# OVERTON HIGH SCHOOL CURRICULUM GUIDE



2020-2021

**Revised 7/2020** 

#### **TABLE OF CONTENTS**

GRADUATION REQUIREMENTS	PAGE 2
GRADUATION HONORS	PAGE 3
DUAL CREDIT COURSES	PAGE 3
CORRESPONDENCE COURSES	PAGE 3
COURSE DESCRIPTIONS	
ART (VISUAL)	PAGE 4
BUSINESS	PAGE 5
COMPUTER EDUCATION	PAGE 7
ENGLISH/SPEECH	PAGE 8
ENGLISH AS A SECOND LANGUAGE	PAGE 10
FOREIGN LANGUAGE	PAGE 11
FAMILY & CONSUMER SCIENCE	PAGE 12
INDUSTRIAL TECHNOLOGY	PAGE 15
MATHEMATICS	PAGE 17
MUSIC	PAGE 19
NATURAL SCIENCES	PAGE 20
PHYSICAL EDUCATION	PAGE 22
SOCIAL SCIENCES	PAGE 23
VOCATIONAL AGRICULTURE	PAGE 24

Graduation shall be upon the recommendation of the Superintendent, providing the student meets the following requirements:

1. The student must receive a passing grade of 70% or above in 250 semester hours of work to include the following courses:

LANGUAGE ARTS	40 Hours
MATHEMATICS	40 Hours
SOCIAL SCIENCES	30 Hours
GOVERNMENT	10 Hours
NATURAL SCIENCES	30 Hours
BUSINESS EDUCATION	10 Hours
KEYBOARDING	10 Hours
P.E./HEALTH	10 Hours
SPEECH	5 Hours
ART	5 Hours
REQUIRED COURSE HOURS	190 Hours
ELECTIVES	60 Hours
TOTAL COURSE HOURS	250 Hours

2. A minimum of 40 earned semester hours credits must be earned during the school year in which the student intends to graduate. Credit hours will be computed in accordance with the Nebraska Department of Education.

Exceptions to these requirements shall be made and approved only by the Superintendent. Credits may be transferred from other schools and adjustments may be made in subject matter requirements.

Conflicts and/or costs arising from a student who must retake a required course because of a failing grade will be the responsibility of the student and his/her parents.

A student who has not met the requirements for graduation but who has attended school regularly may, with the recommendation of the Superintendent, be granted a Certificate of Attendance. Students receiving a Certificate of Attendance shall not be eligible to participate in the graduation ceremony.

#### **GRADUATION HONORS**

The student who completes the requirements for graduation and has the highest scholastic average for the four years of high school shall be considered the Valedictorian and the student who has the second highest scholastic average for the four years of high school will be declared the Salutatorian. To be recognized as the Valedictorian or Salutatorian, the students must have been in attendance at Overton High School for his/her entire senior year.

#### **DUAL CREDIT COURSES**

Dual Credit Courses may be offered by teachers who have meet College and/or University certification to provide the course as a dual credit offering. Students also have the opportunity for Dual Credit Classes through the NebraskaNOW and Peru State course offerings. Students must meet College/University requirements to enroll in Dual Credit Classes. Students must have at least a 'C' average to enroll in these classes. All costs associated with Dual Credit Classes are the responsibility of the student.

#### **CORRESPONDENCE COURSES**

Correspondence classes may be used to fulfill graduation requirements so long as the class they are taking through correspondence is not offered by the district, or there are unavoidable conflicts within the student's schedule. All correspondence classes require the approval of the counselor and Principal. Correspondence class hours shall be limited to 40 hours. Conflicts and/or costs arising from a student who must retake a required course because of a failing grade will be the responsibility of the student and their parents/guardians.

#### **COURSE DESCRIPTIONS**

The following course descriptions are designed to give, students and parents, a brief overview of the subject matter to be covered in each course. Please be aware of any prerequisites that may be necessary before registering for a particular class. Some prerequisites may be waived at the discretion of the teacher and with the approval of the administration. These course descriptions are not meant to be a curriculum guide, any additional questions a student or parent may have in regard to curriculum content can be answered by the teacher.

VISUAL ARTS					
Freshmen Sophomores Juniors Seniors					
* Art I	* Art I * Art II * Sophomore Exploratory	* Art I * Art II * Art III	* Art I * Art II * Art III * Art IV		

## ART I (020100) 5 CREDIT HOURS PER SEMESTER

EMILY BROOKS NO PREREQUISITE

This course reviews the elements and principles of design. Various techniques in drawing, ceramics, and sculpture are explored, while including learning and exploring other artists. Weekly sketches will be done, in class along with more complex projects. Rubric grading is implemented that includes lesson vocabulary. Some oral critiques and explanations are required.

## ART II (020200) 5 CREDIT HOURS PER SEMESTER

EMILY BROOKS PREREQUISITE: MINIMUM 83% IN ART I

This course continues in the mastery of drawing, ceramics and sculpture (techniques, vocabulary and skills learned in Art 1 will be expounded on) and introduces acrylic and watercolor painting. Other artists and their work will be explored for inspiration and techniques. Weekly sketches will be done, in class along with more complex projects. Rubric grading is implemented that includes lesson vocabulary. Some oral critiques and explanations are required.

## ART III (020300) 5 CREDIT HOURS PER SEMESTER

EMILY BROOKS PREREQUISITE: MINIMUM 85% IN ART II

In this course students continue to explore different artists and develop their own style. Different mediums including but not limited to; cloth mache, stained glass, and graphic art may be explored-based on overall interest and class size. Weekly sketches will be done, in class along with more complex projects. Rubric grading is implemented that includes lesson vocabulary. Some oral critiques and explanations are required.

## ART IV (020400) 5 CREDIT HOURS PER SEMESTER

EMILY BROOKS PREREQUISITE: MINIMUM 91% IN ART III

This is a guided independent study art class. Contracts will be followed each quarter that are filled out by the student and discussed with and approved of by the teacher. The contract will require, one painting, one drawing, one sculpture-all with minimum size requirements but in medium of choice, one of the 3 projects must be inspired by an artist or art movement in which a research paper will be written with an accompanying explanation of how they used the research to influence their chosen piece. Weekly sketches will be done, in class along with more complex projects. Rubric grading is implemented that includes lesson vocabulary and an individual teacher evaluation of craftsmanship, development and overall impact of the work. Some oral critiques and explanations are required.

## SOPHOMORE EXPLORATORY (029930) 5 CREDIT HOURS (1 SEMESTER REQUIRED FOR GRADUATION)

EMILY BROOKS PREREQUISITE: NONE

This course is a semester long and opposite Speech. A variety of art mediums is explored in this course graphic art, sculpture, decoupage, printmaking and clay are some but not all. iPads will be used to create digital art and the Homecoming poster for the current year and following year will be created. Effort and a positive attitude are major factors contributing to the final grade.

BUSINESS			
Freshmen	Sophomores	Juniors	Seniors
	* Yearbook * Business * Communications * Intro. to Marketing	* Yearbook * Business * Communications * Intro. to Marketing * Accounting	* Yearbook  * Business  * Communications  * Intro. to Marketing  * Accounting  * Management/Entrepreneurship

#### ACCOUNTING (030300) 5 CREDIT HOURS PER SEMESTER

TORY GILSON JUNIOR OR SENIOR STATUS

Do you want to keep the daily accounting records of a business? Or are you a small business owner or office manager who becomes embarrassed or mystified when others start talking about debits and credits or discussing financial statements? Learn how to record the daily transactions of a business using the rules of debit and credit and convert this data into useful financial statements. Learn how to record journal entries, post, use special journals and subsidiary ledgers, prepare adjusting entries related to accruals and deferrals, prepare closing entries, establish basic internal controls, and prepare financial statements.

#### JOURNALISM (050401) 5 CREDIT HOURS PER SEMESTER

TORY GILSON SOPHOMORE, JUNIOR, OR SENIOR STATUS

This course is designed to teach the skills necessary to produce the school yearbook, which offers a complete record of an entire school year. The year begins by planning the coverage for the school year and designing a unifying theme for the book. Students will study magazine journalism including layout and design techniques, writing and editing copy, headlines and picture captions. This course provides the study of and practice in gathering and analyzing information, interviewing, note taking and photography. Students will learn strategies of planning, marketing (ad sales) and distribution of the yearbook. At times, deadlines require that staff members work after school, on weekends, and holidays. Students will learn good work habits and are responsible for all phases of yearbook publication. Course Competencies: Upon completion of the course students will be able to:

- 1. Apply the basic principles of page design and layout
- 2. Operate software
- 3. Write copy for captions and text
- 4. Shoot, select, and crop photographs for layout
- 5. Execute a publication strategy

## INTRODUCTION TO MARKETING / BUSINESS COMMUNICATIONS TORY GILSON 5 CREDIT HOURS PER SEMESTER SOPHOMORE, JUNIOR, OR SENIOR STATUS

#### INTRODUCTION TO MARKETING (1ST SEMESTER) (032300)

In this course, students find out what it takes to market a product or service in today's fast-paced business environment. They learn the fundamentals of marketing using real-world business examples. They learn about buyer behavior, marketing research principles, demand analysis, distribution, financing, pricing, and product management.

#### **BUSINESS COMMUNICATIONS (2ND SEMESTER) (030600)**

Business Communication affects all aspects of our lives. This introductory course will teach students to communicate in a clear, courteous, concise, complete and correct manner on both the personal and professional levels. Competency will be developed in oral, written, interpersonal, technological, and employment communication. Listening skills will be incorporated throughout the semester. The overriding goal is to provide students with a solid communication base, so they are able to communicate effectively.

## ENTREPRENEURSHIP / MANAGEMENT 5 CREDIT HOURS PER SEMESTER

TORY GILSON SENIOR STATUS

#### ENTREPRENEURSHIP (1st SEMESTER) (032370)

In this course you will learn the basics needed to plan and launch your own business. Do you have what it takes to start a new business? Do you have an idea for a business but need the tools to get started? This course will provide you with the core skills you need to become successful. In this course you will study the characteristics of successful entrepreneurs. You will also learn about self-employment and basic economic concepts related to small businesses, such as competition and production. This course will also walk you through the steps of setting up a business, including developing a business plan, a mission and a vision, attracting investors, and marketing your company.

#### MANAGEMENT (2<sup>nd</sup> SEMESTER) (032802)

The Business Management course provides students with an understanding of the business management functions, various management theories and the basic organization of a business. Students learn that Business Management is the process of using the resources of a business to efficiently and effectively achieve its goals through planning, organizing, staffing, leading and controlling. The study of business management is an essential component in the design and delivery of a comprehensive business education curriculum.

Students build a strong knowledge base and develop effective management skills and learn that successful managers are individuals who understand the benefits of teamwork and consensus building and are able to maximize the utilization of human resources. As leaders, they recognize the importance of technology and information management in the decision-making process and the value of ethics and social responsibility in building and maintaining business relationships. In addition, managers realize that the ability to recognize and respond to new business opportunities and changing economic conditions is critical to the overall success of a business both locally as well as in the global marketplace.

The material covered in the Business Management course is reinforced and enhanced through the use of technology, guest speakers, videos and hands-on, project-based activities whenever possible.

COMPUTER EDUCATION				
Freshmen Sophomores Juniors Seniors				
* Information Technology I & Digital Media / Media Production Production Production * Digital Media / Media Production Production Production * Digital Media / Media Production Production * Digital Media / Media / Media Production * Digital Media / Medi				

## INFORMATION TECHNOLOGY APPLICATIONS I (270501) INFORMATION TECHNOLOGY APPLICATIONS II (270502) 5 CREDIT HOURS PER SEMESTER

TORY GILSON FRESHMAN STATUS

Main emphasis first quarter is the learning/reviewing of the keyboard. After keyboarding skills are learned, emphasis is placed on keyboarding letters and envelopes, manuscripts, tables, and other business correspondence. In addition, proofreading, spelling, and language skills are implemented. Timed writings are given once a week; however, accuracy is emphasized over speed. An extensive career unit is covered 2<sup>nd</sup> Semester. The successful completion of this course is required of graduation.

## DIGITAL MEDIA / MEDIA PRODUCATION 5 CREDIT HOURS PER SEMESTER

MICHAEL PHELPS SOPHOMORE – SENIOR STATUS

Computer Multimedia is a beginner level course in multimedia production and computer technology. The course will provide students with a basic introduction to multimedia, using industry standard software and hardware. Student will use Macintosh computers for all projects.

#### DIGITAL MEDIA (1<sup>ST</sup> SEMESTER) (270602)

Software introduced during the semester includes: Photoshop Elements(Digital Image Editing), Comic Life(Comic Book Creator), Garageband(Digital Music Creator), and iMovie(Digital Movie Creator)

#### MEDIA PRODUCTION (2ND SEMESTER) (270610)

Software introduced during the semester includes: SketchUp(3D Drawing), Alice(Animation), Blender(3D Drawing and Animation, and Final Cut(Advanced Movie Creator)

#### NOT OFFERED DURING 2020-2021 SCHOOL YEAR

	ENGLISH			
Options	Freshmen	Sophomores	Juniors	Seniors
General /	* English 9	* English 10	* English 11	* English 12
Tech Prep.		* Speech		
College Prep.	* English 9	* English 10	* English 11	* English 12
		* Speech		

## ENGLISH I (050021) 5 CREDIT HOURS PER SEMESTER

ASHLEY WYATT FRESHMAN STATUS

The English I curriculum supports the Nebraska Language Arts Standards (rev. 2014). English I focuses on the study of grammar and composition, six-trait writing, as well as the investigation of literature by genre. A review of the traditional grammar and usage study prefaces the writing of paragraphs, essays, and other compositions. Creative expression (both written and verbal) is also emphasized and is often presented in conjunction with the particular type of literature being studied. Independent reading of a variety of books will also be required. Students will also be polishing their reading, writing, speaking, and listening skills. Students will participate in the Accelerated Reader program both Semesters.

#### ENGLISH II (050022) 5 CREDIT HOURS PER SEMESTER

ASHLEY WYATT SOPHOMORE STATUS

The English II curriculum supports the Nebraska Language Arts Standards (rev. 2014). The literature study in English II illustrates various aspects of the human condition. Fiction, nonfiction, short stories, drama, poetry, and full-length novels are all used as part of the curriculum. Writing skills and the six-trait writing methods are emphasized, studied and practiced frequently. Various types of compositions are required ranging from paragraphs and essays, to short stories. Students will also be required to read independently outside of class. Students will also be polishing their reading, writing, speaking, and listening skills. Students will participate in the Accelerated Reader program both

#### ENGLISH III (050023) 5 CREDIT HOURS PER SEMESTER

Semesters.

ASHLEY WYATT JUNIOR STATUS

The English III curriculum supports the Nebraska Language Arts Standards (rev. 2014). A chronological study of American literature and major American authors is the focus of English III. The anthology is used as a guide with the insertion of individual novels at relevant times. The techniques of persuasive writing are studied and practiced through a variety of assignments. Each student must also read outside of class. Students will also be polishing their reading, writing, speaking, and listening skills. Students will participate in the Accelerated Reader program both Semesters.

#### ENGLISH IV (050024) 5 CREDIT HOURS PER SEMESTER

ASHLEY WYATT SENIOR STATUS

The English IV curriculum supports the Nebraska Language Arts Standards (rev. 2014). Students study the oral tradition, fiction, nonfiction, poetry, and drama as of numerous world cultures including Greece, Rome, Africa, Asia, Europe, and the Americas. Emphasis is on reading, writing, speaking/listening, and multiple literacies. Students complete a variety of writing activities including literary criticism, biographical narrative, essay, journal entry, poem, research reports, and business and technical writing.

Speaking opportunities include debate, discussion, interview, persuasive speech, oral interpretation of a short story, and reflective presentation.

#### SPEECH (050501) 5 CREDIT HOURS PER SEMESTER

ASHLEY WYATT SOPHOMORE STATUS

This course offers the student the opportunity to learn the fundamentals of communication and the processing, preparing, organizing, presenting, and evaluating of speeches. Students will also explore the genre of drama and study and practice theatre techniques. Participation in speech/drama competitions is encouraged but not required. This class is a one semester class opposite Art I.

ENGLISH as a SECOND LANGUAGE				
Freshmen Sophomores Juniors Seniors				
* English Foundations		* English Foundations	* English Foundations	
* Math Foundations		* Math Foundations	* Math Foundations	
* Science Foundations		* Science Foundations	* Science Foundations	
* Social Science		* Social Science	* Social Science	
Foundations	Foundations	Foundations	Foundations	

All Foundation course students are admitted based on their English Language testing. Testing results will determine if the student is placed into Foundations Level II, Level II, or Level III.

#### ENGLISH FOUNDATIONS (310051) 5 CREDIT HOURS PER SEMESTER

ALICIA LUTHER FRESHMAN - SENIOR STATUS

A special course designed to provide students who are learning the English language with subject matter knowledge reflecting the Nebraska State Standards in the area of language arts, including the full range of language experiences i.e., oral, listening, reading and writing skills. This course is designed for students whose instructional level is at the secondary level (grades 9-12).

#### MATH FOUNDATIONS (310111) 5 CREDIT HOURS PER SEMESTER

ALICIA LUTHER FRESHMAN - SENIOR STATUS

A special course designed to provide students who are learning the English language with subject matter knowledge reflecting the Nebraska State Standards in mathematics for students whose instructional level is grades 9-12.

#### SCIENCE FOUNDATIONS (310131) 5 CREDIT HOURS PER SEMESTER

ALICIA LUTHER FRESHMAN - SENIOR STATUS

A special course designed to provide students who are learning the English language with subject matter knowledge reflecting the Nebraska State Standards in science for students whose instructional level is at the secondary level (grades 9-12).

## SOCIAL SCIENCE FOUNDATIONS (310151) 5 CREDIT HOURS PER SEMESTER

ALICIA LUTHER FRESHMAN - SENIOR STATUS

A special course designed to provide students who are learning the English language with subject matter knowledge reflecting the Nebraska State Standards in social studies for students whose instructional level is at the secondary level (grades 9-12).

FOREIGN LANGUAGE					
Freshmen	Freshmen Sophomores Juniors Seniors				
* Spanish II * Spanish III * Spanish III					

#### SPANISH I (060241) 5 CREDIT HOURS PER SEMESTER

KATHLEEN ROOS SOPHOMORE STATUS

This course is designed to develop basic abilities in the Spanish language. Emphasis is placed on pronunciation, grammar, and vocabulary with development of the communication skills of listening, speaking, reading, and writing. Learning about Spanish-speaking cultures is included as an integral part of understanding the language.

#### SPANISH II (060242) 5 CREDIT HOURS PER SEMESTER

KATHLEEN ROOS JUNIOR STATUS

This course begins with a review of skills learned in Spanish I. Further grammar and vocabulary are taught with continued attention to listening, speaking, reading, and writing. Learning about Spanish-speaking cultures continues to be an integral part of the language study.

## SPANISH III (060243) 5 CREDIT HOURS PER SEMESTER

KATHLEEN ROOS SENIOR STATUS

This course begins with a review of skill learned in Spanish II. There is an expansion of grammar and vocabulary study with attention to listening, speaking, reading, and writing. Learning about Spanish-speaking cultures is pursued in the classroom. There is also opportunity for cultural learning outside the classroom.

FAMILY & CONSUMER SCIENCE				
Freshmen	Sophomores	Juniors	Seniors	
* Intro. to FCS	* Growth & Development/	* Growth & Development/	* Growth & Development/	
* Leadership & Ethics in	Parenting	Parenting	Parenting	
Human Services	* Foods & Nutrition /	* Foods & Nutrition /	* Foods & Nutrition /	
	Culinary	Culinary	Culinary	
	* Leadership & Ethics in	* Leadership & Ethics in	* Leadership & Ethics in	
	Human Services		Human Services	
		* Child Development /	* Child Development /	
			Early Childhood Ed.	
			* Life & Career Readiness/	
			Relationships	

## INTRODUCTION TO FAMILY & CONSUMER SCIENCE (090101) 5 CREDIT HOURS PER SEMESTER

ANGIE EHLERS FRESHMAN STATUS

Students will experience how the concepts of communication, ethics, leadership, and teamwork relate to the Human Services and Resources Career Field. Students will consider these concepts as applied to their multiple roles of family member, wage earner and citizens. Clusters to be explored in this career field are: (1) Human Services, (2) Government and Public Administration, (3) Law, Public Safety and Security, and (4) Education and Training. The second semester is designed to help students develop goal setting, resource management, parenting, sewing and interior design skills.

## FUNDAMENTALS OF FOOD & NUTRITION / CULINARY 5 CREDIT HOURS PER SEMESTER

ANGIE EHLERS SOPHOMORE – JUNIOR STATUS

#### **FUNDAMENTALS OF FOOD & NUTRITION (1ST SEMESTER) (090107)**

This course is designed to provide students with the base foundation knowledge of food selection and preparation needed to successfully fuel the human body through consumption of food and resulting food energy. With a beginning foundation of nutrition, students will learn basic preparation skills and the short-term and long-term wellness consequences as a result of nutritional intake, and exposure to careers related to the food industry.

#### CULINARY (2<sup>ND</sup> SEMESTER) (370021)

This course is designed to provide students with curriculum which is focused on the foodservice industry and provides training in workplace and culinary skills, food safety and sanitation, interpersonal and communication skills, as well as an exposure to the areas of restaurant management and career exploration.

## LIFE & CAREER READINESS / INTERPERSONAL RELATIONSHIPS 5 CREDIT HOURS PER SEMESTER

ANGIE EHLERS SENIOR STATUS

#### LIFE & CAREER READINESS (1ST SEMESTER) (090104)

Life and career readiness is a financial literacy course that provides students with the tools to take charge of their personal financial well-being and to make sound personal financial decisions. Units of study include budgeting, credit, insurance, renting an apartment, and banking. Students will explore the

following areas application of critical thinking, decision-making, and problem solving skills to issues impacting adult relationships. Include self-understanding, establishing and maintaining positive relationships in the family, crisis management and building family strengths. Life/work literacy concepts such as wellness across the lifespan and stress management are examined.

#### INTERPERSONAL RELATIONSHIPS (2ND SEMESTER) (090116)

The course includes the study of interpersonal relationships and the effect of these relationships on the well-being of individuals, families, work and society. The course includes concepts such as effective communication, establishing and maintaining relationships, diverse family systems, characteristics of personal development and the impact of relationships on personal and career success.

## HUMAN GROWTH & DEVEOPMENT / PARENTS & FAMILIES 5 CREDIT HOURS PER SEMESTER

ANGIE EHLERS SOPHOMORE – SENIOR STATUS

#### **HUMAN GROWTH & DEVELOPMENT (1ST SEMESTER) (090123)**

This course explores the physical, emotional, social, and intellectual development of individuals across the lifespan. External impacts on development including family structure and practices, social and technological forces, and resources available to individuals and their outcomes will be explored. Classroom, laboratory and educational leadership activities are supplemented through Nebraska FCCLA Career Student Organization.

#### PARENTS AND FAMILIES (2<sup>ND</sup> SEMESTER) (090117)

Students will evaluate the effects of parenting roles and responsibilities on the wellbeing of individuals and families. In this course students will explain the following: influences on parenting, decisions to parent, support services for parents, positive actions to support the physical, emotional, intellectual, and social development family members, parenting theories, and family adjustment to parenthood.

## CHILD DEVELOPMENT / EARLY CHILDHOOD EDUCATION 5 CREDIT HOURS PER SEMESTER

ANGIE EHLERS JUNIOR – SENIOR STATUS

#### CHILD DEVELOPMENT (1ST SEMESTER) (090119)

This course integrates knowledge, skills and practices necessary for nurturing the growth and development of children. The study of the physical, emotional, social, and intellectual aspects related to prenatal through age 12 will be studied in addition to the positive and negative factors that impact child growth and development.

#### EARLY CHILDHOOD EDUCATION (2ND SEMESTER) (090121)

In this course students will explore education and community resources available for the education and necessary services of young children. Students will be exposed to educational needs and resources as well as begin the development of lesson plans and lesson plan components for the education of young children as well as the career skills necessary for a career in early childhood education and services.

## LEADERSHIP & ETHICS IN HUMAN SERVICES (090208) 5 CREDIT HOURS PER SEMESTER

ANGIE EHLERS FRESHMAN – SENIOR STATUS

This course is designed to provide a background of leadership styles and information on the necessary leadership skills including collaboration, ethics, and teamwork. The course is assessed with real-life opportunity to demonstrate one's own leadership style through a practical, personal experience.

INDUSTRIAL TECHNOLOGY			
Freshmen	Sophomores	Juniors	Seniors
* Welding I/Woods I	* Metals & Fabrication	* Metals & Fabrication	* Metals & Fabrication
	* Advances Woods /	* Advances Woods /	* Advances Woods /
Advanced Welding Advanced Welding		Advanced Welding	
	* Mechanical /	* Mechanical /	* Mechanical /
	Architectural Drafting	Architectural Drafting	Architectural Drafting
		* Power, Energy, &	* Power, Energy, &
		Transportation	Transportation
			* Structural Systems

WELDING I / WOODS I (101930) / (101920) 5 CREDIT HOURS PER SEMESTER

TODD HOYT FRESHMAN STATUS

This entry-level course will expose students to various topics of Industrial Technology. Topics include Welding, Woodworking, Drafting and Power Mechanics, and High Technology in the set up and use of a Laser Engraver. Students will also be required to observe all Safety rules and regulations that they learned in Shop 8.

<u>Drafting</u>-Students will learn basic drafting techniques by completing various mechanical drawings using both traditional drafting equipment and Computer Aided Drafting. They will also both sketch and draft the plans for their wood project.

<u>Woodworking</u>-Students will learn basic woodworking skills including various power and hand tools needed to complete an entry level project of their choice.

<u>Welding</u>- Students will learn basic skills in Stick Arc Welding, Mig Welding, Tig Welding, and Oxy-Acetylene Welding.

<u>Power Mechanics</u>-Students will be introduced to basic power mechanics. They will learn about the tools needed in working with small engines and identify the parts of the engine.

MECHANICAL / ARCHITECTURAL DRAFTING (100140) 5 CREDIT HOURS PER SEMESTER LIMIT OF 6 STUDENTS PER SEMESTER

TODD HOYT
PREREQUISITE: WELDING I/ WOODS I
SOPHOMORE – SENIOR STATUS

This course will allow the students to learn more about the drafting industry. The students will learn how to produce drawings by using both traditional methods and Computer Aided equipment. The students will produce mechanical, technical, and architectural drawing.

ADVANCED WELDING / ADVANCED WOODS 5 CREDIT HOURS PER SEMESTER PREREQUISITE: WELDING I/ WOODS I

TODD HOYT SOPHOMORE – JUNIOR STATUS

<u>Advanced Welding (101940)</u> – This class will consist of a semester of Advanced Welding and a semester of Advanced Woodworking. The students will learn advanced methods of welding techniques. They will be required to complete an advanced welding project for the welding portion of this class.

<u>Advanced Woodworking/Cabinetry (101921)</u> – This portion of the class will build on the skills and machines that the students learned in Woods 1. Students will be required to draft and construct an Advanced Wood project during this class.

#### METALS & FABRICATION (016005) 5 CREDIT HOURS PER SEMESTER

PREREQUISITE: ADVANCED WELDING/WOODS SOPHOMORE - SENIOR STATUS

This course focuses on the areas of manufacturing and construction. The students will have the opportunity to expand their knowledge and skills learned in welding and woodworking by designing and completing a MAJOR project. Topics will include metal and wood fabrication, and also the use of plastics and fiberglass.

POWER, ENERGY, & TRANSPORTATION (016000) 5 CREDIT HOURS PER SEMESTER PREREQUISITE: WELDING I/ WOODS I TODD HOYT IUNIOR – SENIOR STATUS

Students in this class will study the history and evolution of Power, Energy and Transportation. They will study and complete experiments in Mechanical Power, Fluid Power, Solar Power, Electrical Power, and Wind Power during this class. Students will also explore multiple energy sources and how society uses each.

STRUCTUAL SYSTEMS (016002) 5 CREDIT HOURS PER SEMESTER PREREQUISITE: WELDING I/ WOODS I TODD HOYT SENIOR STATUS

Students in the class will learn how the construction industry works. Topics will include Architectural Construction, Civil Engineering, and Blueprint reading. Students will also study the tools, techniques, and safety precautions needed to construct a major project to during the school year.

MATHEMATICS					
Options	Options Freshmen Sophomores Juniors Seniors				
General / * Geometry * Algebra II * Math 11 * Business Math Tech Prep.					
College Prep.	* Geometry	* Algebra II	* Trigonometry	* Calculus	

## ALGEBRA I (110300) 5 CREDIT HOURS PER SEMESTER

#### DERRICK PULLIAM / ALISHA REMMENGA 8<sup>TH</sup> GRADE OR FRESHMAN STATUS

Algebra begins with a review of the basic number properties and leads into the use of algebraic terms and variables. With this knowledge, the student is able to solve equations and inequalities, graph equations, factor polynomials and do the operations with them. Emphasis is placed on reasoning abilities in solving story problems.

## GEOMETRY (111200) 5 CREDIT HOURS PER SEMESTER

#### DERRICK PULLIAM / ALISHA REMMENGA FRESHMAN STATUS

Geometry is a college preparatory course in Euclidean plane geometry. The emphasis is on formulating mathematical deductive reasoning both formally (in proofs) and informally (in problems). It also acquaints students with properties of geometric figures, constructions, inductive reasoning, and indirect proofs.

#### ALGEBRA II (110306) 5 CREDIT HOURS PER SEMESTER

#### DERRICK PULLIAM / ALISHA REMMENGA SOPHOMORE STATUS

A college prep class, Advanced Algebra is a review of algebra and an extension of the topics completed there. Additional topics include functions, systems of equations, conic sections and logarithms.

TRIGONOMETRY (111600)
5 CREDIT HOURS PER SEMESTER
PREQUISITE: MINIMUM 79% IN ALGEBRA II

DERRICK PULLIAM JUNIOR STATUS

A college prep class. Advanced Math is a study of trigonometric equations and their graphs and inverses. Other topics include trigonometric identities, trigonometric equations, radian and degree measures, law of Sines & law of Cosines, vectors, and the polar coordinate system. Additional topics are analytic geometry, logarithmic functions, and an introduction into limits. Students will use graphing calculators.

#### MATH 11 (119930) 5 CREDIT HOURS PER SEMESTER

DERRICK PULLIAM IUNIOR STATUS

Math 11 is a prep class for business math and the ACT. Its main purpose is to give students more exposure to the basic concepts of mathematics. Students will be looking mainly at Algebra 2 concepts again, but more in depth and they will also touch on a few trigonometric concepts.

# CALCULUS (110600) 5 CREDIT HOURS PER SEMESTER PREREOUISITE: MINIMUM 79% IN TRIGONOMETRY

DERRICK PULLIAM SENIOR STATUS

A college prep class. Calculus is the study of derivatives and integrals. We will go into depth on each of these items and their definitions. Other topics include graphing functions, finding minimums and maximums using derivatives, concavity using derivatives, using logarithms, and using trigonometric functions. Students will use graphing calculators.

#### BUSINESS MATH / PERSONAL FINANCE 5 CREDIT HOURS PER SEMESTER

TORY GILSON SENIOR STATUS

#### **BUSINESS MATH (1ST SEMESTER) (111800)**

Students will review and apply mathematical operations with whole numbers, decimals, fractions, ratios, and percents. They will understand terminology relating to personal and business mathematics applications and apply basic math skills to the solution of both personal and business applications. They will use common mathematical formulas to solve a variety of personal and business mathematics as well as apply knowledge of computer and calculator use

#### PERSONAL FINANCE (2<sup>ND</sup> SEMESTER) (033000)

This course will inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions leading to financial independence.

MUSIC				
Freshmen	Sophomores	Juniors	Seniors	
*Band *Band *Band *Band				
* Choir * Choir * Choir * Choir				

#### BAND (120500) 5 CREDIT HOURS PER SEMESTER

#### CHASE CHRISTENSEN FRESHMAN-SENIOR STATUS

Through participation in band each student will continually work on improving his/her playing skills. The following skills are emphasized: proper breathing, embouchure, and posture; correct production of a clear, full tone with good intonation; sight reading; the ability to read and understand rhythm patterns, music notation and terminology; and self-confidence as a musician. During marching season, the following skills will also be stressed: correct execution of marching maneuvers on the street and field, and production of a solid, full tone while marching. All early practices are required. Students enrolled in band are required to participate in halftime shows, parades, clinics, contests, pep rallies, pep band, concerts, and any other events designated by the instructor. Each student must be a member of band for at least two years to be able to go on the band trip that is held every two years.

*JAZZ BAND*-----Selected by audition. This group performs at clinics, concerts, and contests. Attendance at all rehearsals is required.

#### CHOIR (120400) 5 CREDIT HOURS PER SEMESTER

BECKA BRUNTZ FRESHMAN-SENIOR STATUS

Through participation in choir, each student shall continually work on improving their singing skills. The following skills are emphasized: proper breathing and posture, the production of a clear, consistent tone that is in tune; sight singing; the ability to read and understand rhythm patters, music notation and terminology; self-confidence as a singer. Students enrolled in concert choir are required to participate in all concerts, clinics, contests, and any other events as designated by the instructor.

*JAZZ CHOIR*-----Selected by audition. This group performs at concerts, clinics, and contests. Attendance at all rehearsals is required. Students must maintain a 70% GPA in all classes to audition.

NATURAL SCIENCES					
Options	Freshmen	Sophomores	Juniors	Seniors	
General / Tech Prep.	* Integrated Science - Physical Science	* Biology	* Science in Practice		
College Prep.	* Integrated Science - Physical Science	* Biology	* Science in Practice * Chemistry	* Physics * Chemistry * College Biology	

## INTEGRATED SCIENCE - PHYSICAL SCIENCE (130420) 5 CREDIT HOURS PER SEMESTER

KEITH SWIFT FRESHMAN STATUS

The content of Integrated Science – Physical Science allows students to continue their understanding of the core ideas in the physical, life, and earth and space sciences learned in middle school. These ideas include the most fundamental concepts from chemistry, physics, biology, and Earth and space science. This course will be aligned with Nebraska Standards.

#### BIOLOGY (130201) 5 CREDIT HOURS PER SEMESTER

SETH EHLERS SOPHOMORE STATUS

This course is designed to prepare the students for general biology at the college level. Instruction will include but not limited to the following: biology and our world, cell structure and function, life processes from the cellular level of organization to more complex multi-cellular organisms, heredity, evolution, ecology, and human body systems. Labs activities will supplement instruction and reinforce concepts learned. Example – The "DNA Who Done It" lab is a representation of DNA finger printing used to help solve crimes. This course will be aligned with Nebraska Standards.

#### SCIENCE IN PRACTICE (130423) 5 CREDIT HOURS PER SEMESTER

SETH EHLERS & KEITH SWIFT IUNIOR STATUS

The content of Science in Practice allows students to fully develop their understanding of the core ideas in the physical, life, and Earth and space sciences. These ideas include the more complex concepts from chemistry, physics, biology, and Earth and space science. This course will be aligned with Nebraska Standards.

ANATOMY (130210) 5 CREDIT HOURS PER SEMESTER PREREQUISITE: MINIMUM 85% IN BIOLOGY SETH EHLERS JUNIOR – SENIOR STATUS

This course will be divided into two areas of biological study. During the first semester the emphasis of study will be on biochemistry. This will include advanced techniques in DNA science and a study of cellular respiration and photosynthesis. Lab sessions will involve growing bacterial cultures, electrophoresis, DNA extraction, and DNA fingerprinting. During the second semester the focus of study is on human anatomy and physiology. This course is primarily designed for those students interested in studying advanced concepts in science, possibly as a means of preparation for technical or medical related fields. This course will be aligned with the Nebraska Standards.

CHEMISTRY (130301)
5 CREDIT HOURS PER SEMESTER

SETH EHLERS JUNIOR - SENIOR STATUS

This course is a college preparatory class to introduce the basic principles needed to enter the general chemistry courses in college. It is a study of the properties, composition, and structure of matter and the change matter undergoes. The principles of structure, matter energy relationships, the mole concept of various elements lead into the study of chemical symbols and formulas, atomic structures, organization, and reactions. Experimentation will provide hands on experience in laboratory techniques that are used in any wet-chemistry lab. Labs will also provide practical application of theories and concepts taught. This course will also be aligned with Nebraska Standards.

PHYSICS (130303) 5 CREDIT HOURS PER SEMESTER PREREQUISITE: MINIMUM 85% IN TRIGONOMRETY KEITH SWIFT SENIOR STATUS

This is a college preparatory class studying the laws of Physics and their applications. The areas of study will include measurements, linear and vector motion, forces, mechanics, energy types, and heat. Applicable labs will focus on bridge design, building and testing, buoyancy tests of boats, and rocket design and launching.

COLLEGE BIOLOGY (DUAL CREDIT) (130202) 5 CREDIT HOURS PER SEMESTER PREREQUISITE: MINIMMUM 85% IN BIOLOGY SETH EHLERS IUNIOR – SENIOR STATUS

This course is designed for the senior that wants a fourth year of science. The course is offered as a Dual Credit Course through Central Community College. The course will cover topics which include cellular chemistry, cellular structure and function, photosynthesis, cellular respiration, meiosis and mitosis, evolution, microorganisms, animals, plant structure and function, and ecology. The course will be a combination of lecture and hands-on experiences. Lab activities will be done to reinforce material that is covered.

PHYSICAL EDUCATION					
Freshmen	Sophomores	Juniors	Seniors		
* PE 9 / Health * Strength & Conditioning	* Strength & Conditioning	* Strength & Conditioning * Lifetime Sports & Fitness	* Strength & Conditioning * Lifetime Sports & Fitness		

### PHYSICAL EDUCATION 9 & HEALTH (080100) / (080107) 5 CREDIT HOURS PER SEMESTER

MARCUS HARVEY FRESHMAN STATUS

The physical education will be geared toward lifetime sports. The student will be exposed to various sports, learn the rules of the game and learn the proper etiquette involved in playing the game. All students are required to dress in the proper clothing for P.E. class. This includes gym shirt, gym shorts, and gym shoes. Students will be graded on attitude, skill level, behavior, dress, participation, written tests, skill tests, and notebooks. The health portion will introduce students to ten different areas of health. These areas include: mental, family and social growth and development, nutrition, exercise and fitness, drugs, diseases and disorders, consumer and personal safety and First Aid, and community and environmental health. Students are required to shower. The student will be graded by written tests, quizzes, notebooks, reports, and classroom discussions.

## LIFETIME SPORTS & FITNESS (080120) 5 CREDIT HOURS PER SEMESTER

MARCUS HARVEY JUNIOR – SENIOR STATUS

This physical education class will be geared toward the more serious athletes that want to better themselves in activity or to improve their physical well-being by lifting weights, stretching and running. The students will be exposed to various lifetime sports, learn the rules of the game and learn the proper etiquette involved in playing the game. The student will be required to wear the appropriate P.E. clothes, including: gym shorts, gym shirt, and gym shoes. They will be graded on participation, attitude, behavior, skill level, and dress. Students will be required to shower.

## STRENGTH & CONDITIONING (080111) 5 CREDIT HOURS PER SEMESTER

MARCUS HARVEY / MICHAEL PHELPS FRESHMAN - SENIOR STATUS

This course is designed for the student wishing to become a better athlete, or improve overall fitness levels. Students in weight training will lift hard four days a week, and become familiar with proper techniques and terminology of weight lifting. Speed, agility, and flexibility training will also be implemented. Students participating must be of acceptable physical health and be willing to work hard. Gym cloths and shoes are required.

SOCIAL SCIENCES					
Options	Freshmen	Sophomores	Juniors	Seniors	
General / Tech Prep.	* Geography	* World History	* American History	* Government	
College Prep.	* Geography	* World History	* American History	* Government	

## GEOGRAPHY (150700) 5 CREDIT HOURS PER SEMESTER

AARON MCCOY FRESHMAN STATUS

This course covers the physical and cultural geography of the seven continents. Much of the class time will be spent in reading, mapping and exploring the cultures of each continent. Each unit describes the geography of a region; such as its landforms, climate, and resources. The units also include the history, political, and economic development of our world's major geographic regions.

#### WORLD HISTORY (150800) 5 CREDIT HOURS PER SEMESTER

AARON MCCOY SOPHOMORE STATUS

This course studies world history from the Early Middle Ages to modern historical events. Main points of emphasis include the study of the different religions, the Renaissance, the Reformation, growth of European nations, World Wars, and the Cold War. Emphasis is placed on major world events and conflicts and how these conflicts helped develop the present day nation states.

#### AMERICAN HISTORY (150820) 5 CREDIT HOURS PER SEMESTER

AARON MCCOY JUNIOR STATUS

The first semester will begin with a review of American History up to the Civil War. Then we will study the causes of the Civil War and the Civil War Era. Then the focus will be upon Reconstruction, growth of American industry, Foreign Policy in South America, and the Progressive Era. The final semester will include American involvement in World War I, post-World War I returns to isolationism, the "Roaring 20's", and the stock market crash/Depression Era, the New Deal and World War II, the Cold War, the Vietnam War and Presidential policies through the present.

#### GOVERNMENT (151110) 5 CREDIT HOURS PER SEMESTER

AARON MCCOY SENIOR STATUS

The course begins with the study of the United States governmental system. This will include the study of the executive, legislative, and judicial branches of the federal government, the Constitution, Nebraska State government, and the political parties. The class will also emphasize the discussion of current events and contemporary issues of our nation and the world. A community service project or term paper will be required for completion of the course.

VOCATIONAL AGRICULUTRE					
Freshmen	Sophomores	Juniors	Seniors		
* Intro. to Agriculture * Plant Science / Agronomic Science	* Intro. to Agriculture * Plant Science / Agronomic Science	* Intro. to Agriculture * Independent Study AG	* Plant Science / Agronomic Science * Crop Management / Biotechnology * Agriculture Leadership / Natural Resources		

#### MIDDLE SCHOOL AGRICULTURE EXPLORATION & LITERACY (011012)

JULIANA LOUDON
7<sup>TH</sup> – 8<sup>TH</sup> GRADE STATUS

The exploratory class provides basic information and understanding of agriculture products. Students will gain a basic understanding of commodities with the focus being on "Farm-to-Plate". Agriculture Literacy and career exploration are also vital components to this course. Students will begin to learn the basics of parliamentary procedure and gain an understanding of the FFA organization.

# INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES (011000) JULIANA LOUDON 5 CREDIT HOURS PER SEMESTER FRESHMAN – SENIOR STATUS PREREQUISITE FOR ALL OTHER AGRICULTURE COURSES

The introductory course for the Agriculture, Food and Natural Resources Career Cluster provides 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. This course should be taken as a prerequisite to all other agricultural courses.

## PLANT BIOLOGY / AGRONOMIC SCIENCE SETH EHLERS 5 CREDIT HOURS PER SEMESTER SOPHOMORE – SENIOR STATUS (FRESHMAN UPON APPROVAL)

#### PLANT BIOLOGY (1ST SEMESTER) (011016)

This course covers the biology of plants grown for food, feed, fiber, fuel, and fun. Students will learn about plant life cycles in managed and natural ecosystems and their role in global carbon and water cycles. Students will also discover the mechanisms plants use to drive and control their growth, propagate, and change to compete with other organisms in their environment.

#### AGRONOMIC SCIENCE (2<sup>ND</sup> SEMESTER) (011008)

This course provides the study of plant physiology and morphology and its relationship to growth, development and reproduction of crop and forage plants in the global environment. Topics include: seed identification, testing and grain grading. Identification of agronomic crops and major weeds in crop production and harvesting and handling will be emphasized.

CROP MANAGEMENT / BIOTECHNOLOGY
5 CREDIT HOURS PER SEMESTER
RECOMMENDED PREREQUISITE: PLANT SCIENCE

JULIANA LOUDON SENIOR STATUS

#### **CROP MANAGEMENT (011008)**

This course investigates advanced crop production and management topics. Students develop an understanding of fertilization methods, resource management, pest management, technology use,

marketing, and world hunger. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

#### **BIOTECHNOLOGY (012004)**

This course focuses on students examining extensively the relationship between biotechnology and modern plant production systems. Students identify purposes and methods of genetic modification of plants and the impact of modern plant production on a global scale. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

## AGRICULTURAL LEADERSHIP / NATURAL RESOURCES 5 CREDIT HOURS PER SEMESTER

JULIANA LOUDON SENIOR STATUS

#### **AGRICULTURAL LEADERSHIP (017000)**

Instruction provided in a semester long leadership, human resource development and related careers course includes leadership in a community, leadership concepts/applications, characteristics of an effective leader, characteristics of an effective manager and related practicum demonstrating contribution to society. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

#### **NATURAL RESOURCES (013000)**

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. Students also look closely at Nebraska's natural resources and management techniques. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

## CASE - ANIMAL SCIENCE (018062) 5 CREDIT HOURS PER SEMESTER

JULIANA LOUDON SENIOR STATUS

The major focus of the Principles of Agricultural Science – Animal (ASA) course is to expose students to agriculture, animal science, and related career options. Students participating in the ASA course will have experiences in various animal science concepts with exciting hands-on activities, projects, and problems. Students' experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets.

Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. In addition, students will understand specific connections between animal science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

The ASA course of study includes: 1) Background and Social Issues of Animal Science, 2) Anatomy and Physiology, 3) Nutrition, 4) Reproduction, 5) Genetics, 6) Animal Health, & 7) Animal Selection.

# LARGE ANIMAL MANAGEMENT (011005) 5 CREDIT HOURS PER SEMESTER FREREQUISITE: ANIMAL SCIENCE JUNIOR - SENIOR STATUS (SOPHOMORE UPON APPROVAL)

This course includes advanced scientific principles and communication skills that build on the knowledge and skills learned in Animal Science. Topics include animal waste management, animal science economics, decision making, global concerns in the industry, genetics, and breeding. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

NURSERY AND LANDSCAPE (012001)
5 CREDIT HOURS PER SEMESTER

JULIANA LOUDON RECOMMENDED PREREQUISITE: PLANT SCIENCE SENIOR STATUS

This course introduces students to the principles of design, methods of establishing and maintaining landscapes, and landscape business management procedures. Includes arranging plants, objects, and earth in the landscape; covers culture and maintenance of plants. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

#### AGRIBUSINESS (011009) 5 CREDIT HOURS PER SEMESTER

JULIANA LOUDON SENIOR STATUS

This course covers skills necessary for entry into employment or furthering education in an agricultural business. The course includes the study of business organizations, business structures, job responsibilities, job applications and interviewing, human relations, marketing, selling, displaying, using business machines, management and entrepreneurship skills. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

AGRICULTURE SALES & ENTREPRENEURSHIP (011011)
5 CREDIT HOURS PER SEMESTER

JULIANA LOUDON PREREQUISITE: AGRIBUSINESS SENIOR STATUS

This course builds on the knowledge and skills covered in Agribusiness. Content includes entrepreneurship, business plan development, risk analysis, product/service promotion, and sales/marketing skill development. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

NOT OFFERED DURING 2020-2021 SCHOOL YEAR