Act allows eligible students the opportunity to take eligible courses at an Iowa area community college or university, and have the cost of tuition, fees and textbook up to \$250 paid by their home school district. Credit earned in the courses will be counted at the home school as well as the college. Students will be granted one high school credit for every three semester hours of college credit taken. Grades earned from other institutions will be recorded on their transcripts. These grades will be computed in the students' grade point averages. Students are responsible for supplying the district with official transcripts of courses successfully completed.

Students who fail post-secondary courses and fail to receive credit shall reimburse the school district for all costs directly related to the course. Failure or withdrawal from any post-secondary courses may be grounds for denial of future applications for post-secondary courses.

An "eligible course" is a course that is not comparable to a course taught in the high school the student attends. The purpose of this program is not to supplement the local curriculum, but rather to provide students an extended program of study in an area of interest. Local school boards determine if the post-secondary courses are comparable to courses taught in the local school districts. Speak with the school counselor on whether or not a course qualifies for this program.

In compliance with the Humboldt Community School District policy, this option is available for all 11<sup>th</sup> and 12<sup>th</sup> grade students. It is also available to 9<sup>th</sup> and 10<sup>th</sup> grade students who have been identified as gifted according to the school's identification procedure.

Students can only take PSEO courses if the course is not offered at the high school.

These college level courses are available only to those students who meet the criteria set forth by the post-secondary institution for enrollment. The school counselor will assist students in taking the appropriate assessment to demonstrate a readiness for post-secondary coursework.

## IOWA CENTRAL COMMUNITY COLLEGE ACADEMIES

### North Central Career Academy

Participating students will travel to the Regional Career Academy 5 days a week and take part in a career pathway from 8:20 am – 11:10 am each day. Students will take a specific sequence of courses that will provide skills and an educational base that will allow students to either transfer these college credits into an academic program at the post-secondary level, or seek employment. Students have the opportunity to gain college credit courses in a discipline that interests them, while still attending high school. These career pathways are designed to lead into multiple college programs giving the most flexibility to students who participate.

The North Central Career Academy is available to Juniors and Seniors only. Please see the school counselor for an application and more information.

### **Business**

The Business career pathway is designed for those students interested in the fields of 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.



## **Engineering Technology**

Students will be provided with a basic understanding of the technical training needed to enter various fields of computer aided design and drafting, as well as a pre-engineering course through the approved Project Lead the Way curriculum for the first step toward a potential career in engineering.

## **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 General Education track will provide them with a variety of courses from the Math, Science, Social Science and Humanities categories from the Associate of Arts degree at Iowa Central, as well as strong transfer course into a four-year university and college.

## **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 has been designed to introduce 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 field.

## **Manufacturing Technology**

For students who are more mechanically inclined, the manufacturing technology career pathway is a great start to finding out what career interests them. The courses 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.

## **Computer Science/Programming**

Students in the Computer Science/Programming career pathway will be exposed to the technology that is 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 worlds to provide an introduction into the latest computer science and programming technology.

## **Health Sciences**

This pathway is for the student that wants to explore the Health Sciences pathway. Students will take courses that help prepare them to enter into a variety of programs within the Health Science field, as well as the opportunity to earn credentials in First Aide, CPR and AED, the National Career Readiness Certificate and become a Certified Nursing Assistant.

## **TRITON ACADEMIES**

Iowa Central Community College has created a new opportunity for high school students to take advantage of the many academic and career-ready programs that are offered on the Fort Dodge campus and online. Students can enroll in approximately nine credit hours per semester in many different programs. The classes will be with other Iowa Central College students, creating a real college learning environment while earning credits toward one of the many programs that have been made available through this opportunity. Students may also choose to take advantage of online campus programs. Please see the school counselor for a list of programs available and how to get signed up!

# Advanced Placement Courses

Advanced placement courses are offered to Humboldt High School students both in the classroom and through the Belin-Blank Center using the APEX Learning platform. Students earn high school credit for the course and have the opportunity to earn college credit depending on their AP exam scores. APEX Learning digital curriculum takes advantage of the power of technology to create active learning experiences that keep students alert and engaged as they read, view, listen, inquire, write, discuss, explore and manipulate objects and data. Multimedia tutorials provide students with opportunities to explore and discover new concepts, allowing each student to move at their own pace. Images, sound tracks, short movies, animations, charts and graphs integrated throughout the text provide alternative representations and address different learning styles.

Advanced Placement Courses are rigorous and challenging college preparatory courses which are highly valued by colleges and universities. The AP designation students receive on their transcript sets them apart in the admission process. AP courses can also help students acquire the skills and habits they will need to be successful in college. Students will improve their writing skills, sharpen their problem-solving abilities, and develop time management skills, discipline, and study habits. In order to increase student success the following is necessary;

- Students must have access to computer with internet
- Testing and other course requirements may be required outside of the normal school day
- Makeup AP unit and semester exams will be given at the discretion of the teacher and/or AP Mentor
- Student's score on the final exam in May, will determine the college credit received

The following Advanced Placement courses are available only to those students who meet the criteria set forth by the post-secondary institution for enrollment. The school counselor will assist students in taking the appropriate assessment to demonstrate a readiness for post-secondary coursework.

## AP LITERATURE AND COMPOSITION

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 10081</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 10082</b>
<b>LENGTH:</b>	Full Year, offered every even year
<b>PREREQUISITE:</b>	C or better in LA 10 or LA10 Accelerated, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	10-12
<b>CREDIT:</b>	Two Credits

An AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. (The College Board, AP English Course Description, May 2009, p. 57.) Since AP Language and Composition is an advanced placement class and prepares students for the AP English Literature exam, students can expect it to be a rigorous and challenging college preparatory course that is highly valued by colleges and universities.

## AP LANGUAGE AND COMPOSITION

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 10091</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 10092</b>
<b>LENGTH:</b>	Full Year, offered every odd year
<b>PREREQUISITE:</b>	C or better in LA 10 or LA10 Accelerated LA 10, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	10-12
<b>CREDIT:</b>	Two Credits

The AP course in English Language and Composition is taught by a HHS staff member on an every other year basis. It engages students in becoming skilled readers of prose written in a variety of rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. The purpose of the AP English Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers (The College Board, AP English Course Description, May 2007, p. 6). This course prepares students for the AP English and Composition exam and has been authorized by the College Board to use the AP designation. Since AP Language and Composition is an advanced placement class, students can expect it to be a rigorous and challenging college preparatory course that is highly valued by colleges and universities.

## AP CALCULUS

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 20091</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 20092</b>
<b>LENGTH:</b>	Two Semesters
<b>PREREQUISITE:</b>	C or higher in College Algebra/Pre-Calculus and Trigonometry
<b>GRADE LEVEL:</b>	11,12
<b>CREDIT:</b>	Two Credits

Calculus courses are intended for students who have attained Pre-Calculus objectives, including some combination of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis, or Pre-Calculus. They include the study of derivatives, anti-derivatives, differentiation, integration, the definite and indefinite integral, differentials, and applications of calculus. This is a first course in integrated calculus and analytic geometry. The concepts of analytic geometry are studied as they apply to calculus. The calculus concepts covered include the rate of change of a function, limits, derivatives of algebraic, logarithmic, trigonometric and inverse trigonometric functions, applications of the derivative and an introduction of integration and its applications. Students can earn college credit by passing the AP exam in May. Students in this class are expected to take the AP Calculus exam. Because AP Calculus AB is an advanced placement class, students can expect it to be a rigorous and challenging college preparatory course that is highly valued by colleges and universities. This course prepares students for the AP Calculus AB exam and has been authorized by the College Board to use the AP designation. Cost: A scientific calculator (\$20.00) is needed; a TI-83 or TI-84 graphing calculator (\$90.00) is recommended.

## AP STATISTICS

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 20121</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 20122</b>
<b>LENGTH:</b>	Full Year, offered online only
<b>PREREQUISITE:</b>	At least a B in most recent math class, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	For qualified AP students
<b>CREDIT:</b>	Two Credits

AP Statistics gives students hands-on experience collecting, analyzing, graphing, and interpreting real-world data. They will learn to effectively design and analyze research studies by reviewing and evaluating real research examples taken from daily life. The next time they hear the results of a poll or study, they will know whether the results are valid. As the art of drawing conclusions from imperfect data and the science of real-world uncertainties, statistics plays an important role in many fields. The equivalent of an introductory college-level course, AP Statistics prepares students for the AP exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

## AP MACROECONOMICS

<b>COURSE NUMBER:</b>	<b>40070</b>
<b>LENGTH:</b>	One Semester, offered online only
<b>PREREQUISITE:</b>	At least a B in most recent social studies class, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	For qualified AP students
<b>CREDIT:</b>	One Credit

AP Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They'll also examine how individuals, institutions, and influences affect people, and how those factors can impact everyone's life through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP exam and for further study in business, political science and history.

## AP MICROECONOMICS

<b>COURSE NUMBER:</b>	<b>40080</b>
<b>LENGTH:</b>	One Semester, offered online only
<b>PREREQUISITE:</b>	At least a B in most recent social studies class, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	For qualified AP students
<b>CREDIT:</b>	One Credit

AP Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They'll also learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP exam and for further study in business, history, and political science.

## AP PSYCHOLOGY

<b>COURSE NUMBER:</b>	<b>40150</b>
<b>LENGTH:</b>	One Semester, offered online only
<b>PREREQUISITE:</b>	At least a B in most recent social studies class, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	For qualified AP students
<b>CREDIT:</b>	One Credit

AP Psychology provides an overview of current psychological research methods and theories. Students will explore the therapies used by professional counselors and clinical psychologists and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They will study core psychological concepts, such as the brain and sense functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Along the way, students will also investigate relevant concepts like study skills and information retention. The equivalent of an introductory college-level survey course, AP Psychology prepares students for the AP exam and for further studies in psychology or life sciences.

## AP U.S. GOVERNMENT AND POLITICS

<b>COURSE NUMBER:</b>	<b>40040</b>
<b>LENGTH:</b>	One Semester
<b>PREREQUISITE:</b>	At least a B in most recent social studies class, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	For qualified AP students
<b>CREDIT:</b>	One Credit

AP U.S. Government and Politics studies the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students will gain the analytic perspective necessary to critically evaluate political data, hypotheses, concepts, opinions, and processes. Along the way, they'll learn how to gather data about political behavior and develop their own theoretical analysis of American politics. They'll also build the skills they need to examine general propositions about government and politics, and to analyze the specific relationships between political, social, and economic institutions. The equivalent of an introductory college-level course, AP U.S. Government and Politics prepares students for the AP exam and for further study in political science, law, education, business, and history.

## AP COMPUTER SCIENCE

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 60411</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 60412</b>
<b>LENGTH:</b>	Full Year, offered online only
<b>PREREQUISITE:</b>	At least a B in most recent math class, Senior Year Plus Guidelines on page 7
<b>GRADE LEVEL:</b>	For qualified AP students
<b>CREDIT:</b>	Two Credits

This GiftedandTalented.com course, developed by Stanford University, is a one-year course that includes extensive practice writing programs in both C++ and Java. Students work with an expert tutor who reviews assignments, monitors progress in online modules, and provides individual coaching when needed. In this course, students learn to compile, execute, and debug programs in C++. Topics include basic syntax, data types, expressions, control statements, interaction between the compiler and the hardware, along with arrays, functions, sorting algorithms, and recursion. Programming exercises are oriented towards learning how to construct an efficient algorithm to solve a problem, using structured programming methods. Students will learn to use the Dev C++ environment and will learn practical programming tools and techniques to enable writing complex programs.

# Agriculture

Careers in the Ag Science/Natural Resources Career Pathway are related to agriculture and natural resources, and range from agricultural producer to veterinarian. All students enrolled in Agriculture courses are eligible to become members of the Humboldt FFA and the National FFA organization.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	1 Sem	Introduction to Agriculture	1 Credit	Required before any other Agriculture Course
X	X	X	X	1 Sem	Animal Science	1 Credit	Intro to Agriculture
X	X	X	X	1 Sem	Ag Communications	1 Credit	Intro to Agriculture
X	X	X	X	1 Sem	Plant Science	1 Credit	Intro to Agriculture
X	X	X	X	1 Sem	Ag Business	1 Credit	Intro to Agriculture
X	X	X	X	1 Sem	Ag Mechanics I	1 Credit	Intro to Agriculture
	X	X	X	1 Sem	Ag Mechanics II	1 Credit	Ag Mechanics I
X	X	X	X	1 Sem	Horticulture I	1 Credit	Intro to Agriculture
	X	X	X	1 Sem	Horticulture II	1 Credit	Horticulture I

## Career and Technical Education Programs Ag Education Instructional Strands

### Recommended Sequential Courses

#### Ag Business Strand

Intro to Agriculture	½ Unit
Animal Science	½ Unit
Ag Communications	½ Unit
Plant Science	½ Unit
Ag Business	½ Unit
*Intro to Renewable Resources	½ Unit
Horticulture I	½ Unit

#### Horticulture Strand

Intro to Agriculture	½ Unit
Horticulture I	½ Unit
Horticulture II	½ Unit
Plant Science	½ Unit
Ag Communications	½ Unit
Ag Business	½ Unit

#### Ag Mechanics Strand

Intro to Agriculture	½ Unit
Ag Mechanics I	½ Unit
Ag Mechanics II	½ Unit
Intro to Welding	½ Unit
Metals Mfg. Technology	½ Unit

#### Natural Resources Strand

Intro to Agriculture	½ Unit
Horticulture I	½ Unit
Horticulture II	½ Unit
Plant Science	½ Unit
Ag Communications	½ Unit
Ag Business	½ Unit

#### Agriculture Production Strand

Intro to Agriculture	½ Unit
Animal Science	½ Unit
Ag Communications	½ Unit
Plant Science	½ Unit
Ag Business	½ Unit
Horticulture I	½ Unit
Ag Mechanics I	½ Unit
Ag Mechanics II	½ Unit

\*Dual Credit Course

### Agriculture, Food and Natural Resources

This Career Cluster Plan of Study (based on the Agriculture, Food and Natural Resources Career cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. \*This plan of Study should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	AGRICULTURE	OTHER REQUIRED
Grade 9	LA9	Algebra I	Environmental Science Earth Science	US History	Intro to Agriculture	PE
Grade 10	LA10	Geometry	Biology	Modern Civilizations	Plant Science	Ag Mechanics I Horticulture I, PE
Grade 11	LA11	Algebra II *Pre-Calculus Trig *College Algebra	Chemistry	Social Studies Elective		Ag Mechanics II Horticulture II PE
Grade 12	LA12 or Equivalent Composition	*Pre-Calculus Trig Calculus *Statistics Personal Money Management	Physics	Government	Horticulture I	Horticulture II PE
Year 13	*Composition I & II	College Algebra or Finite	Intro to Chemistry and Lab	Social Science	Ag Elective	College Experience (Required)
Year 14	Speech	Statistics	Intro to Biology & Lab General Biology I & Lab General Biology II	Social Science Elective (2) Humanities Elective (2)	Ag Elective (3)	2 credits Distributed Electives (Required)
Year 15						
Year 16						
ISU	See Iowa State University 4-year plans for suggested courses from departments: Horticulture, Animal Science, Ag Business, Agronomy, AGEDS, Natural Resources, etc...					

**Examples of occupations requiring High School Diploma –** Entry level retail/sales position, farm employee, greenhouse employee, plant/animal breeding employee. **Examples of occupations requiring some postsecondary Education –** Agriculture chemical dealer, aquaculturalist, band/loan officer, environmental compliance assurance manager, equine manager, farm manager, health & safety sanitarian, meat cutter-meat grader, park manager, produce buyer, recycling technician, wildlife manager. **Examples of occupations requiring baccalaureate degree –** Ag educator, botanist, ecologist, environmental engineer, fish and game officer, plant pathologist, veterinarian.

## INTRODUCTION TO AGRICULTURE

**COURSE NUMBER:** 60011  
**LENGTH:** One Semester  
**PREREQUISITE:** This course is required before any other Agriculture Course.  
**GRADE LEVEL:** 9, 10, 11, 12  
**CREDIT:** One Credit

This is an introductory agriculture course for students interested in agriculture and FFA. The course includes an orientation to the history of agriculture education and the FFA. Students will have the opportunity to understand how the agriculture education, FFA and Supervised Agricultural Experience (SAE) work together in the total agriculture education program. Other units of instruction include parliamentary procedure, leadership, foundational SAE and agriculture career exploration. Other topics such as farm animals and crops will be covered also.

## ANIMAL SCIENCE

**COURSE NUMBER:** 60022  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Agriculture  
**GRADE LEVEL:** 9, 10, 11, 12  
**CREDIT:** One Credit

Units of instruction in this course will include livestock industry, animal nutrition, genetics, reproduction, health and animal welfare. There will be an emphasis on swine, beef, sheep, goats, poultry and horses. Students will use simulated, as well as real world activities to develop skills and knowledge essential for the production and management of livestock.

## PLANT SCIENCE

**COURSE NUMBER:** 60040  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Agriculture  
**GRADE LEVEL:** 9, 10, 11, 12  
**CREDIT:** One Credit

This is an introductory course that includes units on Midwest crop production and management, soil fertility, and land use and classification. The FFA Test plot is operated by the students of this course and is used as a land laboratory. Students will take part in soils evaluation clinics and have the opportunity to participate in FFA crop management career development events.

## AG MECHANICS I

**COURSE NUMBER:** 60090  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Agriculture  
**GRADE LEVEL:** 9-12 or Teacher Approval  
**CREDIT:** One Credit  
**FEES:** Lab Fee

Students will gain skills in the area of arc welding and oxyacetylene use. Students will plan a welding or woods project to build at their own expense. Students will be encouraged to take part in the FFA Career Development Event in Ag-Mechanics.

## AG MECHANICS II

**COURSE NUMBER:** 60100  
**LENGTH:** One Semester  
**PREREQUISITE:** Ag Mechanics I  
**GRADE LEVEL:** 10-12 or Teacher Approval  
**CREDIT:** One Credit  
**FEES:** Lab Fee

This course will emphasize the area of fabrication, tractor restoration and farm equipment servicing. Other projects are possible. Students will be encouraged to take part in the FFA Career Development Event in Ag-Mechanics.

## HORTICULTURE I

**COURSE NUMBER:** 60120  
**LENGTH:** One Semester  
**PREREQUISITE:** Intro to Agriculture  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit  
**FEES:** Lab Fee

Horticulture is an introductory course for students interested in greenhouse management, hydroponics, houseplants, and gardening. Topics will include careers in horticulture, plant propagation, plant growth and development, soils, fertilizer and pesticide use.

## HORTICULTURE II

**COURSE NUMBER:** 60130  
**LENGTH:** One Semester  
**PREREQUISITE:** Horticulture I  
**GRADE LEVEL:** 10, 11, 12 or Teacher Approval  
**CREDIT:** One Credit  
**FEES:** Lab Fee

In this course a more in-depth study of the horticulture field. Topics will include landscaping marketing and tree and shrub identification and turf grass management. Students will have the opportunity to create landscape designs and select proper plants and materials. They will also have the opportunity to work in the lab area on different planter designs.

## AG BUSINESS

**COURSE NUMBER:** 60140  
**LENGTH:** One Semester  
**PREREQUISITE:** Intro to Agriculture  
**GRADE LEVEL:** 10, 11, 12  
**CREDIT:** One Credit

Students will learn the basic accounting principles for successful agricultural businesses. Topics/units covered include starting a business, costs of doing business, measuring success using financial documents, business risks and financial plans.

## AG COMMUNICATIONS

**COURSE NUMBER:** 60150  
**LENGTH:** One Semester  
**PREREQUISITE:** Intro to Agriculture  
**GRADE LEVEL:** 10, 11, 12  
**CREDIT:** One Credit

Students will learn the service and supply side of agriculture. Units in this course will include sales, marketing design, social media marketing, communication with customers, customer service and market analyses.



# Art

The Art Program is designed to be used by both beginning and advanced level students, by students who will seek careers in Art, and those who will become intelligent consumers of the Arts. The components of the Art program will be integrated to teach students that they can communicate their ideas and emotions in many different ways.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	1 Sem	Introduction to Art	1 Credit	None
X	X	X	X	1 Sem	2D Art Foundations	1 Credit	C- or better in Intro to Art
X	X	X	X	1 Sem	3D Art Foundations	1 Credit	C- or better in Intro to Art
X	X	X	X	1 Sem	Digital Art Foundations	1 Credit	C- or better in Intro to Art
	X	X	X	1 Sem	Drawing Studio	1 Credit	C- or better in Intro to Art <b><u>AND</u></b> 2D Art
	X	X	X	1 Sem	Painting Studio	1 Credit	C- or better in Intro to Art <b><u>AND</u></b> 2D Art
	X	X	X	1 Sem	Sculpture Studio	1 Credit	C- or better in Intro to Art <b><u>AND</u></b> 3D Art
	X	X	X	1 Sem	Ceramics Studio	1 Credit	C- or better in Intro to Art <b><u>AND</u></b> 3D Art
	X	X	X	1 Sem	Photography Studio	1 Credit	C- or better in Intro to Art <b><u>AND</u></b> Digital Art
	X	X	X	1 Sem	Design Studio	1 Credit	C- or better in Intro to Art <b><u>AND</u></b> Digital Art
			X	1 Sem	Senior Studio	1 Credit	C- or better in Intro to Art <b><u>AND FOUR</u></b> additional art classes at high school.

## INTRODUCTION TO ART

**COURSE NUMBER:** 70070  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Introduction to Art is a prerequisite for all art classes. It is an introduction to creative problem solving, as well as an introduction to the elements and principles of art. Students will use a wide variety of both traditional and non-traditional materials to grow and improve their artistic and creative ability.

## TWO DIMENSIONAL ART FOUNDATIONS

**COURSE NUMBER:** 70100  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Introduction to Art  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Students will learn methods of observation for drawing objects from life. They will learn how to create proportions in living form and in still life. They will work in multiple 2D media to explore how to create interesting compositions and create depth within their 2D work.

### THREE DIMENSIONAL ART FOUNDATIONS

**COURSE NUMBER:** 70110  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Introduction to Art  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Students will learn methods of creating and displaying 3D form. They will explore various construction techniques and consider how using these various techniques impact the perception of their artwork.

### DIGITAL ART FOUNDATIONS

**COURSE NUMBER:** 70120  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Introduction to Art  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Students will learn the basics of digital design. They will participate in job like situations to solve problems through the use of digital art. Students will learn the basics of the adobe suite of programs such as InDesign, Illustrator and Photoshop.

### DRAWING STUDIO

**COURSE NUMBER:** 70060  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Intro to Art AND 2D Foundations  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

Students will work independently in a studio environment to develop their skills in drawing. They will use their drawings to explore ideas and learn more about subjects that are important to them.

### PAINTING STUDIO

**COURSE NUMBER:** 70090  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Intro to Art AND 2D Foundations  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

Painting is a studio level class. Students will develop their skills in class using goals they set for themselves and participating in small and large group critiques. Students will experiment with pairing techniques in order to grow their artistic skill.

### SCULPTURE STUDIO

**COURSE NUMBER:** 70041  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Intro to Art AND 3D Foundations  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

Students will independently design and engineer sculpture using multiple materials in this studio level course. They will consider not only aesthetic design, but also support and structure of their pieces.

### CERAMICS STUDIO

**COURSE NUMBER:** 70040  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Intro to Art AND 3D Foundations  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

Ceramics is a studio level class. Students taking ceramics will use multiple approaches to create their artwork. They will engage in critiques, and learn about the material through their own practice and through participating in critiques with their peers.

## DESIGN STUDIO

**COURSE NUMBER:** 70124  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Intro to Art **AND** Digital Foundations  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

Students will work in a studio style course to develop their graphic design skills. They will develop multiple solutions to creative problems and learn to present their work in a professional format.

## PHOTOGRAPHY STUDIO

**COURSE NUMBER:** 70121  
**LENGTH:** One Semester  
**PREREQUISITE:** C- or better in Intro to Art **AND** Digital Foundations  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

Photography is a studio level course. Students will be able to explore the world around them from a unique and creative perspective. They will also use Photoshop to edit and create artistic touches using the photos they take.

## SENIOR STUDIO ART

**COURSE NUMBER:** 70122  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Art and a successful completion of a minimum of 4 other art courses at the high school level  
**GRADE LEVEL:** Senior Status  
**CREDIT:** One Credit

Senior Studio Art is a class designed for students who plan to pursue art beyond high school. In order to get into senior studio art, students will need to have completed Intro to Art plus four other classes and have a completed portfolio of their artwork. During this class, they will continue to develop their portfolio and they will create a body of work to display in a senior showcase.

# Business

Business Education courses will benefit students interested in the Business/Information Management/Marketing Career Pathway as well as the Family and Human Services Career Pathway. Occupations in this area range from accounting to sales and tourism.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
		X	X	1 Semester	Introduction to Accounting	Dual Credit	None
		X	X	1 Semester	Computer Accounting	Dual Credit	Intro. to Accounting
	X	X	X	1 Semester	Management/Entrepreneurship	1 Credit	None
	X	X	X	1 Semester	Marketing	1 Credit	None
		X	X	1 Semester	Business Communications	Dual Credit	None
		X	X	1 Semester	Human Relations	Dual Credit	None
		X	X	Full Year	Yearbook	2 Credits	None
		X	X	1 Semester	Economics	1 Credit	None

## Career and Technical Education Programs Business Education Instructional Stands

### Recommended Sequential Courses

#### **Business Management**

##### 10th Grade

Management/Entrepreneurship **½ Unit**

Marketing **½ Unit**

##### 11th Grade and 12th Grade

Introduction to Accounting **½ Unit**

Computer Accounting **½ Unit**

Business Communication **½ Unit**

Human Relations **½ Unit**

**Business Management and Administration**

This Career Cluster Plan of Study can serve as a guide, along with other career planning materials, as learners continue developing your program of study. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals.

GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	Other required courses, Recommended Electives And Learner Activities	Career & Technical Courses and/or Degree Major courses for Business Financial Mgt & Accounting Pathway
Interest Inventory Administered and 8 <sup>th</sup> Grade Plan Developed.						
<b>Grade 9</b>	LA9	Algebra I	Environmental Science Earth Science	US History	Spanish, band, or vocal music	
<b>Grade 10</b>	LA10	Geometry	Biology	Modern Civilizations	Spanish, band or vocal music	Management/ Entrepreneurship Marketing
<b>Grade 11</b>	LA11 AP Literature or AP Language	Algebra II *Pre-Calculus Trig *College Algebra	Chemistry	Social Studies Elective	Minority Studies, World Religions, *Statistics Yearbook, Spanish	*Human Relations
<b>Grade 12</b>	LA12 or Equivalent	*Pre-Calculus Trig Calculus *Statistics Personal Money Management	Physics	Government	Personal Money Mgt Contemporary Issues Spanish Technical Writing	*Intro to Accounting
<b>An asterisk* indicates an Articulation and concurrent enrolled course. These courses may be taken in the secondary level for dual-credit purposes.</b>						
<b>Year 13</b>	*Composition I & II	*Calculus I *Statistics	Science Elective	Macro Economics	The College Experience	Financial Accounting Intro to Computers Managerial Accounting Excel for Accounting Payroll Accounting
<b>Year 14</b>	Fundamentals Of Oral Communication		Science Elective	Intro to Psychology Micro Economics	3 Humanities elec. Intermediate Account. Tax Accounting Cost Accounting Internship, VITA Program	Continue courses in Area of specialization
<b>Year 15</b>	<b>Continue courses in the area of specialization</b>					
<b>Year 16</b>	<b>Continue courses in the area of specialization</b>					
<b>ISU</b>	<b>Mgmt, Global Perspective</b>					

Occupations requiring less than a Baccalaureate Degree – Accounting clerk, adjustment clerk, assistant treasurer, bookkeeper, accounts receivable clerk, billing clerk, payroll accounting clerk, Occupations requiring Baccalaureate Degree – Accountants, accounting supervisor, adjuster, auditor, budget analyst, budget manager, cash manager, controller, merger & acquisitions manager, price analyst, cost accountant, financial accountant, More than Baccalaureate Degree – Top Collections Executive, Top Investment Executive, Treasurer, Chief Financial Officer, Finance Director, Certified Public Accountant.

### ICCC INTRODUCTION TO ACCOUNTING

**COURSE NUMBER:** 60521  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual credit

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 for cash 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.

### ICCC COMPUTER ACCOUNTING

**COURSE NUMBER:** 60532  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Accounting  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

Students will receive in-depth instruction in analyzing and recording various business transactions and in completing the accounting cycle on computerized systems. Both Peachtree and QuickBooks Pro will be used as accounting software to develop student learning of fundamental and in-depth accounting practices. Students will also learn 10-key touch operation on the keyboard and electronic calculator.

### MANAGEMENT/ENTREPRENEURSHIP

**COURSE NUMBER:** 60500  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 10, 11, 12  
**CREDIT:** One Credit

Management/Entrepreneurship is designed for students interested in various business fields. Students will gain an understanding of what it means to become an entrepreneur, learn skills needed to evaluate their potential as a business owner, and build a business plan. Students will utilize the Foundations Digital Entrepreneurship online curriculum as well as the Knowledge Matters Virtual Business Simulation.

### MARKETING

**COURSE NUMBER:** 60510  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 10, 11, 12  
**CREDIT:** One Credit

Marketing is designed for students interested in various areas of business. Students will gain an understating of the roles of marketing and their impact on individuals, business, and society. Marketing will allow students to learn and apply the 4 P's of marketing: price, product, place and promotion; and create effective marketing plans.

### ICCC BUSINESS COMMUNICATIONS

**COURSE NUMBER:** 60550  
**LENGTH:** One Semester  
**GRADE LEVEL:** 11 and 12  
**PREREQUISITE:** None  
**CREDIT:** Dual Credit

Business letter construction will be studied. Students will have the opportunity to analyze various business letters. In addition, they will compose letters and memos to develop the ability to communicate in writing. Students will also prepare and present short speeches to develop the basic skills of oral communications. Proper use of grammar and mechanics is emphasized.

## ICCC HUMAN RELATIONS

**COURSE NUMBER:** 60540  
**LENGTH:** One Semester  
**GRADE LEVEL:** 11 and 12  
**PREREQUISITE:** None  
**CREDIT:** Dual Credit

This course introduces students to the importance of human relations – summarized in one concise law of personal and organizational success: All work is done through relationships. Focusing on the interpersonal skills needed to be well-rounded and thoroughly prepared to handle a wide range of human relations issues, one's behavior at work and in our private lives is influenced by many interdependent traits such as emotional balance, self-awareness, integrity, self-esteem, physical fitness, and healthy spirituality. As a first exposure to a leadership role or a Human Resource Management career, the student explores the value of the non-technical work skills, history, theory, and the wide range of these skills needed in today's workplace.

## YEARBOOK PUBLICATION

**COURSE NUMBER:** SEMESTER 1 60701  
**COURSE NUMBER:** SEMESTER 2 60712  
**LENGTH:** Full Year  
**PREREQUISITE:** None  
**GRADE:** 11-12  
**CREDIT:** Two Credits

Yearbook Publications is a hands-on course in which students produce the school yearbook. The course includes all phases of production including: planning issue content, interviewing, writing and editing, headlines and captions, planning page layout, proofreading, word processing, photography; and designing pages. Students are required to photograph several events outside of the school day. This course may be taken more than one year. Students must fill out an application and be accepted by teacher to take this course.

# Engineering

The Division of Community College and Workforce Preparation within the Department of Education has developed a statewide system that utilizes a national pre-engineering program called Project Lead the Way (PLTW) that addresses numerous priorities identified by the Iowa Learns Council. This statewide system fosters the integration of academics into Career and Technical Education and creates a seamless transition for students to move from the secondary level to higher education. Project Lead the Way (PLTW) provides the integration of academics and technical education through curriculum that addresses national math and science standards along with national industry skill standards. PLTW incorporates strong partnerships between the public schools, higher education institutions and the private sector to increase the quantity and quality of Iowa's advanced manufacturing and biotechnology workforce. We hope that this will be the beginning of multiple Engineering classes offered at HHS in the future.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	Full Year	Introduction to Engineering Design	Dual Credit	Successful completion of Algebra I or Algebra IB or currently enrolled in one of these classes.
	X	X	X	Full Year	Principles of Engineering	Dual Credit	Introduction to Engineering Design.
		X	X	Full Year	Digital Electronics	Dual Credit	Introduction to Engineering Design and Principles of Engineering Design
			X	Full Year	Engineering Design and Development	Two Credits	Introduction to Engineering Design, Principles of Engineering Design and Digital Electronics
X	X	X	X	One Sem	Introduction to Computer Science (not PLTW curriculum)	One Credit	Successful completion of Algebra I or Algebra IB or currently enrolled while enrolled in Computer Science.



### INTRODUCTION TO ENGINEERING DESIGN

**COURSE NUMBER:** SEMESTER 1 64011  
**COURSE NUMBER:** SEMESTER 2 64012  
**LENGTH:** One Year  
**PREREQUISITE:** Successful completion of Algebra I or Algebra IB or currently enrolled in one of these classes.  
**GRADE LEVEL:** 9-12  
**CREDIT:** Dual Credit

This course is an introduction to the elements of Engineering Design. Students will learn the history of design, design process, sketching and visualization, geometric relationships, and modeling. Elements of manufacturing production, marketing, analysis, and quality control will also be studied. Students will learn presentation techniques and develop a portfolio.

### PRINCIPLES OF ENGINEERING

**COURSE NUMBER:** SEMESTER 1 64021  
**COURSE NUMBER:** SEMESTER 2 64022  
**LENGTH:** One Year  
**PREREQUISITE:** Introduction to Engineering Design.  
**GRADE LEVEL:** 10, 11, 12  
**CREDIT:** Dual Credit

This course is an introduction to the opportunities and responsibilities of Engineering. Students will learn the fields of Engineering, and explore Engineering Careers. They will complete projects from areas such as Design, Engineering Systems, Thermodynamics, Fluid systems, Electrical and Control Systems, Strength and Properties of Materials, and Production Process and Quality Control.

### DIGITAL ELECTRONICS

**COURSE NUMBER:** SEMESTER 1 64031  
**COURSE NUMBER:** SEMESTER 2 64032  
**LENGTH:** One Year  
**PREREQUISITE:** Introduction to Engineering Design and Principles of Engineering Design.  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

This course is an introduction to Digital Electronics. Students will learn basic lab safety, electron theory, Ohm's and Kirchhoff's Laws, logic, number systems, binary addition and Boolean Expression applications. Students will design, construct, troubleshoot and evaluate design problems, and will present oral reports of their results. Students will also study PLD's Flip-Flops, microprocessors, and shift registers and counters.

### ENGINEERING DESIGN AND DEVELOPMENT

**COURSE NUMBER:** SEMESTER 1 64041  
**COURSE NUMBER:** SEMESTER 2 64042  
**LENGTH:** One Year  
**PREREQUISITE:** Intro to Engineering Design, Principles of Engineering Design and Digital Electronics.  
**GRADE LEVEL:** 12  
**CREDIT:** Two Credit

Engineering Design and Development (EDD) is the capstone course in the PLTW high school engineering program and is appropriate for 12th grade students. It is an engineering research course in which students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. Since the projects on which students work can vary with student interest and the curriculum focuses on problem solving, EDD is appropriate for students who are interested in any technical career path.

### INTRODUCTION TO COMPUTER SCIENCE

**COURSE NUMBER:** 64050  
**LENGTH:** Semester  
**PREREQUISITE:** Successful completion or concurrent enrollment in Algebra I or Algebra IB  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Introduction to Computer Science (not PLTW curriculum) introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python to create apps (for tablets or phones). They will apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create programs that address topics and problems.

# Family and Consumer Science

Family and Consumer Science courses benefit students interested in all career pathways; some courses are highly recommended for certain career areas. Particular emphasis in the Humboldt program of study is Hospitality & Tourism. A well rounded experience in Design, Education, Health Science and Family and Human Services fields is also available..

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	1 Semester	Child Development 1	1 Credit	None
		X	X	1 Semester	Child Development 2	1 Credit	Child Development 1
	X	X	X	1 Semester	Family Studies	1 Credit	None
X	X	X	X	1 Semester	Nutrition	1 Credit	None
	X	X	X	1 Semester	Foods	2 Credits	Nutrition
X	X	X	X	1 Semester	Housing and Interior Design	1 Credit	Introduction to Art Recommended
		X	X	1 Semester	Fashion Design	1 Credit	Introduction to Art Recommended
X				1 Semester	Introduction to Family & Consumer Science	1 Credit	9 <sup>th</sup> grade only
X	X	X	X	1 Semester	Introduction to Textiles	1 Credit	None
X	X	X	X	1 Semester	Textiles Studio	1 Credit	Introduction to Textiles

## Career and Technical Education Programs Family and Consumer Science Instructional Stands

### Recommended Sequential Courses

#### General Family Consumer Science Pathway

Intro to Family & Consumer Science-9 <sup>th</sup> grade	½ Unit
Child Development 1	½ Unit
Child Development 2	½ Unit
Nutrition	½ Unit
Foods	1 Unit
Family Studies-11 <sup>th</sup> -12 <sup>th</sup> grade	½ Unit

#### Program of Study Hospitality and Tourism

Child Development 1	½ Unit
Nutrition	½ Unit
Foods	1 Unit
ICCC Culinary Program	1 Unit

**Hospitality & Tourism**

This Career Cluster Plan of Study Tool can serve as a guide, along with other career planning materials, as you continue developing your Program of Study. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner’s educational and career goals. All plans should meet high school graduation requirements as well as college entrance requirements.

GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	Other Required Courses, Recommended Electives, and Learner Activities	Career & Technical Courses and/or Degree Major Courses
Interest Inventory Administered and 8 <sup>th</sup> Grade Plan Developed.						
Grade 9	LA9	Algebra I	Environmental Science Earth Science	US History	Introduction to Textiles Housing and Interior Design Textiles Studio PE	Intro to Family & Consumer Science Child Development I
Grade 10	LA10	Geometry	Biology	Modern Civilizations		Nutrition
Grade 11	LA 11 or Ap Literature or AP Language	Algebra II *Pre-Calculus Trig *College Algebra	Chemistry	Social Studies Elective		Foods Child Development 2
Grade 12	LA 12 or Equivalent	*Pre-Calculus Trig Calculus *Statistics Personal Money Mgt	Physics	Government		HCM 108 Safety & Sanitation HCM 608 Intro to Hospitality HCM 143 Food Prep I & Lab HCM 144 Food Fundamentals HCM 513 Hospitality Professionalism
Post Secondary Year 13						HCM 157 Food Prep II & Lab HCM 158 Culinary Nutrition & Food Science HCM 128 Basic Baking & Lab HCM 513 Hospitality Professionalism
Post Secondary Year 14					All plans of study need to meet learner’s career goals with regard to required degrees, licenses and/or certifications.	HCM 129 Advanced Baking & Lab HCM 131 Basic Pastry & Lab BUS 121 Business Communications HCM 178 International Restaurant/Hotel Cuisine HCM 254 Purchasing for Profit/Loss BUS 112 Business Math HCM 517 Hospitality Prof III General Education Elective Social Science/Humanities Elective

Post Secondary Year 15					All plans of study need to meet learner’s career goals with regard to required degrees, licenses, and/or certifications	HCM 179 Adv Cuisine for Restaurants and Hotel Lab HCM 332 Hospitality Personal Mgt HCM 272 Garnishing & Finishing Techniques HCM 300 Beverage Management HCM 517 Hospitality Prof III General Education Elective Social Science/Humanities Elective
Post Secondary Year 16						HCM 179 Adv Cuisine for Restaurants and Hotel Lab HCM 332 Hospitality Personnel Mgt HCM 272 Garnishing & Finishing Techniques HCM 300 Beverage Mgt HCM 517 Hospitality Prof III General Education Elective Social Science/Humanities Elective

**Sample Occupations relating to this Pathway – Management Level** – caterer, catering & banquet manager, executive chef, sous chef, food & beverage manager, general manager, kitchen manager, maitre d’, restaurant owner, services manager. **Skill level** – baker, pastry & specialty, chefs, restaurant server. **Entry Level** – banquet server, banquet set-up, employee, counter server, line cook.

SF 449 requires high schools to establish articulation agreements with post secondary schools. Under this agreement, high school students may have some of their high school course work apply toward their post secondary course work if certain competencies are met. For more information about courses in this department that apply, contact FCS teacher.

#### CHILD DEVELOPMENT 1

**COURSE NUMBER:** 61020  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Child Development 1 classes provide knowledge about the physical, mental, emotional, and social growth and development of children from conception to age two. Students discover parental responses required by the various states of growth, the prenatal and birth processes, the responsibilities and difficulties of parenthood, and the fundamentals of children's emotional and physical development. A two night child care simulation with Baby Think It Over and a written evaluation of the experience will be a major requirement and will determine pass/fail of the class.

#### CHILD DEVELOPMENT 2

**COURSE NUMBER:** 61120  
**LENGTH:** One Semester  
**PREREQUISITE:** Child Development 1  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Child Development 2 is a continuation of Child Development 1. Classes provide knowledge about the physical, mental, emotional and social growth and development of children from age two until adolescence. Students will investigate the needs of toddler, preschoolers, and school age children. Observations at each of these levels will be an integral part of this class. Students will get an opportunity to work with these age groups. This class is aimed at anyone who plans to work with children, day care providers, early childhood educators and teachers.

#### FAMILY STUDIES

**COURSE NUMBER:** 61050  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** Recommended for 11 and 12  
**CREDIT:** One Credit

Family Studies is designed to encourage social growth in individuals and help cultivate needed personal skills. Communication skills, conflict resolution, and the decision making process are included in this class as well as skills for developing strong and healthy relationships. Concepts of personal development, relationships, love, marriage, understanding the changing family, potential challenges, balancing work and family, and managing resources can lead to lively discussions. This class is recommended for all 11 or 12<sup>th</sup> grade students (from students that have taken it) who are looking to move on and start living as an adult in the adult's world.

#### NUTRITION

**COURSE NUMBER:** 61090  
**LENGTH:** One Semester  
**PREREQUISITE:** Biology is recommended  
**GRADE LEVEL:** 9-12 (Recommended for 10-12)  
**CREDIT:** One Credit

This nutrition course provides students with an understanding of the role food plays in society, and a background of the nutritional needs and requirements for healthy living. It provides students with the basic knowledge of nutrition, consumerism, and the importance of science principles in foods. Emphasis will also be placed on the nutritional components of a balanced diet, weight control, eating disorders, and the principles of digestion. Although career opportunities in the food service industry may be presented, the emphasis of this course is not career related. Nutrition is a requirement for foods.

## FOODS

**COURSE NUMBER:** 61060  
**LENGTH:** One Semester  
**PREREQUISITE:** Passed Nutrition, (with a C or better is recommended)  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits (a two period class due to foods lab)

In this class the principles of food preparation and evaluation will be explored. Starting with basic food systems and progressing to more complex ones, the students will learn to cook and serve healthy nutritious and tasty foods. This is a 2 period long class and is set up in a lab format. Lab evaluations and tests will be used in student evaluation. Combining the disciplines of family and consumer science, Foods offers opportunities to study the composition, structure, and properties of foods and the chemical changes that occur during processing, storage, preparation, and consumption. Students who wish to continue in the study of foods can progress from this class to the culinary program at ICCC.

## INTRODUCTION TO FAMILY AND CONSUMER SCIENCE

**COURSE NUMBER:** 61010  
**LENGTH:** One Semester  
**PREREQUISITE:** none  
**GRADE LEVEL:** 9<sup>th</sup> grade only  
**CREDIT:** One Credit

Introduction to Family and Consumer Sciences is factual information related to sexuality and getting along in high school. Areas of study include making responsible choices, choosing friends wisely, setting goals for your high school years. Other areas of study include introduction to personal finance and food and nutrition. You will also learn about the changes of puberty, human reproductive anatomy, sexually transmitted diseases, birth control, teenage pregnancy and the responsibilities that go along with being a teen parent.

## HOUSING AND INTERIOR DESIGN

**COURSE NUMBER:** 61070  
**LENGTH:** One Semester, offered odd school years  
**PREREQUISITE:** Introduction to Art is recommended  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

This course will provide students with basic knowledge regarding housing, and architectural style. Architectural design, making housing decisions, and understanding basic construction will be included in the course. The major project will include creating a floor plan and presenting an interior design board of a room. Cost: Purchase of some drawing tools may be required.

## FASHION DESIGN

**COURSE NUMBER:** 61080  
**LENGTH:** One Semester, offered even school years  
**PREREQUISITE:** Introduction to Art is recommended  
**GRADE LEVEL:** primarily 11-12  
**CREDIT:** One Credit

This class is designed for those who are interested in a career in fashion design and fashion marketing. All aspects of fashion design and production will be explored. Fabric, materials and fashion design principles will be investigated. A major project with a portfolio of your own fashion designs will be the culminating project for this class. An interest in art and the ability to draw are advantages but not requirements for this class. CAD fashion design programs will be used. These are industry standard and lots of fun to use. Cost: Purchase of some drawing supplies may be required.

## INTRODUCTION TO TEXTILES

**COURSE NUMBER:** 61030  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

This course introduces students to basic sewing and pressing equipment, textiles, introductory or intermediate level project construction techniques depending upon the student's entry skills, and techniques for constructing edge finishes, using a serger. The class will include fabric construction and weaves, basic sewing skills, and pattern selection and use. This class is designed to help those students who wish to expand upon what they learned in fashion design with some basic clothing construction, or for those who wish to use sewing as a useful skill to know. Final exams will include both a written and a sewing project. Some fees may be applicable.

## TEXTILES STUDIO

**COURSE NUMBER:** 61110  
**LENGTH:** One Semester  
**PREREQUISITE:** Must have completed Introduction to Textiles  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

This course allows students access to sewing and pressing equipment, and instructor advice for intermediate level and advanced level students. Students will be expected to complete two major clothing construction projects. They will also learn to use the machine embroidery equipment along with the digitized software. The class will run at the same time as Introduction to Textiles so students will have to be willing to be self directed learners. Final exams will include presentation of their finished projects to the class. For Textiles Studio the purchase of all sewing supplies, material and patterns would be the responsibility of the student. Some fees may be applicable.

## Foreign Language

A second language can be very useful in various careers. A foreign language will benefit students interested in any of the six career pathways. Knowing a second language opens your mind and helps teach you that people who speak a language other than your own are neither better nor worse, only a little different. You also get the added benefit of learning more about your native tongue as you learn another language. By taking a foreign language during all four years of high school, you will go beyond the basic skills and begin to use the language and reinforce your fluency. If you are undecided about whether or not to take a foreign language, try researching colleges or employers to find out about their foreign language requirements.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	Full Year	Spanish I	2 Credits	Passing grade in Language Arts
	X	X	X	Full Year	Spanish II	2 Credits	Pass Spanish I (a C or better is strongly recommended)
		X	X	Full Year	Spanish III	2 Credits	Pass Spanish II (a C or better is strongly recommended)
			X	Full Year	Spanish IV	2 Credits	Pass Spanish III (a C or better is strongly recommended)

### SPANISH I

**COURSE NUMBER:** SEMESTER 1 50011  
**COURSE NUMBER:** SEMESTER 2 50012  
**LENGTH:** Full Year  
**PREREQUISITE:** A passing grade in Language Arts  
**GRADE LEVEL:** 9, 10, 11, 12  
**CREDIT:** Two Credits

Spanish I is a beginning level class that emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can begin to read, write, speak, and listen on a basic level. Students will also learn about the cultures of Spanish speaking people. Because of the world becoming more global this course would benefit all students. To continue to the next semester, a passing grade must be earned in the previous semester.  
Cost: Notebook or 3-ring binder with loose-leaf paper.

### SPANISH II

**COURSE NUMBER:** SEMESTER 1 50021  
**COURSE NUMBER:** SEMESTER 2 50022  
**LENGTH:** Full Year  
**PREREQUISITE:** A passing grade in Spanish I (a C or better is strongly recommended)  
**GRADE LEVEL:** 10, 11, 12  
**CREDIT:** Two Credits

Spanish II enables students to expand upon what they have learned in Spanish I, increasing their skills and depth of knowledge. Reading, writing, listening and speaking are all incorporated in the learning of more vocabulary and grammar. The culture and history of Spanish speaking countries is also taught. To continue to the next semester, a passing grade must be earned in the previous semester.  
Cost: Notebook or 3-ring binder with loose-leaf paper.

### SPANISH III

**COURSE NUMBER:** SEMESTER 1 50031  
**COURSE NUMBER:** SEMESTER 2 50032  
**LENGTH:** Full Year  
**PREREQUISITE:** A passing grade in Spanish II (a C or better is strongly recommended)  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Two Credits

Spanish III will focus on having students express more complex concepts both verbally and in writing, and comprehend literature. The four language skills of speaking, reading, writing, and listening will all be incorporated with an increased focus on language use. Spanish art and history are also taught. To continue to the next semester, a passing grade must be earned in the previous semester.  
Cost: Notebook or 3-ring binder with loose-leaf paper.

### SPANISH IV

**COURSE NUMBER:** SEMESTER 1 50041  
**COURSE NUMBER:** SEMESTER 2 50042  
**LENGTH:** Full Year  
**PREREQUISITE:** A passing grade in Spanish III (a C or better is strongly recommended)  
**GRADE LEVEL:** 12  
**CREDIT:** Two Credits

Spanish IV will review and expand upon all previous levels of Spanish. In this course grammatical structures will be studied in detail and vocabulary will be expanded. Students will work on developing their ability to understand others and express themselves in Spanish. To continue to the next semester, a passing grade must be earned in the previous semester.  
Cost: Notebook or 3-ring binder with loose-leaf paper.



## Guidance Related Courses

Guidance related courses listed below allow for students to explore themselves and their interactions with others. These courses take the students' educational experiences beyond the school walls and provide them a venue to discuss issues that they are confronted with daily as an adolescent and in the workplace.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
		X	X	1 Sem	Life Skills	1 Credit	None
		X	X	1 Sem	Introduction to Education	1 Credit	None
		X	X	1 Sem	Peer Helping Experience	1 Credit	Intro to Education

### LIFE SKILLS

**COURSE NUMBER:** 62024  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE:** 11, 12  
**CREDIT:** One Credit

This course allows students to explore their communication, self-improvement and relationship skills, mental health and how their own influences behaviors, diversity, and career/college readiness. This class is graded on reflective learning and connecting for self improvement.

### INTRODUCTION TO EDUCATION

**COURSE NUMBER:** 62033  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 12  
**CREDIT:** One Credit

This introductory course is designed to acquaint students with the field of Education and Human Service. Students will examine technology and its impact on youth, ethical and legal issues facing our families, effective teaching strategies, diversity in the classroom, social problems and how they relate to schools/families, professionalism in education and current curricula. This course is an examination of the relationship between school and society through the lens of current issues in Education and Human Services. A variety of perspectives will be examined, including historical, philosophical, social media, ethical, and legal. Through classroom observations and journal entries, students will develop an understanding of what it means to be a reflective practitioner. Students will also mail a letter advocating for change to our Iowa Department of Human Services. Students will be working with younger peers for 20 hours. Students will have the opportunity to work toward a Para Educator Certification through coursework and after graduation from high school, they can receive their Para Educator Certification, which they would be able to use for three years.

### PEER HELPING EXPERIENCE

**COURSE NUMBER:** 62032  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Education  
**GRADE LEVEL:** 12  
**CREDIT:** One Credit

Peer Helping Experience provides students with the opportunity to receive school credit for volunteering their time, energy, and talents in a community service program. The course is conducted with a prerequisite **Introduction to Education class**, so that students' volunteer experiences can be used as learning experiences in effective communication and decision-making. Examples of helping people are working with elementary or junior high students as peer tutors, leading a lesson, or working in a small group. It is intended that Peer Helpers commit one period every day to peer help. Students will be placed in a classroom for one period to assist the classroom teacher in learning. This class would be graded pass or fail.

# Health Education

Areas studied within Health Education courses will include personal health (mental health and stress management, drug/alcohol abuse prevention, disease prevention, and body systems) and consumer health issues. Brief studies of environmental health, personal development, and/or community resources will also be included.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	1 Sem	Health Education	1 Credit	None
X	X	X	X	1 Sem	Public Health	1 Credit	None
X	X	X	X	1 Sem	Community Health	1 Credit	None

## HEALTH EDUCATION

**COURSE NUMBER:** 62420  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Health Education is the introduction to general/personal health. The focus is on assessing personal health based on individual choices and behaviors. The class is set up more as a seminar with some traditional instruction. Topics that will be discussed will be physical, mental/emotional, substance abuse, pregnancy, and communicable diseases..

## PUBLIC HEALTH

**COURSE NUMBER:** 62430  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Public Health takes Health into the public by discussing the history of medical diseases, preventions and health care. Explore the different influences that change the way personal health is viewed along with learning how to self advocate. With so many different ways of achieving good health, Public Health informs how to have tolerance with other's way of thinking.

## COMMUNITY HEALTH

**COURSE NUMBER:** 62410  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Community Health is the introduction to how the body systems work together. The focus will be connecting family history to the function, structure, and problems of each body system. The body systems that will be covered are skin, skeletal, muscular, nervous, endocrine, circulatory, respiratory, reproduction, urinary and digestive. We will also explore how medicine and disease affects each body system.

# Health Care Occupations

Health Care Occupations is essential for students interested in careers directly related to the Health Sciences, Family and Human Services, Ag Science and Natural Resources, Business/Information Management and Marketing and Engineering/Industrial Technological Sciences pathways.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
		X	X	1 Sem	Introduction to Health Care	Dual Credit	None
		X	X	1 Sem	Medical Terminology	Dual Credit	None
		X	X	1 Sem	First Aid	Dual Credit	None
		X	X	1 Sem	Nurse Aide	Dual Credit	Intro Health Care, Medical Terminology, teacher recommendation

## Career and Technical Education Programs Health Care Occupations Instructional Strands

Recommended Sequential Courses

### 11th Grade and 12th Grade

Introduction to Health Care	½ Unit
Medical Terminology	½ Unit
Nurse Aide	1 Unit
First Aid	½ Unit

Health Sciences

<b>GRADE</b>	<b>ENGLISH</b>	<b>MATH</b>	<b>SCIENCE</b>	<b>SOCIAL STUDIES</b>	<b>HEALTH AND/OR TECHNOLOGY</b>	<b>PE</b>	<b>ELECTIVES</b>
Grade 9 1 <sup>st</sup> Sem	LA 9	Algebra I	Environmental Science	US History	Health	PE	Spanish I
Grade 9 2 <sup>nd</sup> Sem	LA 9	Algebra I	Earth Science	US History	Health	PE	Spanish I
Grade 10 1 <sup>st</sup> Sem	LA 10	Geometry	Biology	Modern Civilizations		PE	Spanish II
Grade 10 2 <sup>nd</sup> Sem	LA 10	Geometry	Biology	Modern Civilizations		PE	Spanish II
Grade 11 1 <sup>st</sup> Sem	LA11	Algebra II	Physical Science- Chemistry	*Intro to Psychology		PE	Intro to Healthcare Medical Terminology EB 1, 2, 4
Grade 11 2 <sup>nd</sup> Sem	LA11	Algebra II	Physical Science- Physics			PE	Nurse Aide (2 pds) EB 1, 2, 4
Grade 12 1 <sup>st</sup> Sem	LA12 or College English EB 2, 4	Math Elec or Pre-Calculus Statistics EB 4	*Anatomy & Physiology I or Physics 1, 2, 4	Government	*Intro to Business 1, 2, 4	PE	First Aid/CPR EB 1, 2, 4
Grade 12 2 <sup>nd</sup> Sem	LA Elective or Composition II EB 2, 4	Math Elec or Pre-Calculus Statistics EB 4	Anatomy & Physiology II or Physics	*Developmental Psychology 1, 2, 4		PE	
<b>Post Secondary 1<sup>st</sup> Sem</b>	<b>Fundamentals of Speech Communication 1, 2, 4</b>	<b>Statistics EB 4</b>	<b>Anatomy &amp; Physiology and Nutrition 1, 2, 4</b>				
<b>Post Secondary 2<sup>nd</sup> Sem</b>			<b>Anatomy &amp; Physiology II and Microbiology 1, 2, 4</b>				

EB = ICCC Early Bird Courses; \*Dual Credit

- 1 – 1 year post-secondary education for EMT, surgical technician, practical nurse, medical assistant, dental lab technician, medical transcriptionist
- 2 – 2 year post-secondary education for registered nurse, medical lab tech, respiratory therapist, radiology tech
- 4 – 4 years of post-secondary education for physician, physician assistant, physical therapist, occupational therapist, speech pathologist, veterinarian, dentist, dental hygienist, advanced practical nursing or registered nurse practitioner.

## INTRODUCTION TO HEALTH CARE

**COURSE NUMBER:** 62520  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

Students will be given a basic introduction to the health care delivery system, professionalism, and legal and ethical responsibilities of the health care worker. The communication process will be introduced as well as an understanding of patient's needs and behavior. Aspects of patient care will be discussed involving safety, infection control, transfer techniques and vital signs. Some time will be spent outside of the classroom job shadowing health care personnel in the community. Exploration of various health care careers will be included. This course will provide an orientation to the people and institutions that make up the health care system. This is a dual credit course. In addition to the Humboldt High school credit, students will receive 2 semester credit hours from Iowa Central Community College for Introduction to Health Care, upon successful completion of this course.

## MEDICAL TERMINOLOGY

**COURSE NUMBER:** 62530  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

Students will study terminology of the human body systems. Emphasis will be on recognition and functional vocabulary related to the medical sciences. Definitions, standard abbreviations, pronunciation, and correct spelling will be included. This class is recommended to everyone who is interested in any health care occupation or students planning on taking the certified nursing course 2nd semester. This is a dual credit course. In addition to the Humboldt High School credit, students will receive 2 semester hours of credit from Iowa Central Community College for Medical Terminology upon successful completion of this course.

## FIRST AID

**COURSE NUMBER:** 62510  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

The course is a study of the fundamentals of first aid with emphasis on the prevention and emergency care of injuries of all kinds. Units using multimedia instruction and cardiopulmonary resuscitation will be given with American Red Cross certification. This course is recommended to students interested in health care occupations. This is a dual credit course. In addition to the Humboldt High School credit, students will receive 2 semester hours of credit from Iowa Central Community College for First Aid upon successful completion of this course.

## NURSE AIDE

**COURSE NUMBER:** 62540  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Health Care, Medical Terminology, Teacher Approval.  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

The main focus of this class is the 75 hour nurse aide course. This course provides students with the basic level of knowledge and skills to provide safe, effective patient care. This nurse aide course meets the training requirements of the Omnibus Budget Reconciliation Act of 1987 for nurses working in nursing facilities (NF) and skilled nursing facilities (SNF). This course is held at the Humboldt High School, Humboldt Care Centers, and the Humboldt Community Hospital. Because of the clinical components of this class, there are certain health and uniform requirements:

1. A health physical examination by a licensed professional. This requirement may be met by taking a school athletic physical.
2. Testing for Tuberculosis (TB).
3. Vaccination series for hepatitis B or a waiver signed by a parent.
4. **Criminal/Abuse background check. The state requires that background checks be completed no sooner than 30 days before the start of class.**
5. Uniform (any color) and shoes can be any color as long as they are not made of mesh or have any holes (like crocs). They should only be worn for this class until the semester is over.)

Students will be expected to provide their own transportation to and from the clinical sites in Humboldt on clinical days. This is a dual credit course. In addition to the Humboldt high school credit, students will receive 3 semester hours from Iowa Central Community College.

## Industrial Technology

Industrial Technology courses will benefit students interested in the Industrial/Technological Sciences career pathway. These technical education courses include the areas of; Manufacturing, Transportation, Building Trades and Vocational Education. These courses are intended to provide the basic knowledge required for both current and future technical careers. Courses will prepare students for postsecondary academic or technical education choices as well as employment preparation.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	1 Semester	Introduction to Industrial Technology	1 Credit	Have not taken any other Industrial Tech courses or be a freshman
	X	X	X	1 Semester	Introduction to Welding	1 Credit	None
		X	X	1 Semester	Advanced Welding	1 Credit	Introduction to Welding
X	X	X	X	1 Semester	Metal Fabrication	1 Credit	Introduction to Industrial Technology
	X	X	X	1 Semester	Machining Technology	1 Credit	Introduction to Welding or Metal Fabrication
X	X	X	X	1 Semester	Wood Process/Production I	1 Credit	Introduction to Industrial Technology
		X	X	1 Semester	Wood Process/Production II	1 Credit	Wood Process/Production I
		X	X	1 or 2 Semester(s)	Independent Study Material Processing	1 or 2 Credits	Instructor approval
X	X	X	X	1 Semester	Small Engines/Engines	1 Credit	Introduction to Industrial Technology
	X	X	X	1 Semester	Introduction to Building Trades	1 Credit	None
		X	X	1 Semester	ICCC Introduction to CAD	Dual Credit	None
		X	X	1 Semester	Architectural Drawing Technology	1 Credit	Intro to CAD or Intro to Building Trades
		X	X	Full Year	ICCC Introduction to Construction	Dual Credit	Junior or Senior

**Career and Technical Education Programs  
Industrial Technology Education Instructional Strands  
Recommended Sequence of Courses**

**Building Trades**

9th Grade and 10th Grade

Intro to Industrial Technology	½ Unit
Wood Process/Production I	½ Unit
Wood Process/Production II	½ Unit
Intro. to Building Trades	½ Unit

11th Grade

ICCC Introduction to CAD	½ Unit
Architectural Drawing	½ Unit
ICCC Intro to Construction	4 Units

12th Grade

ICCC Intro to Construction	4 Units
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**Manufacturing Technology**

9th Grade

Wood Process/Production I	½ Unit
Wood Process/Production II	½ Unit
Metal Fabrication	½ Unit
Intro to Industrial Technology	½ Unit

10th Grade

Metal Fabrication	½ Unit
Small Engines/Engines	½ Unit
Intro. to Welding	½ Unit

11<sup>th</sup> and 12th Grade

ICCC Intro to CAD	½ Unit
Machining Technology	½ Unit
Advanced Welding	½ Unit
Independent Study	½ Unit

**Transportation**

9<sup>th</sup> Grade and 10<sup>th</sup> Grade

Small Engines/Engines	½ Unit
Intro to Welding	½ Unit
Intro to Industrial Tech	½ Unit

11th Grade

Metal Fabrication	½ Unit
Auto Hub	4 Units
Advanced Welding	½ Unit

12th Grade

Auto Hub	4 Units
Machining Technology	½ Unit

## Manufacturing

This Career Cluster plan of study (based on Manufacturing Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This plan of study, used for learners at an educational institution, should be customized with the course titles and appropriate high school graduation requirements as well as college entrance requirements.

GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	Other Required Courses, Other Electives, Recommended Electives, Learner Activities	Career & Technical Courses And/or Degree Major Courses for Manufacturing
<b>Interest Inventory Administered and 8<sup>th</sup> Grade Plan Developed</b>						
Grade 9	LA 9	Algebra I	Environmental Science Earth Science	US History	Intro to Industrial Tech PE	Wood Process Production I Wood Process Production II Metals Fabrication
Grade 10	LA 10	Geometry	Biology	Modern Civilizations	Intro to Industrial Tech PE	Intro to Welding, Small Engine Mechanics, Metal Fabrication
Grade 11	LA 11	Algebra II College Alg/Trig	Physical Science – Chemistry Physical Science – Physics (Each one semester)	SS Elective	PE	
Grade 12	LA 12 or Equivalent	Calculus *Statistics Personal Money Mgt	Advanced Chemistry Physics Physiology/Anatomy	Government	PE	Material Processing Independent Study
<b>Articulation/Dual Credit Transcript – Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes.</b>						
Year 13 ICCC		Technical Math Technical Math II				Precision Measurements Lab, Shop Operations, Blueprint Reading, Mechanical Processes, Intro to Lathe Ops, Intro to Mill Ops, Beginning Welding, Intro to CAD, Solid Modeling I, Machine Processes I, CNC Ops, Advanced Lathe, GTAW, Advanced GTAW
Year 14 ICCC	Business Communications or Composition I		Applied Physics	Human Relations or Humanities		
Year 15 ISU	Continue courses in the area of specialization.					
Year 16 ISU						Internship, Adv CNC & Lab, CAM I/II, intro to Die Making Jobs & Fixture design, CIM, Intro to Mold Making, Quality Assurance, Robotic Welding, Geometric Tolerancing



### **INTRODUCTION TO INDUSTRIAL TECHNOLOGY**

**COURSE NUMBER:** 63020  
**LENGTH:** One Semester  
**PREREQUISITE:** Have not taken any other industrial technology courses or freshman status  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

This course is required in order to take any other Industrial Technology courses. This course will provide instruction in the fundamentals of carpentry, welding, metal fabrication, engine mechanics, drafting, employability skills, as well as shop practices and procedures. Shop safety procedures will be strongly emphasized throughout the course. Students will also be provided instruction in measurement and precision measurement. Students will be responsible for designing and creating both a carpentry project and a metals related project.

### **INTRODUCTION TO WELDING**

**COURSE NUMBER:** 63130  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

This course will provide instruction and practice in the methods of cutting and joining metals. The instruction will include knowledge of shielded metal arc (SMAW) welding, cutting and brazing, metal inert gas (MIG) welding, tungsten inert gas (TIG) welding and plasma arc cutting. An understanding of plasma cam will be provided. The knowledge and skills will be learned through both academic and practical lab exercises in the various welding methods and welding positions. These are the processes used in local manufacture, repair and technical education programs. This class requires students to spend much of class time in the practice and development of welding skills. Students will need to exhibit independent work habits.

### **ADVANCED WELDING**

**COURSE NUMBER:** 63135  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Welding  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

In this course students will learn the symbols associated with welding trades. Blueprint reading will be emphasized. Students will explore careers associated with manufacturing, welding, and construction. This course will help students refine their critical thinking skills in the shop, and they add to previous welding skills they have learned in prior courses and experiences. This course will also help students gain manufacturing communication skills that will be used throughout the course of their adult lives.

### **METAL FABRICATION**

**COURSE NUMBER:** 63150  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Industrial Technology  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Students will identify and practice many of the processes used in local manufacture of metals. Correct use of hand tools will be demonstrated. Processes to be covered include; precision bench work, threading, foundry and sheet metal forming. Measuring, math, applied geometry and project layout skills will be utilized. Students will need to work independently and demonstrate appropriate work habits. This is a wide encompassing course and is intended to provide some of the background needed for other courses and/or future employment skills

### **MACHINING TECHNOLOGY**

**COURSE NUMBER:** 63140  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Welding or Metal Working or teacher approval  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Students will complete units in math and precision measuring. Blueprint reading and proper machine set-up will be covered. Students will complete machining projects on the mill and the lathe to precise dimensions.(+-.005") Students will use also develop an understanding of Computer aided manufacturing (Cam) programs. An understanding of the manufacturing industry will be covered. Students will need to exhibit independent work habits.

## WOOD PROCESS/PRODUCTION I

**COURSE NUMBER:** 63210  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Industrial Technology  
**GRADE LEVEL:** 9-12  
**CREDIT:** One credit

Students will learn basic operation and safety about hand and power tools. Several small required projects involving basic tools will be completed. Students will make basic decisions to develop these simple projects. Power tools such as routers, band saws, jigsaws, and miter box will be used. Students will interpret plans, create bill of materials, measure and layout and construct. Students work independently and demonstrate appropriate work habits. This class provides students with the basics of measuring, cutting, assembly, sanding and finishing of products. Students will be responsible for cost of individual projects taken home. Students will need to exhibit independent work habits.

## WOOD PROCESS/PRODUCTION II

**COURSE NUMBER:** 63220  
**LENGTH:** One Semester  
**PREREQUISITE:** Wood Process/production I  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Tool safety, nomenclature and use will be stressed. Student will demonstrate various required processes and practices. Students will then select, design, and produce a project during the course. Plans of procedure, cost analysis, record keeping and daily logs will be maintained. Individual project and plan will be approved by the instructor. Students will work independently and demonstrate appropriate work habits. Students will be responsible for cost of individual projects taken home.

## INDEPENDENT STUDY MATERIAL PROCESSING

**COURSE NUMBER:** 63230  
**LENGTH:** 1 or 2 Semester  
**PREREQUISITE:** At least 2 semesters of instruction in area related to study and instructor and parental approval.  
**GRADE LEVEL:** 11-12  
**CREDITS:** 1 or 2 credits

This is a career related class for students who exhibit a desire for an in depth study. Students will use skills and knowledge learned in required prerequisite classes to research, design and create work in the area of study. Students will develop an instructor and parent approved plan and materials list prior to beginning of class. Students will be responsible for all materials, etc. Students will be asked to demonstrate appropriate safety for tools and equipment they will be using. This can be a one or two semester class.

## SMALL ENGINES/ENGINES

**COURSE NUMBER:** 63110  
**LENGTH:** One Semester  
**PREREQUISITE:** Introduction to Industrial Technology  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Students will learn about the principles and operations of small gasoline engines. Identification and correct use of tools and precision measuring instruments will be emphasized. Students will disassemble, measure, troubleshoot and reassemble engines while understanding the various engine systems. Students will work independently and demonstrate appropriate work habits. The basic engine theory in this course would provide excellent background for those interested in auto or mechanical occupations.

## INTRODUCTION TO BUILDING TRADES

**COURSE NUMBER:** 63080  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE:** 10-12  
**CREDIT:** One Credit

This course of construction will focus on the principles of wood frame house construction. Units will include safety, hand tools, power tools, layout tools, building materials, understanding building codes and specifications. Students will complete activities involved in leveling, floor, wall and roof framing in the construction scaled model framing and/or sample construction. This would be an introductory course for those interested in the construction industry.

## ICCC INTRODUCTION TO CAD

**COURSE NUMBER:** 63090  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** Dual Credit

This course will provide experience and knowledge in the drafting and design industry. Much of the time will be spent using the computer (CAD). Projects involving measuring, geometry and applied math will be included. Students will develop various types of drawings used in many different industries. This class is based on the problem-solving approach. Students will work independently and demonstrate appropriate work habits. This is a dual credit course offered with Iowa Central Community College. This would be an excellent class for those interceded in all areas of industry, all areas of engineering, graphic design work, any computer applications or those who like a start on college credits.

## ARCHITECTURAL DRAWING AND DESIGN

**COURSE NUMBER:** 63010  
**LENGTH:** One Semester  
**PREREQUISITE:** Recommended Introduction to CAD or Intro. to Building Trades  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

This course will provide experience and knowledge about drawing in the construction industry. Students will utilize software to create industry approved drawings for plot plans, topography, foundation, framing, floor, schematics and various elevation drawings. The instruction will include identification and function of the materials, symbols and practices in residential construction. Students will create bill of materials and cost estimates for structures. Students will work independently and demonstrate appropriate work habits. Students will use various manuals, software and online resources to complete required drawings. Excellent course for those interested in construction, design or computer graphics.

## RESEARCH AND DEVELOPMENT

**COURSE NUMBER:** 63170  
**LENGTH:** One Semester  
**PREREQUISITE:** Industrial Technology Classes and Teacher Approval  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

This is a class for students who exhibit a desire for an in depth study. Research and Development is teacher approved and the course of study is determined between the teacher and the student.

## ICCC INTRODUCTION TO CONSTRUCTION

**COURSE NUMBER:** SEMESTER 1 63021 ICCO INTRO TO RESIDENTIAL CONSTRUCTION  
**COURSE NUMBER:** SEMESTER 2 63022 ICCO CONCRETE THEORY  
**COURSE NUMBER:** SEMESTER 2 63032 ICCO SITE LAYOUT/BLUE PRINT READING  
**LENGTH:** Full Year  
**PREREQUISITE:** Material Processing or Intro to Building Trades is preferred but not required  
**GRADE LEVEL:** 11-12  
**CREDIT:** Dual Credit

During this course students will construct a house from beginning to end. Students will work side by side with the instructors and several professionals in the construction of a residential home. Students are responsible for their transportation to the jobsite and back to the school. Students are responsible for their own hammer, cat's paw, nail apron, tape measure, chalk line, square, and utility knife. This course can be taken for two years.

# Language Arts

Language Arts is essential for all students. Although eight courses are required, elective, and/or advanced courses will benefit students in any of the six career pathways. Preparing for academic success at post secondary schools will require an emphasis on the communication skills of writing, reading, speaking, and listening and the analysis and interpretation of literature. Extracurricular activities such as debate and speech contest will further develop essential competencies.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X				Full Year	Language Arts 9	2 Credits	None
X				1 <sup>st</sup> Sem	LA 9 Accelerated	1 Credit	Iowa Assessment and MAP Scores
	X			Full Year	Language Arts 10	2 Credits	Language Arts 9
X	X			2 <sup>nd</sup> Sem	LA 10 Accelerated	1 Credit	Iowa Assessment and MAP Scores
		X		1 Sem	Language Arts 11A	1 Credit	Language Arts 10
		X		1 Sem	Language Arts 11B	1 Credit	Language Arts 10
			X	1 Sem	Language Arts 12	1 Credit	Language Arts 11A and Language Arts 11B
	X*	X	X	1 Sem	Composition	1 Credit	Language Arts 9 and Language Arts 10
		X	X	1 Sem	Technical Writing	1 Credit	Language Arts 9 and Language Arts 10
	X*	X	X	1 Sem	Speech	1 Credit	Language Arts 9 and Language Arts 10
		X	X	Full Year	AP Language/Composition	Dual Credit can be earned based upon results of final exam.	LA 9 and LA 10 or equivalent and Senior Year Plus Guidelines on page 6. This course offered every odd year.
		X	X	Full Year	AP Literature/Composition	Dual Credit can be earned based upon results of final exam.	LA 9 and LA 10 or equivalent and Senior Year Plus Guidelines on page 6. This course offered every even year.
		X	X	1 Sem	ICCC Composition I	Dual Credit	Senior Year Plus Guidelines on page 6
		X	X	1 Sem	ICCC Composition II	Dual Credit	Senior Year Plus Guidelines on page 6
X	X	X	X	1 Sem	Reading Strategies	1 Elective Credit	This course is not available for students to choose on their Course Selection Form. Students are placed in this course based on Iowa Assessment and MAP scores or by teacher placement.

**\*Only if you have taken Language Arts 9 Accelerated AND Language Arts 10 Accelerated.**

## LANGUAGE ARTS 9

**COURSE NUMBER:** SEMESTER 1 10011  
**COURSE NUMBER:** SEMESTER 2 10012  
**LENGTH:** Full Year  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9  
**CREDIT:** Two Credits

Language Arts 9 builds upon the students' prior knowledge of grammar, vocabulary, word usage, and mechanics of writing, and includes the four aspects of language use: reading, writing, speaking, and listening. The various genres of literature are introduced and defined, with writing exercises often linked to reading selections.

Language Arts 9 reviews the grammar, usage, mechanics, and spelling skills learned in previous years and presents new materials in each of these areas. The course emphasizes good writing and many opportunities are given to write. This includes a multi-source research unit and a variety of guided writing projects/essays. A variety of literature units is offered during the year: the short story, poetry, modern drama, non-fiction, Shakespearean drama and the novel. Conscious efforts are made to relate the communication skill concepts to the world at large. This course is required of all ninth grade students.

## LANGUAGE ARTS 9 ACCELERATED

**COURSE NUMBER:** SEMESTER 1 10021  
**LENGTH:** One Semester, offered first semester only  
**PREREQUISITE:** Iowa Assessments and MAP Scores  
**GRADE LEVEL:** 9  
**CREDIT:** One Credit

This course involves the same materials covered in LA 9, only on an accelerated basis. The content will be covered in one semester. Iowa Assessments and MAP assessments are used to determine eligibility. This course will be offered first semester.

## LANGUAGE ARTS 10

**COURSE NUMBER:** SEMESTER 1 10031  
**COURSE NUMBER:** SEMESTER 2 10032  
**LENGTH:** Full Year  
**PREREQUISITE:** Language Arts 9  
**GRADE LEVEL:** 10  
**CREDIT:** Two Credits

Language Arts 10 is designed for sophomores and typically introduces two or more genres of literature (Bildungsroman, Dystopian, etc.). Exploration of each genre's literary elements; determination of theme and intent; and vocabulary and semantics are often included as part of the course content. Writing assignments may be required as an additional method to improve understanding and comprehension. A required job shadow experience will provide students with lessons and activities that will explore careers followed by oral and written reports.

This course will involve the reading of To Kill a Mockingbird, The Hunger Games, and other novels, to be determined. Several creative assignments will be made in connection with the novels to assess analysis and synthesis.

## LANGUAGE ARTS 10 ACCELERATED

**COURSE NUMBER:** SEMESTER 2 10052  
**LENGTH:** One Semester, offered second semester only  
**PREREQUISITE:** Iowa Assessments and MAP Scores  
**GRADE LEVEL:** 9-10  
**CREDIT:** One Credit

This course involves the same materials covered in LA 10 and LA 10 Job Shadow, only on an accelerated basis. The content will be covered in one semester. Iowa Assessments and MAP assessments are used to determine eligibility. This course will be offered second semester.

## LANGUAGE ARTS 11A & 11B

**COURSE NUMBER:** 10060, 10065  
**LENGTH:** Full Year  
**PREREQUISITE:** Language Arts 10  
**GRADE LEVEL:** 11  
**CREDIT:** Two Credits

**11A:** American Literature is designed to emphasize comprehension, discernment, and critical thinking skills in literature. More advanced literary techniques (irony, satire, humor, connotation, tone, rhythm, symbolism, etc.) are introduced and explored through two or more literary genres, with the aim of creating sophisticated readers. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Writing assignments may be required as an additional method to develop and improve critical thinking and analytic skills. This course will focus on the poetry, drama, fiction, and non-fiction of America.

**11B:** British Literature is designed to emphasize comprehension, discernment, and critical thinking skills in literature. More advanced literary techniques (irony, satire, humor, connotation, tone, rhythm, symbolism, etc.) are introduced and explored through two or more literary genres, with the aim of creating sophisticated readers. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Writing assignments may be required as an additional method to develop and improve critical thinking and analytic skills. This course will survey various works of British poetry, drama, fiction, and non-fiction.

## LANGUAGE ARTS 12

**COURSE NUMBER:** 10070  
**LENGTH:** One Semester  
**PREREQUISITE:** Language Arts 11A/11B  
**GRADE LEVEL:** 12  
**CREDIT:** One Credit

Language Arts 12 offers the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical thinking skills as they determine the underlying assumptions and values within the reading selection, and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are sometimes required, often with an emphasis toward college preparation. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people. Vocabulary, interpretation skills, interpretive reading skills, and the enjoyment of good literature will be emphasized in this course.

## COMPOSITION

**COURSE NUMBER:** 10110  
**LENGTH:** One Semester  
**PREREQUISITE:** Language Arts 9 and Language Arts 10  
**GRADE LEVEL:** 10\*,11,12  
**CREDIT:** One Credit

Composition is designed for students to build upon previous writing skills. Reinforcing the logic and critical thinking skills that accompany good writing, these courses provide continued and advanced instruction in writing for a variety of purposes and audiences. Word choice, usage, and writing mechanics are frequently emphasized. The purpose of this course is to enable the student to convey in written form, information which he or she has gathered and to express his or her ideas in a clear, complete manner. Included in the course are studies of words and effective usage, building and varying sentences, and constructing effective paragraphs and compositions. This course DOES NOT offer an extensive review of grammar. Rather, it is intended to give the student practice in effective writing. \*Only sophomores that have taken the Accelerated path can take this course.

## SPEECH

**COURSE NUMBER:** 10160  
**LENGTH:** One Semester  
**PREREQUISITE:** Language Arts 9 and Language Arts 10  
**GRADE LEVEL:** 10\*,11,12  
**CREDIT:** One Credit

Speech is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multimedia presentations, including personal narrative, viewpoint, instructional, storytelling, informative, persuasive and impromptu. \*Only sophomores that have taken the Accelerated path can take this course.

## TECHNICAL WRITING

**COURSE NUMBER:** 10180  
**LENGTH:** One Semester  
**PREREQUISITE:** Language Arts 9 and Language Arts 10  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Technical Writing prepares students to write in many technical styles. Researching (primary and secondary sources), organizing (material, thoughts and arguments), and writing in a persuasive or technical style are emphasized. This course is executed carefully for a specific audience; style is clear and concise; tone is objective and businesslike. The following units of study will be covered: blogging, lab reports, progress reports, reviews, summaries, proposals, technical descriptions and current research. Students will compile a portfolio containing the various forms of technical writing. \*Only Juniors and Seniors can take this course.

## ICCC COMPOSITION I

**COURSE NUMBER:** 10101  
**LENGTH:** One Semester, first semester only  
**PREREQUISITE:** Senior Year Plus Guidelines on page 6  
**GRADE LEVEL:** Seniors Level Course. If you take this course as a junior it locks you into AP English as a senior.  
**CREDIT:** Dual Credit

This course focuses on the process of writing expressive and informative prose. It introduces library research skills and critical thinking skills.

## ICCC COMPOSITION II

**COURSE NUMBER:** 10102  
**LENGTH:** One Semester, second semester only  
**PREREQUISITE:** Senior Year Plus Guidelines on page 6  
**GRADE LEVEL:** Seniors Level Course. If you take this course as a junior it locks you into AP English as a senior.  
**CREDIT:** Dual Credit

This course is a continuation of Composition I with advanced work in library research techniques. The major focus is on persuasive and argumentative writing with an emphasis on critical thinking skills.

## AP LITERATURE AND COMPOSITION

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 10081</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 10082</b>
<b>LENGTH:</b>	Full Year, offered every even year
<b>PREREQUISITE:</b>	LA 9 or equivalent and Senior Year Plus Guidelines on page 6
<b>GRADE LEVEL:</b>	10-12
<b>CREDIT:</b>	Two Credits

The AP course in English Literature and Composition is taught by a HHS staff member on an every other year basis. An AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. (The College Board, AP English Course Description, May 2009, p. 57). Because AP Language and Composition is an advanced placement class and prepares students for the AP English Literature exam, students can expect it to be a rigorous and challenging college preparatory course that is highly valued by colleges and universities.

## AP LANGUAGE AND COMPOSITION

<b>COURSE NUMBER:</b>	<b>SEMESTER 1 10091</b>
<b>COURSE NUMBER:</b>	<b>SEMESTER 2 10092</b>
<b>LENGTH:</b>	Full Year, offered every odd year
<b>PREREQUISITE:</b>	LA 9 or equivalent and Senior Year Plus Guidelines on page 6
<b>GRADE LEVEL:</b>	10-12
<b>CREDIT:</b>	Two Credits

The AP course in English Language and Composition is taught by a HHS staff member on an every other year basis. It engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. The purpose of the AP English Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers (The College Board, AP English Course Description, May 2007, p. 6). Because AP Language and Composition is an advanced placement class, students can expect it to be a rigorous and challenging college preparatory course that is highly valued by colleges and universities. This course prepares students for the AP English and Composition exam and has been authorized by the College Board to use the AP designation.



# Mathematics

Regardless of which pathway to the world of work you choose, mathematics is essential. For optimum success in preparing for a post secondary school, advanced courses like calculus and statistics are good. It's more important that you gain a complete understanding of advanced algebra and trigonometry.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	Full Year	Algebra IA	2 Credits	May not be taken if successfully completed Algebra I
	X	X	X	Full Year	Algebra IB	2 Credits	May not be taken if successfully completed Algebra I but must successfully complete Algebra IA.
		X	X	1 Sem	Math Topics	1 Credit	One semester of Geometry attempted
		X	X	1 Sem	Personal Money Management	1 Credit	Completion of 1 year of previous math courses
X	X	X	X	Full Year	Algebra I	2 Credits	none
	X	X	X	1 Sem	Intro to Geometry	1 Credit	This course is not available for students to choose on their Course Selection Form. Students are placed in this course based on Iowa Assessment and MAP scores or by teacher placement.
X	X	X		Full Year	Geometry	2 Credits	Completion Algebra I or Algebra IB
X	X	X		Full Year	Algebra II	2 Credits	Completion of 1 year in Geometry or Algebra I
		X	X	1 Sem	ICCC College Algebra	Dual Credit	Senior Year Plus Guidelines on p. 6
		X	X	1 Sem	Trigonometry	1 Credit	Successful completion of Algebra II
		X	X	1 Sem	ICCC College Trigonometry	Dual Credit	Senior Year Plus Guidelines on p. 6
		X	X	1 Sem	Pre-calculus	1 Credit	Successful completion of Algebra II
		X	X	Full Year	AP Calculus	Dual Credit can be earned based upon results of final exam.	C or higher in College Algebra/ Precalculus and Trigonometry
		X	X	1 Sem	ICCC Statistics	Dual Credit	Senior Year Plus Guidelines on p. 6
	X	X	X	1 Sem	Consumer Math	1 Credit	This course is not available for students to choose on their Course Selection Form. Students are placed in this course based on Iowa Assessment and MAP scores or by teacher placement.

### ALGEBRA IA (by teacher placement)

**COURSE NUMBER:** SEMESTER 1 20011  
**COURSE NUMBER:** SEMESTER 2 20012  
**LENGTH:** Full Year  
**PREREQUISITE:** May not be taken if successfully completed Algebra I.  
**GRADE LEVEL:** 9-12  
**CREDIT:** Two Credits

The student will explore and communicate mathematically, work with order of operations, functions, solving and graphing linear equations, problem solving, data collection and measurement.

Cost: A scientific calculator (approximately \$20.00) is required. This course is by teacher placement

### ALGEBRA IB

**COURSE NUMBER:** SEMESTER 1 20021  
**COURSE NUMBER:** SEMESTER 2 20022  
**LENGTH:** Full Year  
**PREREQUISITE:** Algebra IA  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits

The students will be able to explore, discover, reason, and communicate mathematics. The students will focus on problem solving with concepts related to equations, inequalities, systems of linear equations, exponents, quadratics, ratios, and probability.

Cost: A scientific calculator approximately (\$20.00) is required.

### ALGEBRA I

**COURSE NUMBER:** SEMESTER 1 20031  
**COURSE NUMBER:** SEMESTER 2 20032  
**LENGTH:** Full Year  
**PREREQUISITE:** None.  
**GRADE LEVEL:** 9-12  
**CREDIT:** Two Credits

The students will explore and communicate mathematically, to work with order of operations, functions, solving and graphing linear equations and inequalities, solving systems of linear equations, exponents, quadratics, ratios, probability, data collection and measurement. Problem solving strategies are used throughout the course. Cost: A scientific calculator (approximately \$20.00) is required.

### INTRODUCTION TO GEOMETRY (by teacher placement)

**COURSE NUMBER:** SEMESTER 1 20040  
**LENGTH:** One Semester  
**PREREQUISITE:** Successful completion of Algebra I or Algebra IB.  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

This course covers breakout units from Geometry including: properties of line, plane and parallel lines; congruence of polygons, dot plots, using median, mean, mode to solve problems, and apply distance, midpoint, area, perimeter and volume formulas. This class does not fulfill the prerequisite required for Algebra II. Students are placed in this course based on Iowa Assessment and MAP scores or by teacher placement.

### GEOMETRY

**COURSE NUMBER:** SEMESTER 1 20041  
**COURSE NUMBER:** SEMESTER 2 20042  
**LENGTH:** Full Year  
**PREREQUISITE:** Successful completion of Algebra I or Algebra IB.  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits

Geometry is the study of 2 and 3 dimensional shapes and the components of these shapes: line, points, angles and space. In this class students will use explorations and investigations to develop reasoning skills and to study geometry and discover relationships among the different components of geometric figures. The primary tools will be a pencil, compass, protractor and straight edge. Students will learn to recognize geometric principles in nature, art, and architecture and to view geometry as a mathematical system. Knowledge and mastery of the course is assessed through homework, class activities, projects, quizzes, tests and a cumulative final assessment.

Cost: A Scientific calculator approximately (\$20.00) is required.

## ALGEBRA II

**COURSE NUMBER:** SEMESTER 1 20051  
**COURSE NUMBER:** SEMESTER 2 20052  
**LENGTH:** Full Year  
**PREREQUISITE:** Successful completion of Geometry  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits

The student will explore families of functions, including linear, quadratic, polynomial, exponential, logarithmic, radical and rational functions. As students study each family of functions, students will learn to represent them in multiple ways – as verbal descriptions, equations, tables and graphs. Students will also learn to model real - world situations using functions. Cost: A TI-83 or TI-84 graphing calculator is highly recommended (approximately \$125).

### ICCC COLLEGE ALGEBRA

**COURSE NUMBER:** 20063  
**LENGTH:** One Semester  
**PREREQUISITE:** Senior Year Plus Guidelines on page 6  
**GRADE LEVEL:** 11-12  
**CREDIT:** Dual Credit

College Algebra is a class meant to bridge the gap between Algebra and Calculus. Topics include functions, their graphs, inverses and compositions, polynomials, rational functions, exponents, logarithms, systems of equations, conic sections and other topics important to the study of calculus. Student must have a Math ACT score of 23 or an ALEKS score of 46 in order to take this dual credit course. The TI-83+ or TI-84 graphing calculator is required. (\$125)

### PRE-CALCULUS

**COURSE NUMBER:** 20061  
**LENGTH:** One Semester  
**PREREQUISITE:** Successful completion of Algebra II  
**GRADE LEVEL:** 11 or 12  
**CREDIT:** One credit

Pre-Calculus is a class meant to bridge the gap between Algebra and Calculus. Topics include functions, their graphs, inverses and compositions, polynomials, rational functions, exponents, logarithms, systems of equations, conic sections and other topics important to the study of calculus. The TI-83+ or TI-84 graphing calculator is required. (\$125)

### TRIGONOMETRY

**COURSE NUMBER:** 20062  
**LENGTH:** One Semester  
**PREREQUISITE:** Successful completion of Algebra II  
**GRADE LEVEL:** 11 or 12  
**CREDIT:** One credit

The course contains an orderly development of the trigonometric functions and their inverses. Topics included in the course are solutions of triangles, radian measure and circular functions, identities, trigonometric equations, graphs, and complex numbers, polar equations, and parametric equations. The TI-83+ or TI-84 graphing calculator is required. (\$125)

### ICCC COLLEGE TRIGONOMETRY

**COURSE NUMBER:** 20064  
**LENGTH:** One Semester  
**PREREQUISITE:** Successful completion of Algebra II  
**GRADE LEVEL:** 11 or 12  
**CREDIT:** Dual Credit

The course contains an orderly development of the trigonometric functions and their inverses. Topics included in the course are solutions of triangles, radian measure and circular functions, identities, trigonometric equations, graphs, and complex numbers, polar equations, and parametric equations. Student must have an ACT math score of 23 or an ALEKS score of 46 in order to take this dual credit course. The TI-83+ or TI-84 graphing calculator is required. (\$125)

## AP CALCULUS

**COURSE NUMBER:** SEMESTER 1 20091  
**COURSE NUMBER:** SEMESTER 2 20092  
**LENGTH:** Two Semesters  
**PREREQUISITE:** C or higher in College Algebra/Pre-calculus and Trigonometry  
**GRADE LEVEL:** 11,12  
**CREDIT:** Dual Credit can be earned based upon results of final exam.

Calculus courses are intended for students who have attained pre-calculus objectives, including some combination of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis, or Pre-Calculus. They include the study of derivatives, anti-derivatives, differentiation, integration, the definite and indefinite integral, differentials, and applications of calculus.

This is a first course in integrated calculus and analytic geometry. The concepts of analytic geometry are studied as they apply to calculus. The calculus concepts covered include the rate of change of a function, limits, derivatives of algebraic, logarithmic, trigonometric and inverse trigonometric functions, applications of the derivative and an introduction of integration and its applications.

Students can earn college credit by passing the AP exam in May. Students in this class are expected to take the AP Calculus exam. Because AP Calculus AB is an advanced placement class, students can expect it to be a rigorous and challenging college preparatory course that is highly valued by colleges and universities. This course prepares students for the AP Calculus AB exam and has been authorized by the College Board to use the AP designation.

Cost: A scientific calculator (\$20.00) is needed; a TI-83 or TI-84 graphing calculator (\$125.00) is recommended.

## ICCC STATISTICS

**COURSE NUMBER:** 20113  
**LENGTH:** One Semester  
**PREREQUISITE:** Senior Year Plus Guidelines on page 6  
**GRADE LEVEL:** 11-12  
**CREDIT:** Dual Credit

This is a course in basic probability and statistics which includes the study of frequency distributions, measures of central tendency and dispersion, elements of statistical inference, regression and correlation. This course satisfies a general education requirement in the Math/Science area.

This is a dual credit course. In addition to the Humboldt High School credit, students will receive 4 semester hours of credits for completing one semester. Cost: A scientific calculator (\$20.00) is needed; a TI-83 or TI-84 graphing calculator (\$125.00) is highly recommended.

## PERSONAL MONEY MANAGEMENT

**COURSE NUMBER:** 20130  
**LENGTH:** One Semester  
**TERM(S):** 1st and 2nd semester  
**PREREQUISITE:** Successful completion of 2 semester's previous math courses.  
**GRADE LEVEL:** 11 or 12  
**CREDIT:** One credit

The main objective of this course is for students to learn the financial planning process, apply the process through assignments and ultimately take control of personal finances. A list of some of the main concepts include: understanding various financial services, creating a personal financial plan, developing a personal budget, saving and investing plans, credit and debt management, insurance options, career choices, and discovering what life after high school will really be like.

## CONSUMER MATH (by teacher placement)

**COURSE NUMBER:** 20152  
**LENGTH:** One Semester  
**PREREQUISITE:** Successful completion of 2 semester's previous math courses.  
**GRADE LEVEL:** 10-12  
**CREDIT:** One Credit

This course is not available for students to choose on their Course Selection Form. Students are placed in this course based on Iowa Assessment and MAP scores or by teacher placement. This course covers breakout units from Personal Money Management including: budgeting, saving, investments, checking accounts, credit, insurance, loans and taxes. Students are placed in this course based on Iowa Assessment and MAP scores or by teacher placement

## MATH TOPICS

**COURSE NUMBER:** 20142  
**LENGTH:** One Semester  
**PREREQUISITE:** One semester of Geometry attempted  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

The lowest math class at college for credit is usually a course called math for Liberal arts or something similar. This course will take possible topics from these courses and give an introduction to these topics. Half of the course will be problem solving and the other half will be the other topics. Topics that will be covered are: number systems, set theory, probability, logic, and network theory. A scientific calculator (approximately \$20) OR a TI-83 or TI-84 graphing calculator (approximately \$125) is required.

## Music

Music courses benefit students interested in the Arts/Communication career pathway. Music enhances a core academic high school program and prepares students for careers in areas such as creative writing, dance, theater, and audio communications.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	1 or 2 Sem	Treble Choir	1 Credit Per Sem	None
X	X	X	X	Full Year	Concert Chorale	2 Credits	Acceptance by Audition
X	X	X	X	Full Year	Band	2 Credits	Middle School Band or permission of HS Band Director
X	X	X	X	1 or 2 Sem	Independent Music Study	1 Credit per Sem	Concurrent involvement in band and/or choir
X	X	X	X	1 Sem	Music Theory	1 Credit	Participation in band or choir (1st and 2nd semester) required - offered every odd year
X	X	X	X	1 Sem	Music History/Appreciation	1 Credit	None Offered every even year

## TREBLE CHOIR

**COURSE NUMBER:** SEMESTER 1 71021  
SEMESTER 2 71022  
**LENGTH:** One or Two Semesters  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit per Semester

Treble Choir provides the opportunity to sing a variety of choral literature styles and is designed to develop individual vocal techniques, choral singing skills, and music reading skills. Treble Choir meets every day and performs a variety of music from pop, folk, Broadway and classical areas. This group will perform three major concerts each year, and may also participate in the State Large Group Festival. Students also have the opportunity to participate in the State Solo & Small Ensemble Festival, "Soundsations," Jazz Choir, and honor choir festivals.

The grade from this course is included in a student's high school grade point average.

## CONCERT CHORALE

**COURSE NUMBER:** SEMESTER 1 71031; SEMESTER 2 71032  
**LENGTH:** Full Year  
**PREREQUISITE:** Acceptance by Audition  
**GRADE LEVEL:** 9-12  
**CREDIT:** Two Credits

Concert Chorale provides the opportunity to sing a variety of choral literature styles for mixed voices and is designed to develop individual vocal techniques, choral singing skills, music reading skills, and choral excellence. Concert Chorale meets every day and performs advanced choral literature from a wide variety of periods and styles. Concert Chorale performs on three major concerts per year, participates in the State Large Group Festival, and graduation ceremonies. Students also have the opportunity to participate in the State Solo & Small Ensemble Festival, "Soundsations," Jazz Choir, and honor choir festivals.

The grade from this course is included in student's high school grade point average.

Cost: Music Registration Fee.

## BAND

**COURSE NUMBER:** SEMESTER 1 71011  
SEMESTER 2 71012  
**LENGTH:** Full Year  
**PREREQUISITE:** Performance in the Middle School Band or permission of the High School Band Director.  
**GRADE LEVEL:** 9-12  
**CREDIT:** Two Credits

Band at Humboldt High School is a full year curricular subject and you must sign up for both semester one and two. The band meets and rehearses one class period every school day. The "Pride of Humboldt Band" performs at home football games and participates in 3 competitions a year. Most band members play their main instruments during marching band. Some, through audition, are selected to perform in the band's color guard. (These auditions are held in the spring for the following year.) Other students play in the band's drum line and front line. (Marching band percussion part assignments are made in the spring.) A marching band camp is held for a full week in August prior to the start of school. Daily rehearsals will begin prior to the start of the school day. The Concert Band is the primary ensemble of the class. It performs in a series of concerts during the winter and spring, in addition to performing pep band songs at home basketball games. This ensemble participates in the Iowa High School Music Association's "Large Group Festival" and in the high school graduation ceremony, both in the spring. All students enrolled in band are eligible to audition for the Iowa All-State Band/Orchestra, participate in the IHSMA Solo/Small Ensemble Festival and audition for Jazz Band. All members of this class are required to have an individual lesson once each week.

## INDEPENDENT MUSIC STUDY

**COURSE NUMBER:** SEMESTER 1 71041  
SEMESTER 2 71042  
**COURSE NUMBER:** SEMESTER 1 HALF (opposite PE) 71051  
SEMESTER 2 HALF (opposite PE) 71052  
**LENGTH:** One or Two Semesters  
**PREREQUISITE:** Concurrent involvement in band and/or choir and teacher approval  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit per Semester

Courses in Independent Study Music are conducted with instructors or professional musicians or voice coaches as mentors and enable students to explore music and their own abilities in more detail and depth than in other courses. Polishing talent, building confidence for professional or apprenticeship auditions, and gaining experience in public performance are emphasized. Career opportunities may be explored. The student must interview with the music director(s) to define the topic of study and develop goals and expectations. The grade from this course is included in a student's high school grade point average.

## MUSIC THEORY

**COURSE NUMBER:** 71072  
**LENGTH:** One Semester, offered second semester only  
**PREREQUISITE:** Participation in band or choir required, offered every odd year  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

Music Theory will provide practical knowledge of basic music functions. This course will cover topics such as basic music notation, counting, scales, chords and progressions. Additional topics may be discussed, such as physics of sound and jazz theory. Music Theory is recommended for students interested in jazz improvisation (solos), becoming music major in college, or for those wanting to understand how and why music works.

## MUSIC HISTORY/APPRECIATION

**COURSE NUMBER:** 71082  
**LENGTH:** One Semester, offered second semester only  
**PREREQUISITE:** None-offered every even year  
**GRADE LEVEL:** 9-12  
**CREDIT:** One Credit

This course will cover modern music history from 1500 to present day. Students will learn how to listen to music more deeply, learn about historically significant composers and compositions, and gain a broad sense of music in history. Students will leave this course with a basic musical vocabulary, knowledge of some of the great musicians of past eras such as Bach, Mozart, Beethoven, and Stravinsky, and connections with music and historical time periods. Additional topics of discussion may include: instrument families, history of rock and roll, composition, etc. This class would be good for anyone interested in broadening their musical horizons!



# Physical Education

Physical Education, although required throughout a student's high school career, is essential for good health and development. Physical Education benefits all students interested in any of the six career pathways. Occupations related to this area range from a physical therapist to a teacher.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X	X	X	X	One Semester	Recreational Activities	1 Credit	None
X	X	X	X	One Semester	Aerobic Exercise & Fitness	1 Credit	None
X	X	X	X	One Semester	Personal Strength Training	1 Credit	None

## RECREATIONAL ACTIVITIES

**COURSE NUMBER:** SEMESTER 1 81011  
**COURSE NUMBER:** SEMESTER 2 81012  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** One Credit

This class will emphasize lifetime activities. Some of the activities covered will include tennis, badminton, nitro ball, futsal, softball, lacrosse, soccer, volleyball, ping pong, crazy cricket, pickle ball, whiffle ball, and basketball.

## RECREATIONAL ACTIVITIES

**COURSE NUMBER:** SEMESTER 1 82011  
**COURSE NUMBER:** SEMESTER 2 82012  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9, 10  
**CREDIT:** One Credit

This class will emphasize lifetime activities. Some of the activities covered will include tennis, badminton, nitro ball, futsal, softball, lacrosse, soccer, volleyball, ping pong, crazy cricket, pickle ball, whiffle ball, and basketball.

## PERSONAL STRENGTH TRAINING

**COURSE NUMBER:** SEMESTER 1 81021  
**COURSE NUMBER:** SEMESTER 2 81022  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11, 12  
**CREDIT:** One Credit

Students will be introduced to the basics of personal strength training. Students will chart daily lifting activities to monitor increases or decreases in body strength with various lifts and make assessments to adjust workout to promote continued strength maintenance/building. Students will demonstrate safe lifting practices for each type of lift being executed during class. They will be able to develop a personal fitness program.

## PERSONAL STRENGTH TRAINING

**COURSE NUMBER:** SEMESTER 1 82021  
**COURSE NUMBER:** SEMESTER 2 82022  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9, 10  
**CREDIT:** One Credit

Students will be introduced to the basics of personal strength training. Students will chart daily lifting activities to monitor increases or decreases in body strength with various lifts and make assessments to adjust workout to promote continued strength maintenance/building. Students will demonstrate safe lifting practices for each type of lift being executed during class. They will be able to develop a personal fitness program.

**AEROBIC EXERCISE & FITNESS**

**COURSE NUMBER:** SEMESTER 1 81031  
**COURSE NUMBER:** SEMESTER 2 81032  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Students will be introduced to many different types of aerobic and conditioning activities. They will design their own aerobic routine and design a fitness plan.

**AEROBIC EXERCISE & FITNESS**

**COURSE NUMBER:** SEMESTER 1 82031  
**COURSE NUMBER:** SEMESTER 2 82032  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9-10  
**CREDIT:** One Credit

Students will be introduced to many different types of aerobic and conditioning activities. They will design their own aerobic routine and design a fitness plan.

## Science

Science courses benefit students of all career focus areas. Science background and knowledge is imperative to everyday life regardless of career pathway. Although six courses are required, elective courses will benefit students interested in the Ag Science/Natural Resources and the Health Sciences focus area. There are many occupations related to science, including doctor, pharmacist, biologist, chemist, and educator. Recommendations for success in a post secondary school would include at least one year each of biology, chemistry, and physics.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X				One Sem	Environmental Science – Freshmen	1 Credit	None
X				One Sem	Earth Science – Freshmen	1 Credit	None
	X	X	X	One Sem	Earth Science	1 Credit	None
	X			Full Year	Biology	2 Credits	None
		X	X	One Sem	Physical Science – Chemistry	1 Credit	Passing grade in Biology
		X	X	Full Year	Chemistry	2 Credits	Algebra I or equivalent
		X	X	One Sem	Physical Science – Physics	1 Credit	Passing grade in Biology
		X	X	Full Year	Physics	2 Credits	Algebra II or equivalent
		X	X	One Sem	Forensic Science	1 Credit	Passing grade in Biology
		X	X	One Sem	Human Physiology/Anatomy I	1 Credit	Passing grade in Biology
		X	X	One Sem	Human Physiology/Anatomy II	1 Credit	Passing grade in Biology
		X	X	Full Year	Principles of Biomedical Science	2 Credits	Passing grade in Biology
		X	X	One Sem	Organic Chemistry	1 Credit	Chemistry
		X	X	One Sem	Advanced Chemistry	1 Credit	Chemistry

# Sequence for Science Graduation Requirements

<b>Freshmen</b>	Environmental Science	Earth Science
<b>Sophomores</b>	Biology – Cells	Biology – Genetics
<b>Juniors/Seniors – Path 1</b>	Physical Science - Chemistry	Physical Science - Physics
OR		
<b>Juniors/Seniors – Path 2</b>	Chemistry Semester 1	Chemistry Semester 2 Physical Science - Physics
OR		
<b>Juniors/Seniors – Path 3</b>	Physics Semester 1 Physical Science – Chemistry	Physics Semester 2
OR		
<b>Juniors/Seniors – Path 4</b>	Chemistry Semester 1 Physics Semester 1	Chemistry Semester 2 Physics Semester 2
*Note: Students attending a 4 year college or university will need to take path 2, 3, or 4 to meet college entrance requirements	SCIENCE ELECTIVES are offered after a student has completed Biology.	

## EARTH SCIENCE – FRESHMEN

**COURSE NUMBER:** 30010  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9  
**CREDIT:** One Credit

Earth Science is the study of Earth. This includes studying Earth's materials, changes of the surface and interior, and the forces that cause these changes. Changes are interpreted within the context of plate tectonics, the unifying scientific principle of all of the physical Earth sciences. Earth Science also examines the interaction between Earth's weather and climate, the changes of organisms through time (paleontology) as interpreted by organic evolution. A final major component of Earth Science is astronomy, the study of our solar system, galaxies, the universe, and deep time.

## ENVIRONMENTAL SCIENCE – FRESHMEN

**COURSE NUMBER:** 30020  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9  
**CREDIT:** One Credit

Environmental science examines the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, humans, and a biotic factors, the following subjects will be covered; ecosystems and biomes, sustainability, natural resources (water, soil, air). Students will also identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

## BIOLOGY

**COURSE NUMBER:** SEMESTER 1 30021  
SEMESTER 2 30022  
**LENGTH:** Full Year  
**PREREQUISITE:** None  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits

Biology is designed to provide knowledge regarding fundamental concepts of life. Both semesters include four units, which contain in-depth lessons allowing students to explore a variety of concepts related to the topics of study. These lessons include hands-on investigations, activities, research projects and engineering activities. The first semester includes topics related to living systems, chemistry in living systems, matter and energy in living systems and cells. The second semester includes topics related to structure and function of DNA, genetics and heredity and evolution.

## PHYSICAL SCIENCE – CHEMISTRY

**COURSE NUMBER:** 30060  
**LENGTH:** One Semester  
**PREREQUISITE:** Passing grade in Biology  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Physical Science is the study of the physical world around you. Physical Science can be broken up into two branches, chemistry and physics. Chemistry is the study of the structure and properties of matter. The course provides an introduction to basic chemistry principles and covers topics such as matter, atomic structure, periodic trends, energy and chemical reactions, conservation of matter and energy, and chemical equilibrium.

## CHEMISTRY

**COURSE NUMBER:** SEMESTER 1 30061  
SEMESTER 2 30062  
**LENGTH:** Full Year  
**PREREQUISITE:** C or better in Algebra I or equivalent, C or better in Biology  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits

Chemistry studies matter - its composition, properties and interactions. Concepts studied include but are not limited to: matter and energy, atomic structure, atomic periodicity, ionic compounds, covalent compounds, intermolecular forces, chemical formulas, chemical equations, stoichiometry, solutions, gases and acid/base chemistry. The laboratory activities emphasize applications of chemistry to solve problems and design solutions. Cost: composition notebook (with pages sewn in), scientific calculator (school-issued graphing calculators for math classes are acceptable), Scotch tape or glue.

## PHYSICAL SCIENCE – PHYSICS

**COURSE NUMBER:** 30080  
**LENGTH:** One Semester  
**PREREQUISITE:** Passing grade in Biology  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Physical Science is the study of the physical world around you. Physical Science can be broken down into two branches, chemistry and physics. Physics is the study of the relationship between matter and energy. This course provides an introduction to basic physics principles and covers topics such as forces and motion, energy, thermodynamics, electromagnetism, and waves and their applications in technologies for information transfer.

## PHYSICS

**COURSE NUMBER:** SEMESTER 1 30081  
SEMESTER 2 30082  
**LENGTH:** Full Year  
**PREREQUISITE:** Algebra II or equivalent  
**GRADE LEVEL:** 10-12  
**CREDIT:** Two Credits

Physics studies the forces and laws of nature affecting matter and the relationships between matter and energy with emphasis on using mathematical skills, graphing and vectors. The study of physics includes the topics of mechanics, thermodynamics, optics, nuclear and electrical phenomenon. Cost: Three-ring notebook, composition notebook for lab notes, trig function calculator.

## ADVANCED CHEMISTRY

**COURSE NUMBER:** 30101  
**LENGTH:** One Semester (Spring)  
**PREREQUISITE:** Chemistry  
**GRADE LEVEL:** 11-12  
**CREDIT:** One credit

This course is the third semester of the high school chemistry sequence and will introduce topics of general inorganic chemistry including: solution chemistry, acids and bases, equilibrium systems, chemical thermodynamics, oxidation/reduction reactions, and electrochemistry. Successful completion of Chemistry is required as a prerequisite.

## ORGANIC CHEMISTRY

**COURSE NUMBER:** 30112  
**LENGTH:** One Semester (Fall)  
**PREREQUISITE:** Chemistry  
**GRADE LEVEL:** 11-12  
**CREDIT:** One credit

This is a one semester course that is an introductory course in organic chemistry. Topics will include: structure and function of carbon, functional groups, alkanes/alkenes/alkynes, alcohols, ethers, ketones, aromatic hydrocarbons, carboxylic acids, and polymers. A pre-requisite is successful completion of Chemistry, but not necessarily Advanced Chemistry.

## HUMAN PHYSIOLOGY AND ANATOMY I

**COURSE NUMBER:** 30150  
**LENGTH:** One Semester  
**PREREQUISITE:** Passing grade in Biology  
**GRADE LEVEL:** 11, 12  
**CREDIT:** One Credit

Human Physiology and Anatomy I presents the human body in detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, DNA science, and explore functional systems (bones, muscles, and nervous systems). There will be lecture, lab, and individual study. This course is recommended for those students who might continue study in college in a medical or veterinary related career.

## HUMAN PHYSIOLOGY AND ANATOMY II

**COURSE NUMBER:** 30160  
**LENGTH:** One Semester  
**PREREQUISITE:** Passing grade in Biology  
**GRADE LEVEL:** 11, 12  
**CREDIT:** One Credit

Human Physiology and Anatomy II presents the human body in detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology and explore functional systems (senses, endocrine, immune, digestive, blood and circulatory and respiratory). There will be lecture, lab, and individual study. This course is recommended to those students who might continue study in college in a medical or veterinary related career.

## FORENSIC SCIENCE

**COURSE NUMBER:** 30170  
**LENGTH:** One Semester, first semester only  
**PREREQUISITE:** Biology and Junior or Senior Standing  
**GRADE LEVEL:** 11, 12  
**CREDIT:** One Credit

Forensic science is the scientific method of gathering and examining information about the past. The topics covered include crime-scene investigation; the collection, handling, and examination of trace evidence such as hair, fibers, soil, pollen, and glass; fingerprint, blood and blood spatter examination; DNA, drug, handwriting, and tool mark analysis; impressions; ballistics; and forensic anthropology.

## PRINCIPLES OF BIOMEDICAL SCIENCE

**COURSE NUMBER:** SEMESTER 1 30181  
SEMESTER 2 30182  
**LENGTH:** Full Year  
**PREREQUISITE:** Passing grade in Biology  
**GRADE LEVEL:** 11-12  
**CREDIT:** Two Credits

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students exam autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes, while allowing them to design their own experiments to solve problems. We will cover the content with six inquiry-based units (1-The Mystery, 2-Diabetes, 3-Sickle Cell Disease, 4-Heart Disease, 5-Infectious Disease, 6-Post Mortem.)

## Social Studies

Studies of government, economics, psychology, and sociology and provide important understanding of our political, social, and economic institutions is recommended for students entering post secondary colleges/institutions as well as the world of work.

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
X				Full Year	U.S. History	2 Credits	None
	X			Full Year	Modern Civilizations	2 Credits	None
			X	One Sem	U.S. Government	1 Credit	None
		X	X	One Sem	Minority Studies	1 Credit	Modern Civilizations and U. S. History
		X	X	One Sem	Contemporary Issues	1 Credit	Modern Civilizations and U. S. History
		x	x	One Sem	Sociology	1 Credit	None
		X	X	One Sem	World Religions	1 Credit	Modern Civilizations and U. S. History
		X	X	One Sem	Historical Figures	1 Credit	Modern Civilizations and U. S. History
		X	X	One Sem	Psychology	1 Credit	Modern Civilizations and U. S. History
		X	X	One Sem	Introduction to Psychology	Dual Credit	Senior Year Plus Guidelines on page 6
		X	X	One Sem	Developmental Psychology	Dual Credit	Senior Year Plus Guidelines on page 6
		X	X	One Sem	AP Government	Dual Credit can be earned based upon results of final exam.	Senior Year Plus Guidelines on page 6

## U.S. HISTORY

**COURSE NUMBER:** SEMESTER 1 40011  
SEMESTER 2 40012  
**LENGTH:** Full Year  
**PREREQUISITE:** None  
**GRADE LEVEL:** 9  
**CREDIT:** Two Credits

Students will study an overview of the history of the United States. Students will look at the different time periods from Reconstruction to the 21<sup>st</sup> Century and will focus on the different perspectives present in our culture. We will uncover how historical events are related to current events and current social problems that exist in today's society.

### General Course Goals

- A. To understand culture and cultural diversity.
- B. To understand historical perspective.
- C. To understand people, places, and environments.
- D. To understand interaction among individuals, groups, and institutions.

## MODERN CIVILIZATION

**COURSE NUMBER:** SEMESTER 1 40031  
SEMESTER 2 40032  
**LENGTH:** Full Year  
**PREREQUISITE:** None  
**GRADE LEVEL:** 10  
**CREDIT:** Two Credits

Modern Civilizations is a full year required course. Students will explore the civilizations of the world from the time of the Renaissance onward. Within each unit, topics of study will focus around such concepts as belief systems, conflict, trade, technology, political and economic systems, leadership, revolution, nationalism, empires, genocide and human rights.

### Anticipated units include:

Introduction and Review	Imperialism
Renaissance	World Wars
Enlightenment	Revolution Part II
Revolution Part I	Post WWII
Industrialism	Contemporary Societies

## U.S. GOVERNMENT

**COURSE NUMBER:** 40040  
**LENGTH:** One Semester  
**PREREQUISITE:** None  
**GRADE LEVEL:** 12  
**CREDIT:** One Credit

This required course in U. S. Government provides an overview of the structure and functions of the U. S. Government. This course will also examine the structure and function of state and local government. Major topics of study include the following:

1. Principles of Government
2. The Constitution
3. Federalism
4. Political Parties
5. Interest Groups
6. Congress
7. The Presidency
8. The Federal Court System

## AP GOVERNMENT

**COURSE NUMBER:** 40050  
**LENGTH:** One Semester  
**PREREQUISITE:** Senior Year Plus Guidelines on page 6  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

AP U.S. Government and Politics studies the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students will gain the analytic perspective necessary to critically evaluate political data, hypotheses, concepts, opinions, and processes. Along the way, they'll learn how to gather data about political behavior and develop their own theoretical analysis of American politics. They'll also build the skills they need to examine general propositions about government and politics, and to analyze the specific relationships between political, social, and economic institutions. The equivalent of an introductory college-level course, AP U.S. Government and Politics prepares students for the AP exam and for further study in political science, law, education, business, and history.



## MINORITY STUDIES

**COURSE NUMBER:** 40110  
**LENGTH:** One Semester  
**PREREQUISITE:** Modern Civilizations and U.S. History  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Minority Studies is an elective, one-semester course. Minority Studies involves the study of different minority groups and cultures within the United States. It will focus on their past, present, and future impact on society. The course will include minority cultures such as: Native-Americans, African-Americans, Latinos, Women, the Elderly, Juveniles, and other minority cultures or groups.

## CONTEMPORARY ISSUES

**COURSE NUMBER:** 40090  
**LENGTH:** One Semester  
**PREREQUISITE:** Modern Civilizations and U.S. History  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

Contemporary Issues is a one-semester elective course. Students will examine a broad range of issues that cover anything from local happenings to global events. Newspapers, magazines, and documentaries will be the basic tools for learning and instruction. Potential units would include:

Armed Conflicts	Environmental Concerns
Political Unrest	Human Rights Violations
Religious Movements	

## SOCIOLOGY

**COURSE NUMBER:** 40120  
**LENGTH:** One Semester  
**PREREQUISITE:** Modern Civilizations and U.S. History  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

This course examines how individuals, groups, and institutions interact to make up human societies. You will learn about sociological perspectives, culture, social structures, and social inequality. You will study people and the roles they play in society, both as individuals and groups. Topics of interest include: the family, education, political and economic institutions, religion, and sport.

## WORLD RELIGIONS

**COURSE NUMBER:** 40130  
**LENGTH:** One Semester  
**PREREQUISITE:** Modern Civilizations and U.S. History  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

This course will look at the role of religion in modern and historical contexts. Students will explore the purpose and function of religion, the beliefs and practices of both major and minor faiths in the world today, and recent global issues that have had a large religious influence. This semester will include: Hinduism, Judaism, Islam and 3-4 smaller faiths (such as Scientology and non Theists).

## HISTORICAL FIGURES

**COURSE NUMBER:** 40100  
**LENGTH:** One Semester  
**PREREQUISITE:** Modern Civilizations and U.S. History  
**GRADE LEVEL:** 11-12  
**CREDIT:** One Credit

This course will look at the lives of historical and contemporary figures. International and American persons will be explored for their impact on the world and their personal story. Possible units could be:

Women	Sports Figures
Political Leaders	Artists and Entertainers

## Extended Learning Program (ELP)

Talented and Gifted students at the High School will continue to be identified through their performance on District and classroom assessment, as well as through their personal interactions with staff members. We believe that giftedness comes in many forms and if gifted students are to meet their potentials, they need uniquely designed programming beyond our regular school offerings. Students are encouraged to participate in the many options available to them.

**Acceleration Options**--Acceleration comes in many forms. Students can consider the following options throughout their high school careers:

**Combined classes**--Student may take more than one course during the same period. Example: enroll in art and PE during the same period.

**Testing out of a required course**--Students review the study guide from the teachers and take the final assessment. If the student earns a grade of a C, the student receives credit for the class on their transcript.

**Advanced Placement courses**--Courses are offered both online and in the classroom. Students may earn college credit for these courses. See page 8-9 for a list of available courses.

**Post Secondary Enrollment Option courses**--Students may enroll in online classes to extend their learning beyond our course offerings. See page 7 for more information.

**Dual enrollment**--Students take some courses at the Iowa Central Community College campus. See page 6 for a list of available courses.

**Dual-credit courses**--Freshmen and sophomores are allowed to early enroll in college credit courses, including those listed on page 6-7.

**Career Guidance Services**--Specialized career guidance services provide a bridge for students as they begin to assume responsibility for ultimately developing their own gifts beyond high school. Gifted students' unique career guidance needs are focused on through the following combination of services.

**Individual Growth Plan**--Students develop talent growth plans with the assistance of the TAG consultant and parents. After considering past achievements, career interests, values, and attitudes, students prepare plans describing their future goals and the necessary steps and resources needed to achieve those goals. Students continue to review and update their talent growth plans throughout high school.

**Individual Student/Parent Meeting**--Career and academic counseling continues during the year through meetings with parents, students, and the TAG consultant. Meetings can also include sharing Individual Growth Plans and information on specific gifted issues.

**Individualized options**--These options provide flexibility for students based on their gifts and talents. With these options, students can customize their learning in specific areas.

**Out-of-School Resource**---Based on each student's gifts, the TAG consultant assists individual students in accessing talent searches, state and national competitions, and other opportunities to further their talent development.

**Specialized course offerings are also available which allow students to experience in-depth, independent learning in their area of giftedness.**

GRADE				COURSE LENGTH	NAME OF COURSE	CREDITS	PREREQUISITE
9	10	11	12				
		X	X	One Sem	ELP Mentorship	0 Credit	Based on multiple criteria
X	X	X	X	One Sem	ELP Experience	1 Credit	Based on multiple criteria
X	X	X	X	One Sem	ELP Independent Research	1 Credit	Based on multiple criteria

### ELP MENTORSHIP

**COURSE NUMBER:** SEMESTER 1 62061; SEMESTER 2 62062  
**LENGTH:** One Semester  
**TERMS:** 1st and/or 2nd semester  
**PREREQUISITE:** To be eligible for ELP based on multiple criteria  
**GRADE LEVEL:** 11-12, application and approval required  
**CREDIT:** No course credit, but can appear on transcript  
**DESCRIPTION:**

Students replace regular classes with advanced study and/or application in the area of giftedness with a mentor or instructor. Mentoring combines acceleration and career exploration to offer students an advanced opportunity for talent development. A completed application and preapproval is required. Students must satisfactorily complete written reflections throughout the mentorship before the course will appear on transcripts.

### ELP EXPERIENCE

**COURSE NUMBER:** SEMESTER 1 62071  
**COURSE NUMBER:** SEMESTER 2 62072  
**LENGTH:** One Semester, may be taken more than once  
**TERMS:** One Semester  
**PREREQUISITE:** To be eligible for ELP based on multiple criteria  
**GRADE LEVEL:** 9-12  
**CREDIT:** Credit awarded varies on the individually designed course  
**DESCRIPTION:**

Students can design their own self-directed, independent learning experiences in any academic area. The focus of this time is developing critical thinking, problem solving, and advanced technology skills. Students can elect to take each course as Pass/Fail or for a letter grade.

### ELP INDEPENDENT RESEARCH

**COURSE NUMBER:** 62073  
**LENGTH:** One Semester  
**TERMS:** One Semester  
**PREREQUISITE:** Teacher Recommendation – Students must ask a teacher to fill out recommendation sheet and turn into the office or to the ELP instructor.  
**GRADE LEVEL:** 9-12  
**DESCRIPTION:**

Independent Research is an elective course that allows students to work independently on student selected research topics. Students will apply their interest, knowledge, critical thinking skills, researching and creative ideas to independent projects or area of study. Students will complete a final project and presentation to an expert in the chosen research field. Students must have a strong task commitment and independent work habits. Academic support will be given to students as they complete their coursework in areas of character and leadership development, real-world problem solving, community service, college and career planning and life skills.

### EXTENDED LEARNING PROGRAM (ELP) SKILLS

**COURSE NUMBER:** 62051  
**LENGTH:** One Semester  
**TERMS:** One Semester  
**PREREQUISITE:** TAG  
**GRADE LEVEL:** 9-10  
**DESCRIPTION:**

This required class will focus on skills to be successful and gain the most from your high school experience. This course will focus on how gifted learners are beyond courses and grades. Leadership, study skills, self-advocacy, gifted issues, high school planning, as well as other topics will be discussed. Book studies and Problem Based Learning strategies will be used in this course.

### EXTENDED LEARNING PROGRAM (ELP) RESEARCH METHODS

**COURSE NUMBER:** 62052  
**LENGTH:** One Semester  
**TERMS:** One Semester  
**PREREQUISITE:** TAG  
**GRADE LEVEL:** 11-12  
**DESCRIPTION:**

This required course will focus on skills needed to successfully be admitted into your college of choice. This course focuses on career readiness, research methods, ACT/SAT preparation, passion projects and/or capstone projects. The goal of this class is for gifted students to do original research and complete a passion project or capstone project to help them stand out in the college application process.

# Prerequisites

The following are classes that have a prerequisite class in order to take.

<b>Class</b>	<b>Prerequisite</b>
Before any Agriculture Courses	Introduction to Agriculture Recommended
All Art Courses	C- or better in Introduction to Art
Drawing Studio or Painting Studio	C- or better in Intro to Art and 2D Foundations
Ceramics Studio or Sculpture Studio	C- or better in Intro to Art and 3D Foundations
Photography Studio or Design Studio	C- or better in Intro to Art and Digital Art Foundations
Intro to Engineering	Currently enrolled in Algebra I or IB or higher math class
Engineering courses	Courses must be taken in order: IED, POE, DE & EDD
Foods	Nutrition
ICCC Culinary Arts Program	Foods
Child Development 2	Child Development 1
Housing & Interior Design, Fashion Design	Intro to Art Recommended
Intro to Family & Consumer Science	Freshmen only
Nurse Aide	Intro to Health Care and Medical Terminology
Concert Chorale	Acceptance by Audition
Music Theory	Participation in Band or Choir (every odd year)
Advanced Welding	Introduction to Welding
ICCC Intro to Construction	Intro to Building Trades Recommended
Architectural Drawing Technology	Intro to CAD or Intro to Building Trades
Machining Technology	Intro to Welding or Metal Fabrication
Composition & Speech	Language Arts 9 and Language Arts 10
Technical Writing	Language Arts 9 and Language Arts 10 (Jrs & Srs only)
Math Topics	One semester of Geometry (attempted)
Trigonometry or Pre-Calculus	Successful completion of Algebra II
Chemistry	Algebra I or equivalent
Physics	Algebra II or equivalent
Forensic Science	Passing grade in Biology
Human Physiology/Anatomy I or II	Passing grade in Biology
Minority Studies, Contemporary Issues, World Religions, Historical Figures, Sociology	Modern Civilizations and U.S. History
Peer Helping Experience	Introduction to Education
Metal Fabrication, Machining Technology, Wood Production I, Small Engines/Engines	Introduction to Industrial Technology
Wood Production II	Wood Production I