



**ADAMS CENTRAL**  
PUBLIC SCHOOLS

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Engaging Community. Empowering Students.

2021-2022  
Curriculum  
Guide/Registration  
Handbook

# **PLANNING THE HIGH SCHOOL PROGRAM**

## **THE FOUR-YEAR PLAN**

Planning is a vital part of a well-designed program. Toward the end of the eighth grade, freshman course selections are made upon the recommendations of the eighth grade teachers with the consent of the parents. During the first year of high school, counselors will meet with the freshmen in a group setting to develop the tentative Four Year Plan of study. The purpose of the plan is to familiarize students with the graduation requirements, and elective opportunities.

While administrators, counselors, teachers, and parents have an important role to play in the planning process, ultimately it is the responsibility of the student to register for and pass all courses required for graduation and post-secondary plans. As students register for each semester, teachers will advise them about course selection based upon prior performance in the particular subject area and their chosen major.

It is important to remember that the four-year plan and the selection of an academic major are planning tools. While core courses will not change, the selection of elective courses may be modified as well as particular math, science and English classes. Selection will depend on achievement each year and a modification in future plans.

Typical college admission requirements are required for universities across the nation. That is why we generally display the requirements for the University of Nebraska at Lincoln as a guide for students planning to enter a university or college in the future.

### **UNL REQUIREMENTS FOR ADMISSION**

- 4 years of Math (Algebra I, II, Geometry, and one more unit built on a knowledge of Algebra II).
- 4 years of English (intensive reading and writing experience)
- 3 years of Social Sciences, including 1 unit of American and/or World History and 1 additional unit of history, American Government and/or geography.
- 3 years of Natural Sciences (2 units from Biology, Chemistry, Physics or Earth Sciences)
- 2 years of one foreign language
- Applicant should have an ACT of 20 or higher or class rank in the top one-half of the class

## Adams Central Graduation Requirements

The following chart shows Adams Central’s graduation requirements and college admission requirements. It is important to check with the student’s college of interest to ensure additional or specific coursework is required for admission. Five credits are granted for a semester course. Most students will exceed minimum graduation requirements. ***Starting with the Class of 2024, graduation requirements will change to 250 credits.***

	<b>Adams Central Requirements</b>	<b>Typical 4-Year University Admission Requirements</b>
<b>ENGLISH</b>	40 credits	40 credits/4 years
<b>MATH</b>	30 credits	40 credits UNL requires 40 credits Algebra I, Geometry, Algebra II and one additional higher level math
<b>SCIENCE</b>	30 credits Biology Physical Science One other	30 credits/3 years
<b>SOCIAL SCIENCE</b>	30 credits 1 semester of World History 1 semester of American History 1 semester of American Government 1 semester of Economics	30 credits/3 years
<b>PHYSICAL EDUCATION</b>	10 credits	NA
<b>INFORMATION TECHNOLOGY</b>	5 credits	NA
<b>FOREIGN LANGUAGE</b>	N/A	20 credits 2 years of same language
<b>TOTAL CREDITS</b>	220 credits	

All students will register for courses during the spring semester of each year. The master schedule is built on the basis of student registration requests, teacher and administration input. Students need to make thoughtful choices at registration, as classes fill quickly and changes later may not be possible.

A drop/add opportunity is held at the beginning and end of each semester, however not all changes can be made. The following page has the Adams Central Four-Year Plan for student and parent information.

FOUR-YEAR PLAN FOR: \_\_\_\_\_ CLASS OF \_\_\_\_\_

**GRADE 9**

- 1) English 9
- 2) Physical Education 9 or Weights
- 3) Mathematics
- 4) Physical Science
- 5) World Geography
- 6) Information Technology (one semester)
- 7) \_\_\_\_\_
- 8) \_\_\_\_\_

**GRADE 10**

- 1) English 10
- 2) Physical Education (one semester)
- 3) Mathematics
- 4) Biology
- 5) World History
- 6) \_\_\_\_\_
- 7) \_\_\_\_\_
- 8) \_\_\_\_\_

**GRADE 11**

- 1) English 11
- 2) American History
- 3) Mathematics
- 4) Science
- 5) \_\_\_\_\_
- 6) \_\_\_\_\_
- 7) \_\_\_\_\_
- 8) \_\_\_\_\_

**GRADE 12**

- 1) English 12
- 2) US Government/Economics (one sem each)
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_
- 6) \_\_\_\_\_
- 7) \_\_\_\_\_
- 8) \_\_\_\_\_

**GRADUATION REQUIREMENTS: TOTAL 220 CREDITS**

English: 40 credits

Mathematics: 30 credits

Science: 30 credits

Social Sciences: 30 credits

Required Social Sciences: World History, American History, Government and Economics

Information Technology: 5 credits

Physical Education: 10 credits

**Starting with the Class of 2024, graduation requirements will change to 250 credits.**



## ART

### Recommended

Course Title	Grade	Prerequisites	Course Description
<b>American Cinema</b> 2.5 credits 020800	7	Required for all 7th graders.	This class takes a look at iconic movies and how the cinema has changed in America. We will start with silent movies and actors such as Buster Keaton, and move through black/white cinema and the colorization of film. Other famous actors/actresses featured will be Humphrey Bogart, Marilyn Monroe, James Dean, to name a few.
<b>Art 8</b> 2.5 credits 020801	8	Required for all 8th graders.	Students are exposed to a variety of two- and three-dimensional materials and projects. Using basic art skills, students develop powers of observation and appreciation. Again, sketchbooks are used to improve drawing techniques.
<b>Art I</b> 5 credits 020100	9-12	None	Students are introduced to the basic art areas such as drawing, painting, ceramics, sculpture and general art history. Basic art principles and theories are covered. Sketchbooks are used to organize ideas for art projects.
<b>Graphic Art 1</b> 5 credits 270611	10-12	None	Students are introduced to the basic graphic art techniques using Adobe Photoshop, Illustrator and InDesign. Basic art principles, typography, and compositional rules are covered. Sketchbooks are used to organize ideas for art projects.
<b>Two-Dimensional Design</b> 10 credits 020200	10-12	Art 1	A wide variety of 2-D projects will include elements and principles of design, drawing, painting, printmaking, illustration art and art history. Sketchbooks are used to organize ideas for art projects and to improve techniques. First semester focuses on dry media techniques of: pencil, charcoal, chalk pastel, and ink. Second semester focuses on wet media techniques of: watercolor, acrylic, oil pastel, oil paint and spray paint.
<b>Three-Dimensional Design</b> 5 credits 020300	10-12	Art 1	This class is a variety of experiences in varied 3-D media. First semester focuses on pottery techniques that include intermediate to advanced handbuilding and wheel throwing. Second semester focuses on a variety of techniques that could include: creative and experimental work in construction, subtractive sculpture, assemblage sculpture, fiber art, casting and art history.

<b>Intermediate Drawing (Independent Study)</b> 5 credits 020300	11-12	Art 1, 2D Design	Independent Study 1st Semester course that focuses on intermediate to advanced drawing techniques using new and creative materials as well as combination of various materials. Art history and artistic theories are taught in efforts for students to create original work using their own individual style. Students will complete assignments independently using lessons on Schoology. Sketchbooks are used to organize ideas for art projects.
<b>Intermediate Painting (Independent Study)</b> 5 credits 020300	11-12	Art 1, 2D Design	Independent Study 2nd Semester course that focuses on intermediate to advanced drawing techniques using new and creative materials as well as combination of various materials. Art history and artistic theories are taught in efforts for students to create original work using their own individual style. Students will complete assignments independently using lessons on Schoology. Sketchbooks are used to organize ideas for art projects.
<b>Intermediate Pottery (Independent Study)</b> 5 credits 020300	11-12	Art 1, 3D Design	Independent Study 1st Semester course that focuses on intermediate to advanced pottery techniques. Art history and artistic theories are taught in efforts for students to create original work using their own individual style. Students will complete assignments independently using lessons on Schoology. Sketchbooks are used to organize ideas for art projects.
<b>Intermediate Sculpture (Independent Study)</b> 5 credits 020300	11-12	Art 1, 3D Design	Independent Study 2nd Semester course that focuses on intermediate to advanced sculpture techniques using new and creative materials. Art history and artistic theories are taught in efforts for students to create original work using their own individual style. Students will complete assignments independently using lessons on Schoology. Sketchbooks are used to organize ideas for art projects.
<b>Graphic Art 2 (Independent Study)</b> 10 credits 0270611	11-12	Graphic Art 1	Independent Study course where students learn and complete more advanced graphic art techniques using Adobe Photoshop, Illustrator, and InDesign. Focus will be placed on creating works to submit for State Journalism and other graphic arts contests.
<b>Graphic Art 3 (Independent Study)</b> 10 credits 0270613	11-12	Graphic Art 1 and 2	Independent Study course where students utilize advanced graphic art techniques using Adobe Photoshop, Illustrator, and InDesign to create client-based projects. Focus will be placed on client relationships, professionalism, and developing professional-level finished projects. Students have the opportunity to become Adobe Certified in Photoshop, Illustrator, or InDesign.

<b>Advanced Art</b> 10 credits 020400	12	Art 1 + four semesters of any combination of art classes	This course is a review and expands on objectives of advanced art courses and techniques with a focus on planning, creation, and presentation of original work. Artist statements, reflections and digital portfolio are created. Sketchbooks are used.
<b>MART 1200 - Digital Illustration</b> 5 credits 3 credits CCC 270613	11-12	No prerequisites	An introductory-level course to several software applications (Adobe Photoshop, Illustrator, and Indesign) used in illustrations, digital imaging, page layout, and image enhancement.
<b>MART 1210 - Layout and Design 1</b> 5 credits 3 credits CCC 270613	11-12	MART 1200 Digital Illustration	An introductory-level course using industry-standard (Adobe Create Cloud) page layout software. Emphasis is on developing creative and expressive layouts and designs that communicate.
<b>MART 1300 - Visual Design 1</b> 5 credits 3 credits CCC 270613	11-12	MART 1200 Digital Illustration MART 1210 Layout and Design 1	Emphasis is placed on identifying and solving design problems using Adobe Creative Cloud programs. Various projects will engage students in creative design processes. Material, layout, techniques, vocabulary, and computer design are presented.
<b>MART 1360 Introduction to Graphic Arts</b> 5 credits 3 credits CCC 270613	11-12	MART 1200 Digital Illustration MART 1210 Digital Illustration MART 1300 Visual Design 1	An introduction to the essential skills and design techniques using the major graphics programs in the industry.



## BUSINESS

Recommended

Course Title	Grade	Prerequisites	Course Description
<b>Financial Literacy</b> 2.5 credits 039930	8	Required for 8th graders.	The NGPF Middle School 9-Week course is perfect for delivering personal finance to your middle school students. Covering 9 units, this course will help your students build core personal finance skills and learn real-world strategies they can use. Through engaging resources and activities, students will practice these skills so they can get started on the right track to effectively manage their personal finances.
<b>Personal Finance</b> 5 credits 033000	9-11	None	This class will benefit the students, regardless of their future occupation. Students will learn the importance of different business structures, banking services, credit, budgeting, and checkbook management.
<b>Accounting I</b> 5 credits Semester 1 030501	11-12	None	Students will learn the importance of planning, recording, analyzing and interpreting financial information. Students will be exposed to a sole proprietorship/partnership and all aspects relating to running a small business. The class will teach money management, banking services, taxes, financial analysis, organization, time management and troubleshooting.
<b>Accounting II</b> 5 credits Semester 2 030502	11-12	Accounting I	Students will learn the importance of planning, recording, analyzing and interpreting financial information. Students will be exposed to a sole proprietorship/partnership and all aspects relating to running a small business. The class will teach money management, banking services, taxes, financial analysis, organization, time management and troubleshooting.
<b>Accounting III (H)</b> 5 credits Semester 1 030503	12	Accounting I and II	This honors class will go into greater depth of a corporation and the role it plays with its employees, customers and community. This class is designed for students interested in majoring in business at the college level.
<b>Accounting IV (H)</b> 5 credits Semester 2 030504	12	Accounting I, II and III	This honors class will go into greater depth of a corporation and the role it plays with its employees, customers and community. This class is designed for students interested in majoring in business at the college level.
<b>Business Law</b> 10 credits 030900	11-12	None	The focus is on providing students a basis of their legal rights from a criminal, civil and consumer point of view. The class will explore the different kinds of laws and how they relate to their current and future lives. It will provide a great resource for all students; no matter what career path they may choose.





## ENGLISH DEPARTMENT

The English department will recommend levels of English by grade level and ability level. Differing ability levels will be recommended based on grades attained in the preceding year and the results of nationally standardized tests.

### **Honors English Information**

To be eligible to apply for admission to Honors 9 English, students must have at least 93% average for semester 1 **and** quarter 3 in their English 8 class. If you are eligible and wish to apply, you will need to complete an application. Scores from the following will determine an 8th grade candidate's consideration for acceptance into the Honors Program:

- A. Current English Average (S1 and Q3)
- B. Application
- C. STAR Grade Equivalency Scores (most recent)
- D. MAPS Reading and Language Usage Percentile Ranks (most recent)
- E. State Testing Scores (most recent)

A cut score will be determined each year based on the number of applicants and final rubric scores. Students who score at or above the cut score will be accepted into Honors English 9.

### **Honors Program Maintenance**

In order to remain in the Adams Central Honors English Program, a student must

- A. maintain a B (86%) average every semester. (The 86% will include the 5% Honors points.)
- B. have the current Honors English teacher's recommendation (including classroom attitude, work ethic, and attendance).

To become eligible as a Sophomore, Junior or Senior, students must receive at least a 93% average for semester 1 and semester 2.

### **Transfer students**

Students wishing to be considered for Honors English must provide additional information such as: grades, MAPS scores, State Testing Scores, etc. to be considered for Honors English. Final decisions will be made by administration.

# ENGLISH

Recommended

Course Title	Grade	Prerequisites	Course Description
<b>Writing 7</b> 2.5 credits 050100	7	Required for all 7th graders.	Students in the class are encouraged to view one another as a community of writers who help one another along through the writing process. Strong emphasis is placed on idea development, word choice, and frequent partner or group revision and editing. Units of study include descriptive writing, personal narratives, poetry, and article responses.
<b>English 7</b> 10 credits 050802	7	Required for all 7th graders.	Students study the use of traditional grammar. Literature includes mythology, short stories, plays and novels. Spelling is an important part of English, and the study of sound spellings, vocabulary building and word usage is emphasized. As supplemental reading, students are expected to acquire a minimum number of points per quarter through use of the Accelerated Reader program. Composition work is also included.
<b>Reading Essentials</b> 10 credits 050102	7-8		Some students read significantly below grade level. These students lack basic reading skills and require more time and individual attention than can be given in the regular classroom. Reading skills are emphasized in the course. The immediate goal of the reading program is to remediate the reading deficiencies of the student. The course includes weekly spelling, composition work, and Accelerated Reader.
<b>Beginning Speech</b> 2.5 credits 050501	8	Required for all 8th graders.	This quarter exploratory class focuses on speech writing, public speaking, research skills, and listening skills.
<b>English 8</b> 10 credits 050803	8	Required for all 8th graders.	Students continue to study the use of traditional grammar. There is a strong emphasis on several genres of literature, including dramas and an introduction to Shakespeare. Students will write for a variety of purposes and audiences with an emphasis on descriptive and expository composition. Weekly vocabulary is studied, and Accelerated Reader points are required every quarter.
<b>English Concepts I</b> 10 credits 059930	9		This course focuses on improving reading, writing and language skills. The regular freshman text is adapted and augmented with novels and plays. Accelerated Reader adds to the focus. Weekly vocabulary is studied.
<b>English I</b> 10 credits 050021	9	Required	This course is designed to help students' progress in reading, writing and grammar. Students are exposed to a variety of types of technical writing and write their own after studying and analyzing models. The need for acceptable punctuation, spelling and capitalization is stressed. Class discussion is encouraged. An anthology is provided for the study of a wide variety of literary types and students are required to complete supplemental outside reading by acquiring points through the Accelerated Reader program.

<b>English 9 (H)</b> 10 credits 059931	9		This class will require students to use higher-level thinking skills. An anthology is provided for the study of a wide variety of literary types and students are required to complete supplemental outside reading by acquiring points through the Accelerated Reader program. Students will further develop their skills in citing textual evidence to support their ideas, analyzing characters and point of view, reading texts with varying levels of complexity, analyzing the structure of text, communicating effectively in writing and speaking, and evaluating authors' arguments. An advanced study of vocabulary and grammar is included in this honors level course. You must apply to become eligible and be accepted into the class.
<b>English Concepts II</b> 10 credits 059930	10		This course focuses on world literature as the basis for improving reading comprehension, writing and language skills. The regular sophomore text and curriculum are adapted to the student's pace. Supplementary novels and Accelerated Reader enhance the student's learning. Weekly vocabulary is studied. Grammar and language structure are continued. Composition focuses on summarizing, comparing/contrasting ideas, and persuasive writing. Class discussion is encouraged. Independent reading is required through the AR program.
<b>English II</b> 10 credits 050022	10	Required	This course focuses on literature interpretation, reading comprehension skills, and increasing vocabulary skills. Grammar and language structure are reviewed and continued. Students write for a variety of purposes, but the focus is on the persuasive writing model. Class discussion is encouraged. Independent reading is required through the AR program.
<b>English 10 (H)</b> 10 credits 059931	10		This course is an accelerated examination of drama, poetry, fiction and nonfiction from ancient classics to contemporary literature. Composition work focuses on expository, compare/contrast, creative, and persuasive writing. Grammar and language structure are reviewed as needed. Weekly vocabulary is studied. Class discussion is encouraged. Independent reading is required through the AR program.
<b>English Concepts III</b> 10 credits 059930	11		This course focuses on American literature as the basis for continued improvement in all language skills. The regular junior text is adapted and augmented with supplementary resources. Students write for a variety of purposes, including persuasive writing and ACT practice. Grammar is reviewed and lessons are enhanced with weekly vocabulary. Independent reading is required for the AR program.
<b>English III</b> 10 credits 050023	11	Required	The focus of this class is American Literature. Students will write for a variety of purposes and audiences with an emphasis on persuasive and research writing. Grammar and vocabulary study are a component of this course as well.
<b>English 11 (H)</b> 10 credits 059931	11		This course involves an in-depth study of American Literature. Students will write for a variety of purposes and audiences with an emphasis on reflective, persuasive and research writing. Grammar and vocabulary study are also a component of this class.

<b>English Concepts IV</b> 10 credits 059930	12		This course focuses on British literature as the culmination of high school language arts studies. Emphasis on classic literature, including poetry, short stories, and nonfiction, prepares the students for graduation and higher education. Students will also produce a number of short essays throughout the year. Students will also enhance skills in everyday writing purposes.
<b>English IV</b> 10 credits 050024	12	Required	This course focuses on British literature as the culmination of high school language arts studies. Emphasis on classic literature, including poetry, short stories, and nonfiction, prepares the students for graduation and higher education. Students will also produce a number of short essays throughout the year.
<b>English 12 (H)</b> 10 credits 059931 ENG 1010 and ENG 1020 (6 credits through Nebraska Wesleyan)	12		<i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i> This class is open to any student who took English 11 (H) or who earned a 90% or above in both semesters of English III. It is an honors course in which students may earn six hours of college credit through the NE Wesleyan Honors Academy. This is an in-depth writing course including a research paper and an examination of mainly British Literature.
<b>CCC English (H)</b> 10 credits 059931 CCC ENG 1010 (3 college credits through CCC) and CCC ENG 1020 (3 college credits through CCC)	12	Must have English and Reading ACT score of 22 or higher or MAPS Reading score of 223 or higher	<i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i> This class surveys instructional practice in the techniques of effective writing. Students will produce a number of short essays throughout the first semester. Second semester, the focus shifts to extended source-based writing and/or projects, including a required research paper. This course emphasizes organizational strategies for research, the integration of multiple sources, and the ethical use of information sources.



## FAMILY AND CONSUMER SCIENCE

### Recommended

Course Title	Grade	Prerequisites	Course Description
<b>Exploratory FACS</b> 2.5 credits 090006	7	Required for 7th graders.	This introductory nine-week course focuses on basic food and nutrition and sewing construction. Students will prepare nutritious snacks in the foods class and construct a simple sewing project.
<b>Health 7</b> 2.5 credits 080100	7	Required for 7th graders.	This nine-week class is required for all 7 <sup>th</sup> graders. This course is designed to address the health triangle: physical, emotional/mental, and social health. Taking responsibility of one's own health and making healthy choices will be emphasized.
<b>Making Healthy Choices</b> 2.5 credits 090116	7	Required for 7th graders.	Students will discuss making various choices young people face daily. Some of the topics that will be covered are discovering passion and purpose, overcoming fears, taking healthy risks to accomplish personal goals, experiencing the power of gratitude, and developing a positive attitude.
<b>Careers 8</b> 2.5 credits 320100	8	Required for 8th graders.	This is an exploratory class where students will examine their likes and dislikes, strengths and weaknesses and how it applies to their choice of a future career. Students will take interest inventory tests on the Nebraska Career Connection website. Throughout the nine weeks, students will have the opportunity to learn about many career options available to them.
<b>Intro to Family and Consumer Science (Intro to FACS)</b> 5 credits 090101	9-10	None	This class is intended for students to focus on physical, mental, and social parts of their health. This includes topics such as dating, healthy relationships, chemical abuse, healthy living, and nutrition.
<b>Foods 1</b> 5 credits 090113	10-1 2	None	Introductory Semester Foods class that focuses on basic cooking principles such as measuring, safety, sanitation, and recipe skills. This class also covers nutrition basics and food preparation skills.
<b>Foods 2</b> 5 credits 090107	10-1 2	Foods 1	This food science class focuses on a variety of cooking methods. The second half of this class includes a cultural foods unit that covers different foods around the world.

<b>Culinary Arts</b> 10 credits 370021	10-11	Foods 1, Foods 2	Culinary Arts is geared towards students who may have an interest in the food-service industry. Specialty foods and baking and pastry is also part of this course. SkillsUSA students interested in competitions in Culinary are encouraged to take this class.
<b>Adult Living</b> 5 credits 090104	11-12	None	Geared towards students looking at life after high school. The first part of the class covers topics such as careers, college, job applications, financially living on your own and finding an apartment. The second half of the class focuses on dating, marriage, and healthy relationships.
<b>Child Development</b> 5 credits 090119	9-12	None	This semester class focuses on parenting decisions, pregnancy, childbirth, and learning how to meet the needs of children. The “Real Care Baby Project” is part of the semester course.



## FOREIGN LANGUAGE

It is recommended that those students going into English Concepts strongly consider not taking a foreign language. Taking upper levels of foreign languages is dependent upon passing the preceding year and teacher recommendation.

Course Title	Grade	Recommended Prerequisites	Course Description
<b>World Languages 7</b> 2.5 credits 062091	7	Required for all 7th graders.	A quarter class that introduces students to the language and culture of the following languages: Spanish, French, German, Italian, and Japanese. Students will learn basic vocabulary, discuss culture, geography and customs of the countries that speak these languages, with special emphasis on Spanish.
<b>Intro to Spanish</b> 2.5 credits 060241	8	Required for all 8th graders.	A quarter class that introduces students to the Spanish language and culture. Students will learn basic vocabulary, conversational Spanish and discuss culture, geography and customs of the Spanish speaking countries.
<b>Spanish I</b> 10 credits 060241	9-12	None	Spanish I is an introduction to the Spanish language as well as the culture, history, and geography of Spanish-speaking nations. Students learn basic vocabulary and grammatical structures which enable them to communicate with each other. It is recommended that students have a grade of 77% or higher in their regular English class to enroll in this course.
<b>Spanish II</b> 10 credits 060242	10-12	Spanish I	Spanish II includes a review of basic grammar and vocabulary acquired in Spanish I. Emphasis is placed on increasing the students' vocabulary and ability to communicate in Spanish. The study of Hispanic culture, history and geography is included. A grade of 77% or higher in Spanish I is strongly recommended to enroll in this course.
<b>Spanish III (H)</b> 10 credits 060243	11-12	Spanish I and II Grade of 77% or higher in Spanish I and II.	Students learn to function in Spanish in common situations as well as express their ideas and feelings in Spanish. Several new verb tenses are added to their grammatical knowledge. Students at this level complete in-depth studies of various Hispanic countries and cultural values. A grade of 77% or higher in Spanish II is required to enroll in this course.
<b>Spanish IV (H)</b> 10 credits 060244	12	Spanish I, II, and III Grade of 77% or higher in Spanish III.	This class includes review of all grammatical concepts from Spanish levels 1-3, as well as the addition of more vocabulary and grammar necessary for continuing at a higher level of Spanish study. A grade of 77% or higher in Spanish III is required to enroll in this course.



## INDUSTRIAL TECHNOLOGY

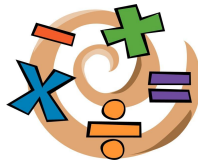
Course Title	Grade	Recommended Prerequisites	Course Description
<b>Industrial Tech 7</b> 2.5 credits 100707	7	Required for all 7th graders.	This class is an exploratory curriculum that gives students the opportunity to discover technological processes through text material, computer software and hands-on activities.
<b>Industrial Tech 8</b> 2.5 credits 100708	8	Required for all 8th graders.	The class is an exploratory curriculum that gives students the opportunity to discover technological processes through text material, computer software and hands-on activities.
<b>Intro to STS - Woods</b> 5 credits 100100	9-12	None	Intro to Woodworking is a beginner woodworking class, which will give each student exposure to the machines in the shop and the learning of general woodworking skills. The student will learn how lumber products are produced and how to take raw materials and create a usable product. Students will build a project within the price range of \$25 to \$50, depending on the species of wood used.
<b>Manufacturing Processes - Woods I</b> 5 credits Semester 1 101920	10-12	Intro to STS - Woods	An in-depth power machines class in which students will learn how to properly and safely operate all of the machines in the woodworking lab. They will then select and build a woodworking project. Students looking for a career in industry or construction should take this course.
<b>Manufacturing Production - Woods II</b> 5 credits Semester 2 101921	10-12	Intro to STS - Woods, Manufacturing Processes - Woods I	An in-depth power machines class in which students will learn how to properly and safely operate all of the machines in the woodworking lab. They will then select and build a woodworking project. Students looking for a career in industry or construction should take this course.



<b>Manufacturing Production - Woods III</b> 5 credits Semester 1 101921	12	Intro to STS - Woods, Manufacturing Processes - Woods II	This class is a second-level woodworking class where students will continue an in-depth use of power machines to construct a woodworking project or projects. Students will choose a plan for a project, make modifications as desired, develop a plan of procedure and bill of materials as necessary. Emphasis will be placed on the uses of additional materials (along with various woods) in the projects, such as, glass, metal, plastic, leather, cloth, etc.
<b>Advanced Manufacturing &amp; Fabrication - Woods IV</b> 5 credits Semester 2 101922	12	Intro to STS - Woods, Manufacturing Processes and Production - Woods III	This class is a second-level woodworking class where students will continue an in-depth use of power machines to construct a woodworking project or projects. Students will choose a plan for a project, make modifications as desired, develop a plan of procedure and bill of materials as necessary. Emphasis will be placed on the uses of additional materials (along with various woods) in the projects, such as, glass, metal, plastic, leather, cloth, etc.
<b>Construction Trades 1</b> 5 credits Semester 1 100110	11-12	Intro to STS - Woods, Manufacturing Processes and Production - Woods I	This course covers many aspects of residential construction. Students will learn how to frame, drywall, side and roof a house in a hands-on classroom. Other projects in the building construction field will be done as well. Students interested in a career in construction, construction management or just saving money by doing work on their own house, should take this course.
<b>Construction Trades 2</b> 5 credits Semester 2 100120	11-12	Intro to STS - Woods, Manufacturing Processes and Production - Woods I and Construction Trades I	This course covers many aspects of residential construction. Students will learn how to frame, drywall, side and roof a house in a hands-on classroom. Other projects in the building construction field will be done as well. Students interested in a career in construction, construction management or just saving money by doing work on their own house, should take this course.
<b>Robotics</b> 5 credits Semester 1 103194	10-12	None	Students in this class will learn and apply current robotics and engineering skills through the use of the Vex Robotics platform. Students will work in small groups. Students will develop skills in many areas including electronics, mechanics, programming, automation, and design. Students will also work on several Engineering projects applicable to current issues in the world today.

<b>Engineering Design and Systems Thinking</b> 5 credits Semester 2 103191	10-12	Robotics	Students in this class will learn and apply current robotics and engineering skills through the use of the Vex Robotics platform. Students will work in small groups. Students will develop skills in many areas including electronics, mechanics, programming, automation, and design. Students will also work on several Engineering projects applicable to current issues in the world today.
<b>Intro to STS - Metals</b> 5 credits 100100	9-10	None	This is an introductory metals course in which the students will learn basic metal working procedures such as: safety, oxy acetylene welding, measurement and sheet metal fabrication. Students will also learn basic automotive care. The students will build a small sheet metal project which has a price ranging from \$20-\$50.
<b>Welding I</b> 5 credits Semester 1 101930	10-12	Intro to STS - Metals	Students will have advanced projects utilizing beginning welding skills, and learn other metalworking processes.
<b>Manufacturing Processes - Metals I</b> 5 credits Semester 2 101400	10-12	Intro to STS - Metals	Students will have advanced projects utilizing beginning welding skills, and learn other metalworking processes.
<b>Welding II</b> 5 credits Semester 2 101940	10-12	Intro to STS - Metals, Welding I, Manufacturing Processes - Metals I	A continuation of advanced projects, utilizing welding skills, as well as learning other metalworking processes.
<b>Manufacturing Production - Metals II</b> 5 credits Semester 2 101401	10-12	Intro to STS - Metals, Welding I, Manufacturing Processes - Metals I, Welding II	A continuation of advanced projects, utilizing welding skills, as well as learning other metalworking processes.
<b>Welding III (Independent Study)</b> 5 credits Semester 1 101941	12	Intro to STS - Metals, Welding I, Manufacturing Processes - Metals I Manufacturing - Production - Metals II, Welding II	A continuation of advanced projects, utilizing welding skills, as well as learning other metalworking processes.

<p><b>Advanced Manufacturing &amp; Fabrication - Metals III (Independent Study)</b> 5 credits Semester 2 101402</p>	12	Intro to STS - Metals, Welding I, Manufacturing Processes - Metals, Welding III	A continuation of advanced projects, utilizing welding skills, as well as learning other metalworking processes.
<p><b>Drafting and Design</b> 5 credits Semester 1 100130</p>	10-12	None	The student will learn about basic drafting procedures, terminology and instruments. Students will learn the basics of CAD so that they can use the computer to create drawings.
<p><b>Architectural Design 1</b> 5 credits Semester 2 100140</p>	10-12	Drafting and Design	A second-level drafting course where the students will use the Chief Architect Software to develop a full set of building plans for their dream house. Students interested in a career in architectural drafting should take this course.



# MATHEMATICS

Recommended

Course Title	Grade	Prerequisites	Course Description
<b>Math 7</b> 10 credits 112801	7		This class covers the full-range of topics needed for the successful study of algebra. Topics included are: operations with whole numbers, integers, decimals and fractions. Students use variables in the expressions and equations, number theory, geometric concepts with volumes, areas, and definitions. They will also study the relationships of fractions, decimals and percentages; solve equations and work with graphs.
<b>Algebra Readiness</b> 10 credits 110299	8	Teacher recommendation	This course is for students who want to take pre-algebra, but their mathematics skills need to be strengthened before they can progress. The course covers fractions, decimals, percentages, exponents, solving equations and inequalities, square roots, and the Pythagorean theorem. An emphasis on signed numbers will be seen throughout the year.
<b>Pre-Algebra 8</b> 10 credits 112802	8		This class is an introduction to rational numbers and basic operations of addition, subtraction, multiplication and division. It is a study of the geometry of plane figures, the metric system, pre-algebra work with open number sentences, irrational numbers, surface area and volume of three-dimensional figures. Students will work with equations in two variables, including graphing of linear equations.
<b>Algebra 8 (H)</b> 10 credits 110300	8	“A” average in Math 7; 90% Standardized tests, teacher recommendation	This basic course includes a review of the four fundamental operations with rational numbers, solving equations and inequalities in one and two variables, basic operation and factoring of the polynomial expressions, solution of equations with rational polynomial expressions, work with irrational numbers and solution of quadratic equations in one variable. Problems studies are related to the practical as well as the abstract nature of mathematics. Each semester, a student in Algebra 8 needs to achieve a grade of 86, without bonus points. If a student fails to do this, we recommend that the student take Algebra I the following year.
<b>Pre-Algebra 9</b> 10 credits 110299	9-10	Grades 11-12 with teacher recommendation	This course is designed for students who are not yet ready to take Algebra I. The course includes a review of the fundamental operations involving the real number system. Also included are topics in Geometry, solving equations and inequalities, ratios, proportions, percentages, statistics, probability, and the coordinate plane. Showing work is emphasized in Pre-Algebra. This class will prepare students to take Algebra I the next year.

<b>Algebra I</b> 10 credits 110300	9-11	None	This course reviews the four fundamental operations with rational numbers, solving equations and inequalities in one and two variables, basic operations and factoring of polynomial expressions, solution of equations with rational polynomial expressions, work with irrational numbers, and solution of quadratic equations in one variable. The problems studied are related to the practical and abstract nature of mathematics. <u>This is a required course for students planning to go to college.</u>
<b>Intuitive Geometry</b> 10 credits 119932	10-12	Teacher recommendation and Algebra I	Intuitive Geometry is recommended for students who wish to take a Geometry course, but do not have strong Algebra skills. Students who have difficulties with reasoning skills and abstract concepts are also good candidates for Intuitive Geometry. Topics covered in Intuitive Geometry are the same as those in regular Geometry, but will not be as abstract and will not focus as heavily on doing proofs. Students must pass Algebra I during the <u>previous school year</u> to be eligible to take Intuitive Geometry.
<b>Geometry</b> 10 credits 111200	9-12	Algebra I	Geometry is strongly recommended for post-secondary education. Topics to be covered are: real numbers, distances, lines, planes, angles, congruency between figures, parallelism, circles, polygons and spatial figures. Students will create direct and indirect proofs. This course strengthens students' deductive reasoning skills. <u>This course is required for students planning to go to college.</u> Students must have a C+ average in Algebra I from the <u>previous school year</u> or have a teacher recommendation to take this class.
<b>Essentials of Algebra</b> 10 credits 119933	11-12	Teacher recommendation	This course is designed as a bridge between Geometry and Algebra II. Its focus is to solidify Algebra I skills with an introduction to more advanced algebra concepts. Some of the topics to be covered will be solving equations, inequalities, graphing in a two-dimensional plane, polynomials, quadratic functions, systems of equations, and factoring. Prerequisite is Intuitive Geometry/Geometry and Algebra I. (Students with a strong background in Geometry and Algebra I are encouraged to take Algebra II.)
<b>Algebra II</b> 10 credits 110306	10-12	Geometry and a strong background in Algebra I	The class includes a review of Algebra I, sets and variables, solving linear equations, systems of equations and factoring. More advanced topics include: rational expressions, relations and functions, irrational numbers, quadratic equations and systems, exponents and logarithms. This course is encouraged for students wanting to go to college. Calculators that are allowed for this class: TI-30x IIS, TI-30Xa, TI-34II, TI-34Xa

<p><b>Trigonometry and Analytical Geometry (H)</b> 10 credits 111600</p>	10-12	Algebra I and Geometry	<p>This class is designed for college-bound students, and includes study of trigonometric functions and graphs, radian and degree measure, polar and rectangular coordinates, proving identities, double angles, half angles, law of sines and cosines, inverse relations and functions, circular functions sequences and series, practical applications in surveying, navigation, construction, displacement, force, velocity, complex numbers, parametric equations, and exponential and logarithmic functions.</p>
<p><b>Pre-Calculus (H)</b> 10 credits 111300 (Possible college credit from CCC 5 credits) <b>CCC MATH 1410</b></p>	11-12	<p>Geometry and Algebra II (If taking for College Credit must have a 22 on Math portion of ACT or Math MAPS score of 249-251)</p>	<p>This basic course includes a review of the four fundamental operations with rational numbers, solving equations and inequalities in one and two variables, basic operation and factoring of the polynomial expressions, solution of equations with rational polynomial expressions, work with irrational numbers and solution of quadratic equations in one variable, work with exponential and logarithmic functions, review of trigonometry, and solving a system of equations and inequalities. Problem studies are related to the practical, as well as the abstract nature of mathematics. Can be taken for college credit. <i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i></p>
<p><b>Calculus (H)</b> 10 credits 110600 (Possible college credit from CCC 5 credits) <b>CCC MATH 1600</b></p>	12	<p>Pre-Calculus (If taking for college credit must have a 25 on Math portion of ACT or Math MAPS score of 259)</p>	<p>This course includes the study of: solving and graphing equations and inequalities, relations, functions, and inverses, limits and continuity, and derivatives. More advanced topics include: integration, definite integrals, techniques of integration and infinite series. A graphing calculator is required. The connections between the graphical, numerical, and algebraic approaches to build a richer understanding of calculus are emphasized. Can be taken for college credit. <i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i></p>
<p><b>Statistics &amp; Probability</b> 5 credits 111700</p>	12	<p>Successful completion of one semester of Algebra II</p>	<p>The course provides an introduction to the basic concepts in statistics and probability. Concepts to be discussed include: the fundamental of probability; the handling of numerical data; random variables with variance and standard deviations; binomial and normal distributions; brief discussion of sampling; and using statistical methods to determine confidence intervals and significance levels.</p>
<p><b>Consumer Math</b> 10 credits 119931</p>	11-12	None	<p>Consumer Math teaches students real-world applications of math. Topics covered are: employment, making purchases, checking and savings accounts, credit, automobile expenses, taxes, budgeting, personal finance, and investments.</p>

<b>College Algebra</b> 5 credits 119934 (3 college credits from CCC) <b>CCC MATH 1150</b>	12	Geometry and Algebra II (If taking for college credit must have 22 on Math portion of ACT or MAPS Math score of 249-251.	This course includes a review of real numbers and their properties, polynomials, rational expressions, rational exponents, and radical expressions. This course will work with linear equations and inequities as well as complex numbers, quadratic equations, and absolute value equations and inequalities. More advanced topics include solving and graphing quadratic functions, higher order polynomials, rational functions, variation models, exponential functions, logarithmic functions, and systems of linear equations and the qualities. Can be taken for college credit. <i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i>
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## MUSIC

Course Title	Grade	Recommended Prerequisites	Course Description
<b>7<sup>th</sup> Grade General Music</b> 2.5 credits 120100	Required for 7th graders.	None	The course provides learning opportunities in listening, music theory and music history. Emphasis is placed on the basic techniques of voice production and a variety of choral literatures are introduced for learning and performance purposes.
<b>8<sup>th</sup> Grade General Music</b> 2.5 credits 120100	Required for 8th graders.	None	This course is a continuation of 7 <sup>th</sup> grade General Music providing more advanced learning opportunities in music theory, music history and listening. Special attention is given to the changing voice and its treatment. Emphasis is also placed on a variety of choral literatures of interest to these students.
<b>8<sup>th</sup> Grade Musical Theatre</b> 2.5 credits <b>220100</b>	Required for 8th graders.	None	8th grade quarter class studying musical theater history, exploring and working through a Broadway Musical show and all that goes into creating a musical production. The students have dialogue to memorize, songs to sing and choreography to learn as well as figuring out characterization, some costuming, props, minimal set and lighting. A performance for parents is the culmination of the quarter and the final test grade.
<b>9-10 Choir</b> 2.5 credits per semester 120400	9-10	None	This is an elective open to 9-10 <sup>th</sup> grade students. Emphasis is placed on proper vocal production, part-singing, performance and preparation for 11-12 vocal music. The two classes are combined prior to concert and perform together at concerts. In addition, a small ensemble is selected by audition from this group to perform at concerts and participate in district music contest.

<p><b>Varsity Choir</b> 5 credits per semester 120400</p>	<p>11-12</p>	<p>None</p>	<p>This elective is open to juniors and seniors at the beginning of the year. Students wanting to be in choir second semester only must have the director's approval and must audition. Auditions consider vocal ability, experience and character. Full choir meets M/W/F; girls/boys sectionals are held on T/TH for additional work. Emphasis is placed on learning through performance. The choir gives several concerts, participates in clinics and district music contest, produces a Broadway musical and makes community appearances. Soloists, small ensembles and district music contest participants are chosen from this group. It is advantageous to be in the group for the entire year.</p>
<p><b>Junior High Band</b> 10 credits 120500</p>	<p>7-8</p>	<p>One year of beginning band is recommended or permission from instructor</p>	<p>Junior high band is an opportunity to improve musical skills while exploring a wide variety of musical styles. Emphasis is placed on a working knowledge of music theory and vocabulary, learning to play in a larger ensemble, and foundations for continuing on to high school band, including marching fundamentals.</p>
<p><b>Senior High Band</b> 10 credits/1 credit for Marching Band 120500</p>	<p>9-12</p>	<p>Passing grades in junior high band and/or permission from instructor</p>	<p>This is a full-year elective class. Those unable to enroll for both semesters of the class will need permission of the instructor. The purpose of the class is the continued development of the musical knowledge and skills. The emphasis is on interpretation and musical maturity in large ensemble music of all genres and styles. There is also opportunity for individual growth through auditions for outside honor ensembles and solo/small group performance. The band in all its entities - marching, pep, concert and jazz - performs at a variety of activities, concerts and contests.</p>
<p><b>Music Theory</b> 10 credits 129930</p>	<p>9-12</p>	<p>The ability to read music notation or permission of the instructor.</p>	<p>This is a full year course. This class is designed for students who seek to enrich their knowledge of the elements of music. The fundamentals of melodic, rhythmic and chordal notation and practice in a variety of musical styles will be explored. The purpose of this course is to cultivate the ability to distinguish, describe, comprehend, and employ music theory concepts and processes in the student's own musical performance and in music composition. It will also serve well those students who intend to continue their musical studies after high school, in preparation for musical theory placement exams at colleges and universities. Some prior music reading knowledge is a necessary prerequisite, though the student need not be currently enrolled in band or choir.</p>





## PHYSICAL EDUCATION

Course Title	Grade	Recommended Prerequisites	Course Description
<b>Physical Education 7</b> 2.5 credits 080126	7	Required by all 7th graders.	Daily fitness to improve total fitness. Areas of emphasis: Cardiovascular endurance, muscular strength, body composition, and flexibility.
<b>Physical Education 8</b> 2.5 credits 080126	8	Required by all 8th graders.	Daily fitness to improve total fitness. Areas of emphasis: Cardiovascular endurance, muscular strength, body composition and flexibility.
<b>Physical Education 9</b> 5 credits 089930	9	Required by all 9th graders.	Lifetime Fitness activities. Areas of emphasis include: cardiovascular endurance, muscular endurance, muscular strength, body composition, and flexibility. Students may choose to do PE or Weights.
<b>Lifetime Fitness</b> 5 credits 080120	10-12	None	Emphasizes the value of lifelong fitness and how to maintain it throughout life. Priority will be given to 10 <sup>th</sup> grade students who are meeting graduation requirements.
<b>Beginning Weight Lifting</b> 10 credits 080111	10-12	None	Will focus on safety rules, names of lifts, basic weight lifting terminology, proper lifting and breathing techniques. These workouts will be slower paced. Students will be learning the main muscle groups and 4 phases of strength training.
<b>Advanced Weight Lifting</b> 10 credits 080113	10-12	None	In this class, students will get the opportunity to build on what they have learned in their previous weight- lifting experience. Students will learn proper technique on Olympic lifts and core lifts and be given the opportunity to demonstrate and learn correct technique. Based on technique and experience, students will continually progress into more complex movements, more volume, and different lifting phases. As we progress, students will learn progressive overload principles, they will learn concentric, isometric, and eccentric strength, and the importance of moving in all planes. Students will work on improving strength, improving agility, improving speed, and improving mobility. Students will be assessed in the core lifts, the 10 yard sprint, the pro-agility run, the vertical jump, the 40 yard dash, and the standing broad jump. Along with working on these skills, students will also learn about the importance of nutrition and how to eat a balanced diet.

<b>Exercise Science</b> 5 credits 077601	10-12	None	This course is appropriate for students wishing to pursue a career in physical therapy, strength and conditioning, occupational therapy, personal training, or any other area in the health field. This is an introductory course and will first focus on vocabulary, introducing terms, functions of muscles, different responses to exercise and different respiratory systems. The course will then move on to look at different methodologies and research applied to exercise and physical fitness. By the end of the semester, students will be able to design fitness assessments and fitness plans to fit the needs of who they might be working with. Students will also learn about nutrition and how to fuel the body.
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## SCIENCE

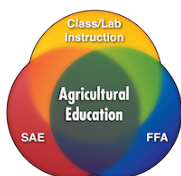
### Recommended

Course Title	Grade	Prerequisites	Course Description
<b>7<sup>th</sup> Grade Science</b> 10 credits 130801	7	Required by 7th graders.	This integrated science course provides an overview of life, earth, space, and physical science concepts in the context of real world problems. The course emphasizes the use of problem-solving and content application to examine current issues in science. Hands-on labs will be a major focus along with inquiry learning.
<b>8<sup>th</sup> Grade Integrated Science</b> 10 credits 130802	8	Required by 8th graders.	This integrated science course provides an overview of life, earth, space, and physical science concepts in the context of real world problems. The course emphasizes the use of problem-solving and content application to examine current issues in science. Hands-on labs will be a major focus along with inquiry learning.
<b>Physical Science</b> 10 credits 130300	9	Required	This is an introductory course into the basic physical and chemical sciences. Topics that may be covered include; motion, energy, atoms, chemicals and chemical changes.
<b>Physical Science (H)</b> 10 credits 130300	9	Algebra 8 (H) 86% or higher	This class covers the same essential topics covered in physical science but covers more in detail about each topic. Those topics are basic physical and chemical science concepts such as motion, forces, energy, atoms, chemicals and chemical changes. The class also requires the completion and presentation of a science fair project. This class is designed to prepare students for advanced physics and chemistry coursework. Students in this class can expect frequent and challenging assignments throughout the year.

<b>Biology I</b> 10 credits 130201	10	Required Physical Science	This class focuses on essential topics of biology including ecology, biochemistry, cell biology, genetics, evolution, classification, and animal behavior with relevant labs. This class will cover essential topics and laboratory techniques to prepare students for further study in biological sciences. Much of the class uses POGIL (Process Oriented Guided Inquiry Learning) and ADI (Argument Driven Inquiry) to cover the material. Most work is done in class.
<b>Biology I (H)</b> 10 credits 130201	10	Physical Science or Physical Science (H) 86% or higher	This class covers the same essential topics covered in biology but covers more detail about each topic and more homework. Those topics are: ecology, biochemistry, cell biology, genetics, evolution, classification, and animal behavior. The class also requires the completion and presentation of a science fair project. This class is designed to prepare students for advanced biology coursework. Students in this class should be prepared for frequent and challenging assignments throughout the year.
<b>Biological  Science 101  (College  Biology (H))</b> <b>5 credits AC</b> 139930 4 credits from CCC <b>CCC BIOS  1010</b>	11-12	ACT composite of 21 or higher (or Accuplacer Equivalent), 86% or higher semester averages in biology	College Biology is a dual-credit introductory biology class taught through Central Community College by Mr. Ceerle at Adams Central. This class will fulfill the general science class with lab requirement at many colleges across Nebraska. Topics taught include molecular biology, cell biology, genetics, and taxonomy. Students will also complete an insect collection as part of the course. Students may take this for four college credits and Adams Central credit. Those taking this class for college credit will need to enroll at Central Community College (Miss Fisher has the form) and will receive a bill from the college after class begins for approximately \$420. Students will need to purchase their own textbook through the campus bookstore or online using websites such as Amazon.com. This class runs in the fall semester only. <i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i>
<b>Medical  Terminology  (H)</b> 5 credits 077600	11-12	Biology 86% semester or higher for year Recommended Anatomy & Physiology	Students will study work prefixes, roots and suffixes used in medicine. Terms will include structures, diagnostic procedures, pathology and treatment. The course covers major body systems such as the muscular, skeletal, cardiovascular, reproductive and respiratory systems. This class requires students to work independently. Students planning on majoring in biology or pre-medical coursework or taking Anatomy and Physiology should take this class.
<b>Anatomy/  Physiology (H)</b> 10 credits 130210	11-12	Honors Biology or Biology Must have a minimum of “B” 86% average over four quarters to be admitted	Anatomy is the study of the structure and relationship between body parts. Physiology is the study of the function of body parts and the body as a whole. Systems covered include the integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, and digestive systems. The class requires the memorization of many terms and concepts. Students who have an interest in pursuing careers in medical sciences should consider taking this class.

<b>Chemistry I</b> 10 credits 130301	11-12	Physical Science and Geometry	Chemistry I is a study of the properties of atoms and molecules as they pertain to the composition of matter and its changes. Stoichiometry, chemical formulas & reactions, and nomenclature will be studied. A strong background in Algebra is highly encouraged.
<b>Chemistry I (H)</b> 10 credits 130301	11-12	Physical Science and Algebra II or (MAPS Math score 249)	Honors Chemistry I is a study of the properties of atoms and molecules as they pertain to the composition of matter and its changes. Stoichiometry, chemical formulas & reactions, nomenclature, and acid-base equilibria will be studied. The honors course will be more fast paced. A strong background in Algebra is highly encouraged.
<b>Chemistry 101 (College Chemistry) (H)</b> 10 credits AC 139931 (Possible college credit through Central Community College) <b>CHEM 1090</b> (4 credits from CCC) <b>CHEM 1100</b> (4 credits from CCC)	12	86% or higher in Chemistry I and an ACT score of 19 on Math portion or 240 on Math portion of MAPS	College Chemistry is a dual credit course and will have a fee for college credit (Each semester will be worth 4 credit hours). It can be used for general education credit (one semester (4 credit hours) will satisfy general education requirements at most colleges) or for students who plan to pursue science majors (i.e. pre-med, veterinary science, biology, or other science-related professions). Semester 1 will highlight electron configurations, nomenclature, solutions, bonding, molecular shape, hybridization, gas laws and nuclear chemistry. Semester 2 will cover equilibrium, acids and bases, electrochemistry and thermochemistry. May take for college credit. <i>Students are expected to pay for college credit or apply for an ACE scholarship if needed.</i>
<b>Physics (H)</b> 10 credits 130303	11-12	Algebra II and Trig (may be enrolled concurrently)	Physics is a study of matter and energy and their relationships. It is a math-based class. Students will study motion, forces, and sound. Strongly encouraged for students wanting to major in the sciences, especially engineering.
<b>Forensic Science or Forensic Science (H)</b> 5 credits 130317	11-12	Biology, Physical Science, Chemistry recommended Student must be able to work with diverse team members and speak in a public setting.	Forensics Science seeks to take concepts learned in biology, chemistry, and physical science and apply them to solving crime scenarios. Students interested in science or criminal justice will find this class beneficial. Students taking this class will spend the first two months learning laboratory and investigative techniques used in crime scene analysis. Students will then carry out an investigation of a mock murder scene designed by the juniors of last year's class. Students will learn how to legally collect crime scene evidence with help from Hastings Police Department detectives. Once evidence is collected, students spend 2-3 weeks processing the evidence and writing up reports. Once all evidence is evaluated, the class recommends the arrest of a suspect for a list of potential seniors that pose as potential perpetrators of the murder. That suspect is then placed on a mock trial

			conducted by Mr. Mulligan's Business Law class. This class promises to teach scientific concepts in a novel and engaging way. Students may take this class as an Honors Class so long as they have permission from the instructor. These students will take on a leadership role throughout the class, be required to write a final report, and will be given more challenging tests.
<b>Special Topics in Scientific Research</b> 10 credits 130424	11-12	Recommendation from Science Teacher. Students must work independently, meet deadlines, speak to adults.	This class is designed for students interested in science research and presenting their work and competitive science fairs. The goals of the fall class is to provide time and more teacher interaction in the research, development, data collection, data analysis, and poster write up for a science research topic. Students will be expected to reach out to local colleges, universities, or business operations for assistance in the design and research of the project. Students taking this course will be required to attend competitive science fairs during the spring class such as the <i>Patriot Science Fair</i> , the <i>Central Nebraska Science and Engineering Fair</i> , the <i>Central Regional Nebraska Junior Academy of Science Fair</i> , and the <i>Junior Science and Humanities Symposium</i> . Other fairs such as the <i>International Science and Engineering Fair</i> , the <i>Nebraska Junior Academy of Science State Fair</i> , and the <i>Junior American Academy for the Advancement of Science Fair</i> may also be attended if the student qualifies. These fairs are usually held in major US cities and will require time away from school to attend.



## Agricultural Education

Course Title	Grade	Recommended Prerequisites	Course Description
<b>8th Grade Careers and Literacy of Agriculture</b> 2.5 credits 018002	8	Required by 8th graders.	The focus of this course is to provide middle school students with a working knowledge of the Agriculture, Food and Natural Resources career field of study. Students will experience the seven AFNR pathways, explore careers within these pathways, and focus on their pathway of interest. The course incorporates teachable moments pertaining to the college and career readiness skills found in the center of the Nebraska Career Education Model. Agricultural literacy, risk management, and current trends are also incorporated into the course.

<p><b>Introduction to Ag, Food &amp; Natural Resources</b> 5 credits 011000</p>	9-12	None	<p>The introductory course for the Agriculture, Food, and Natural Resources Career Cluster providing a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers, cluster foundation knowledge and skills, introduction to leadership development, the FFA organization and career exploration. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.</p>
<p><b>Animal Science</b> 10 credits 011004 (Possible dual credit from CCC AGRI 1700)</p>	10-12	Intro to Ag, Food & Natural Resources	<p>A course focusing on the basic scientific principles and processes that are involved in animal physiology, breeding, nutrition, and care in preparation for an animal systems career. Topics include animal diseases, introduction to animal science, animal nutrition, animal science issues, career opportunities and animal evaluation. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.</p>
<p><b>Biotechnology</b> 5 credits 012004</p>	11-12	Animal Science or Plant Science	<p>This course equips students with a working knowledge of biotechnology as it is used in Agricultural, Food, Natural Resources, and Health Sciences. Students will diagram how classical processes have influenced trait improvement throughout history. Through application of DNA structure and gene insertion methods, students will demonstrate how genetic engineering has been applied to organism improvement and solving human health issues. Students will apply DNA and protein detection to determine presence of specific traits. Additionally, students will distinguish between scientific and societal biotechnology issues. Classroom and laboratory activities are supplemented through supervised agricultural experience and leadership programs and activities.</p>
<p><b>Natural Resources</b> 10 credits 013000</p>	10-12	None	<p>A course that provides an opportunity for students to increase awareness of the close ties among living organisms as well as natural and environmental concerns with the interrelationships of living organisms and the world around us. Students are exposed to careers related to natural resources systems. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.</p>
<p><b>Plant Science</b> 10 credits 011007 (Possible dual credit from CCC AGRI 1310, 1350)</p>	10-12	Intro to Ag, Food & Natural Resources	<p>This course focuses on knowledge, information, and skills related to the science of plant production and agronomy and provides the necessary skills for careers in horticulture, agricultural production and management, and science. The content includes plant growth and reproduction, biotechnology and research, fertilizers, plant and tree identification, controlling weeds and pests, and safe and proper use of agricultural chemicals. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.</p>

<b>Veterinary Science</b> 5 credits 011015	11-12	Animal Science	Introduces students to the basics of animal care, prevention, and maintenance. Topics covered include disease, parasites, feeding, shelter, grooming, and general animal care. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.
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## SOCIAL SCIENCES

### Recommended

Course Title	Grade	Prerequisites	Course Description
<b>World Neighbors 7</b> 10 credits 150011	7	Required	This is a general survey course dealing with both physical and political geography of the world. It provides an examination of the geographical features, history, cultures, lifestyles and governments found throughout the world. The history of Nebraska will be included in World Neighbors. The focus will be on events, people and places.
<b>Social Studies 8</b> 10 credits 150012	8	Required	This is a survey course in American History from Post Revolutionary War to the Progressive Era with the aim of building an interest in, and an understanding of, the basic thought and issues of our nation's growth.
<b>World Geography</b> 10 credits 150700	9-10		This is a general survey course studying both physical and cultural regions of the world. The areas of focus within this course Africa, Asia, and the Pacific Rim.
<b>World History</b> 10 credits 150800	10	Required	This is a general survey course concerning the history of man from the earliest times up to the present day. Most of the emphasis in this course is on the development of Western Civilization. It is designed to provide students with an understanding of how past events have affected the world situation as it is today.
<b>American History</b> 10 credits 150820	11	Required	The goal of this course is to provide coverage of modern American history. This course will focus on the 20th century to recent events. Students will learn to utilize primary and secondary sources as part of writing a research paper.
<b>Psychology</b> 5 credits 151200	11-12		This class centers on the need to understand other human beings and ourselves. Specific areas of concentration will be used in conjunction with educational television and films. Personality formation and psychological disorders will also be studied.

<b>Sociology</b> 5 credits 151300	11-12		This is an in-depth study of man's relationships to man as seen by peers, parents, society and other cultures. A scientific perspective of sociology is the guideline for the course, but primary emphasis is placed on analyzing man in his environment. Issues such as overpopulation, marriage practices, crime and punishment, delinquency and many other social customs will be discussed.
<b>Special Topics in History</b> 10 credits 159930	11-12	86% or higher average in all prior Social Studies classes and 86% or higher in all prior English classes	Special Topics in History is a student driven course researching topics of interest in American or World History. Students will research topics they choose over a subject approved by the instructor and present their information to the class. The instructor and classmates will question the research in open forum. Grading will be done on accuracy of the date, knowledge of the subject and presentation. Also integrated into the class, depending on the subject, will be how popular culture has treated the subject. An attempt will be made to judge the accuracy of the portrayal of certain subjects by the media, books, film and television.
<b>American Government</b> 5 credits 151110	12	Required	This political science course surveys the national government, but also emphasizes state and local levels. It includes traditions and history of the American democratic system and relates this to the changes that have taken place in our representative government to the present. A heavy emphasis will be placed upon establishing and running a Mock Congress in order for students to experience the legislative, executive, and judicial process with regard to the bill making process.
<b>Economics</b> 5 credits 151000	12	Required	This is a course designed to analyze, breakdown, and discover the complexities of our Economy, Economics terminology, theory, and practical application. Heavy emphasis will be placed upon investing, budgeting, real estate principles, analysis of economic impact of college choice, course work, career paths, and long term exploration of income ability based upon occupation. Projects will be created by students to become immersed into both the U.S. and World Economy.





## SPECIAL EDUCATION DEPARTMENT

This department will offer a full range of courses adjusted to meet the needs of all students who qualify for special education services. The department will recommend certain courses for individual students.

### Recommended

Course Title	Grade	Prerequisites	Course Description
<b>Basic English 7-8</b> 10 credits 190515	7-8	None	A special course designed to provide students with disabilities subject matter and experience in the area of language arts, including the full range of language experiences i.e. reading, writing, speaking and listening skills for students with disabilities. This course code is to be used for all language arts classes modified and designed specifically for students with disabilities and is appropriate regardless of grade level 7-8.
<b>Basic English 9-12</b> 10 credits 190515	9-12	None	Meets graduation requirements. Develop spelling skills weekly. Alternating years of instruction: 1) literature: reading various styles of stories; learning characteristics of different genres; identifying different elements of all types of literature 2) Writing: developing quality sentences and paragraphs; learning to write in different styles (descriptive, narrative, persuasive, and expository) basic parts of speech, using 6 traits to develop quality papers, learn how to research.
<b>Basic Math 7</b> 10 credits 112800	7	None	This course is designed to help students who have previously had difficulty in math. Fundamental operations with whole numbers, fractions and decimals are all reviewed. During second semester, new topics covered are: rational number system, geometric concepts and equations.
<b>Basic Science 7-8</b> 10 credits 191315	7-8	None	This is a class for students in Resource classroom. It is run on a 2 year cycle starting with life science one year and earth/physical science for the other year. It offers science concepts for each year that are covered in the regular education science classes but not as in-depth. The class focuses on note-taking strategies to help students improve taking notes in not just science but other classes as well.
<b>Resource</b>	9-12	None	Skills work and completion of classroom assignments.

<b>Job Exploration/ Job Shadow</b> credits may vary 320700	9-12	None	Development of work skills in a work environment. Students work under the supervision of a job site employee and case manager.
<b>Vocational Math I</b> credits may vary 112800	7-9	None	A self contained math class that will focus on addition, subtraction, multiplication, division of whole numbers, decimals, fractions and percentages.
<b>Vocational Math II</b> 112801 credits may vary	9-12	None	A self-contained math class that takes skills learned in vocational Math I and apply them in everyday life situations.
<b>Adaptive Physical Education</b> 10 credits 080127	7-12	Each student admitted according to needs on their IEP.	Adapted Physical education is for individuals with exceptional needs who require development or corrective instruction and who are precluded from participation in the activities of the general physical education program. The program is based on comprehensive assessments and is focused on providing the learner with the skills necessary for a lifetime of rich leisure, recreation, dance, and sport experiences to enhance physical fitness and wellness.



## TECHNOLOGY/COMPUTER EDUCATION

Course Title	Grade	Prerequisites	Course Description
<b>Computer Literacy 7</b> 2.5 credits 033501	7	Required for 7th graders.	Computer Literacy is a production-based class focusing on the touch type method of keyboarding. Students will complete 24 lessons in nine weeks. These lessons consist of learning the location of each letter on the keyboard. The goal is to improve keyboarding speed, accuracy, and technique.
<b>Information Technology Applications</b> 5 credits 270501	9	Required class for 9th graders	Review keyboard to improve speed and accuracy Word (letters, MLA reports, tables) PowerPoint, Excel, database, web page design and iMovie
<b>Intro to Digital Media</b> 10 credits 279930	10-11	“C” average or above in Information Technology	Students enrolled in this class will use software programs and applications to complete iMovie, Photoshop, Macromedia FLASH, Dreamweaver, InDesign, Audacity projects. Students will need to have a 4G-8G flashdrive. Desktop publishing, video production, animated graphics, photo editing, web page, and podcasting projects will be the units covered.
<b>Multimedia Publications</b> 10 credits 050401	11-12	“B” average in English; “C” average or above in Information Technology	The responsibility of the class is publishing the Patriot yearbook and Patriot Voice newspaper as well as designing, maintaining, and updating the school’s web site. Students will learn writing, editing, and photography techniques and use iPhoto, InDesign, Photoshop, Dreamweaver, Flash, FinalCut Pro, Garage Band and other applications to create yearbook and newspaper pages as well as professional looking websites and video. Striv Team will stream school activities and produce commercials and other digital media.

## Early College/Dual Credit Opportunities

Adams Central provides several opportunities for students to earn college credit in high school. Students have the opportunity in one or more of the areas listed below.

### Central Community College Classes Dual Credit Taught by Adams Central Teachers

You must create an account online. [cccneb.edu](http://cccneb.edu)

You must register (get a form from teacher or counselor).

You must have taken an ACT or MAPS and have appropriate scores.

\$107 per credit hour (cost may vary per year)

ENG 1010	English Composition 1 Mr. Boelhower	ACT 18+ (English and Reading) MAPS 223	3 credits Semester 1
ENG 1020	English Composition II Mr. Boelhower	ACT 18+ (English and Reading) MAPS 223	3 credits Semester 2
MATH 1150	College Algebra Mrs. Knehans	ACT 22 (Math) MAPS 249-251	3 credits Semester 1 or 2
MATH 1410	PreCalculus Mrs. Knehans	ACT 22 (Math) MAPS 249-251	5 credits Full year
MATH 1600	Analytic/Geometry & Calculus Mrs. Knehans	ACT 25 (Math) MAPS 259	5 credits Full year
BIOS 1010	General Biology Mr. Cecrle	ACT 21 (Composite) or higher 86% or higher semester averages in Biology	4 credits Semester 1
CHEM 1090 CHEM 1100	General Chemistry I General Chemistry II Mrs. Kliewer	ACT 19 or higher on Math portion or 240 or higher on MAPS Math portion	CHEM 1090 Sem 1 4 credits CHEM 1100 Sem 2 4 credits

MART 1200	Digital Illustration Mrs. Hassenstab	Test scores No prerequisite	3 credits Semester 1 (offered every other year)
MART 1210	Layout and Design 1 Mrs. Hassenstab	MART 1200 Digital Illustration	3 credits Semester 2 (offered every other year)
MART 1300	Visual Design 1 Mrs. Hassenstab	MART 1200 Digital Illustration and MART 1210 Layout and Design 1	3 credits Semester 1 (offered every other year)
MART 1360	Introduction to Graphic Arts Mrs. Hassenstab	MART 1200 Digital Illustration MART 1210 Layout and Design 1 and MART 1300 Visual Design 1	3 credits Semester 1 (offered every other year)

### **Automotive Technology Program @ CCC**

CCC Automotive Technology @ CCC Morning program	Fall: AUTO 1000 2 credits AUTO 1020 2 credits Spring: AUTO 1100 3 credits AUTO 1800 3 credits	10 credits Taught by CCC instructors
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**Online courses are also available to seniors during Patriot Period.  
Some courses include:**

SPCH 1000 Public Speaking	3 credits
PSYC 1810 Intro to Psychology	3 credits

**Nursing Assistant Courses at CCC**  
AM, PM, Evening and Summer

**Nebraska Wesleyan University**  
**Dual Credit Taught by Adams Central Teachers**

You must register online.

<https://www.nebrwesleyan.edu/undergraduate/dual-credit-high-school-students>

Registration information will be provided by English teacher.

\$95 per credit hour

ENG 1010	English Language and Writing Mr. Boelhower	Must have earned a 90% or above in both semesters of English 11 (H) or English III	3 credits Full year
ENG 1020	Composition, Language and Literature Mr. Boelhower	Must have earned a 90% or above in both semesters of English 11 (H) or English III	3 credits Full year

The Access College Early (ACE) Scholarship is a possible way to have the tuition cost for the class paid with a limit of THREE classes per semester. Students who meet one of the following qualifications can submit an ACE Scholarship application with the corresponding documentation. Funding is limited. The qualifications include:

- Supplemental Security Income (SSI)
- Temporary Assistance for Needy Families (TANF)
- Food Stamps
- Special Supplemental Nutrition Program (WIC)
- Free/Reduced Lunches (need current documentation)
- Other Extreme Hardship (must provide detailed documentation)
- Students must also be a U.S. Citizen or a permanent alien resident.

To apply for the ACE Scholarship, you will need to create an online account at <https://ecmp.nebraska.gov/CCPE-ACE/Account/Login>. You will create a new user account and then login and complete the registration. Complete the application, you will need to upload the necessary documentation. See Miss Fisher if you have questions.