



Course Descriptions

2023-2024

NOTICE OF NONDISCRIMINATION

Students, parents, employees and others doing business with or performing services for the West Central Community School District are hereby notified that this school district does not discriminate on the basis of race, color, national origin, religion, sex, disability, sexual orientation, gender identity, marital status, or age (except students), in admission or access to, or treatment in, its programs and activities.

The school district does not discriminate on the basis of race, color, national origin, religion, sex, disability, sexual orientation, gender identity, marital status, or age (except students), in admission or access to, or treatment in, its hiring and employment practices. Any person having inquiries concerning the school district's compliance with the regulations implementing Title VI, Title VII, Title IX, the Americans with Disabilities Act (ADA), § 504 or Iowa Code § 280.3 is directed to contact:

Attn: Superintendent
305 Pember St
Maynard, IA 50655
(563) 637 - 2294

who has been designated by the school district to coordinate the school district's efforts to comply with the regulations implementing Title VI, Title VII, Title IX, the ADA, § 504 and Iowa Code § 280.3 (2007).

COLLEGE ATHLETIC ELIGIBILITY

To be eligible for NCAA college athletics, you must:

- Graduate from high school.
- Academic Requirements – Complete 16 core courses **and** have a minimum GPA of 2.3 (for D1) or 2.2 (for D2) in those core courses. The chart below shows the breakdown of core course requirements for D1 and D2:

Core Curriculum	Division 1	Division 2
English Core	4 years	3 years
Math Core (Algebra 1 or higher)	3 years	2 years
Science Core (1 year must be lab science if your school offers it)	2 years	2 years
Social Science Core	2 years	2 years
Additional courses from English, Math, or Science	1 year	3 years
Additional courses in any of the above areas or foreign language, comparative religion, or philosophy	4 years	3 years
Total Core Units Required	16	16

- West Central's NCAA approved core courses that meet the criteria in the above chart can be found on the [NCAA website](#). West Central's school code is: 162820.
- NCAA Sliding Scale – A combination of your GPA and SAT/ACT test scores is used to determine your eligibility. [View the sliding scales](#) to determine what GPA and test scores you'll need.
- Incoming college freshmen will also have to satisfy [amateurism eligibility requirements](#).
- For more information on NCAA requirements, [visit this website](#) or download the [eligibility checklist](#).

You are responsible for [creating your NCAA account](#), understanding eligibility guidelines, and meeting all criteria.

**WEST CENTRAL COMMUNITY SCHOOL DISTRICT
CREDITS NEEDED FOR HIGH SCHOOL GRADUATION
48 Credits Required To Graduate**

COMPUTER LITERACY	1 Credit 1 Semester	Keyboarding or a course in computer science (HS or college level).
FINE ARTS	1 Credit 1 Semester	Band or Choir or Art
LANGUAGE ARTS	8 Credits 8 Semesters	Must include: <ul style="list-style-type: none"> ● 2 semesters of English 9, ● 2 semesters of English 10, & ● 1 semester of Speech, Mass Media Contemporary Literature, or college Public Speaking, Communication Skills, Workplace Communication
MATHEMATICS	6 Credits 6 Semesters	Must include: 2 Semesters of Pre-Algebra, Algebra I, or Geometry
FINANCIAL LITERACY	1 Credit 1 Semester	Life Skills, General Business II, Consumer Economics, or a college Finance or Microeconomics course
PHYSICAL EDUCATION	2 Credits 8 Semesters	1/4 credit per semester—may be waived for sports participation or a full academic class load.
SCIENCE	6 Credits 6 Semesters	Must include: <ul style="list-style-type: none"> ● 2 Semesters of Physical Science, ● 2 Semesters of Environmental Science[^], ● 2 Semesters of Biology[^]
SOCIAL STUDIES	7 Credits 7 Semesters	Must include: <ul style="list-style-type: none"> ● 2 semesters of American History, ● 2 semesters of a world-related course, & ● 1 semester of American Government
ELECTIVES	16 Credits 16 Semesters	You will need more electives if any of your PE credits were waived.
<u>TOTAL CREDITS REQUIRED FOR GRADUATION</u>	48 CREDITS	[^] - 1 semester of college would be accepted. You still still need total Credits

Course Descriptions by Department

[Art](#)
[Ag](#)
[Business](#)
[English](#)
[Family & Consumer Science](#)

[Industrial Technology](#)
[Health](#)
[Math](#)
[Music](#)
[Physical Education](#)

[Science](#)
[Social Studies](#)
[Spanish](#)

Agricultural Education Course Descriptions

Introduction to Agriculture

A two-semester, 2 credit elective course available to students, grades 9-12. Prerequisite: NONE. This course is offered for students interested in getting the basic knowledge of agriculture. Throughout this course students will have an understanding of what the 3-circle model of agriculture education is, as well as learn about FFA and what FFA has to offer. In this course, students work on their employability skills through practical applications. Students explore career and post-secondary opportunities in agriculture. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Students investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

Animal Science

A one-semester, 1 credit elective course available to students grades 10-12. Prerequisite: Introduction to Agriculture. This course is offered for students who want to learn more about the animal industry. Throughout the semester students explore different animals through animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing.

Agronomy

A one-semester, 1 credit elective course available to students grades 10-12. Prerequisite: Introduction to Agriculture. This course is offered for students interested in learning about crop production and soil management. In this course students will understand the agricultural systems in managing soil and producing a crop. Students will learn about plant, soil, tillage, pest, environmental, and sustainable aspects of crop production.

Horticulture

A one-semester, 1 credit elective course available to students grades 10-12. Prerequisite: Introduction to Agriculture. This course is offered for students interested in food production and management. In this course students will have organized subject matter and practical experiences related to the culture of plants used principally for ornamental or aesthetic purposes. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticulture enterprises. Typical instructional activities include hands-on experiences with propagating, growing, establishing, and maintaining nursery plants and greenhouse crops; tissue culture techniques; designing landscapes; preparing designs; sales analysis and management; participating in personal and community leadership development activities; planning and implementing a relevant school-to-work transition experience; and participating in FFA activities.

Art Course Descriptions

Senior Show

Two semesters – 2 high school credits – 12th grade only – prerequisite: none

This is an independent study course that enables students to independently explore work within a specific art medium, concept, or idea through in-depth examination. Senior Show may serve as an opportunity for students to expand their expertise in a specific medium and style, to explore a topic

in greater detail, or to develop more advanced skills. The student will create a 6 piece body of artwork to display during Fine Arts Night.

Drawing

1st semester – 1 high school credit – grades 9-12 – prerequisite: none

Drawing provides a foundation in drawing using a variety of techniques and media (such as pen-and-ink, pencil, chalk, and so on) in both black and white and color, emphasizing observation and interpretation of the visual environment, life drawing, and imaginative drawing. These courses typically include applying the elements of art and principles of design, along with a study of art and artists from a worldwide perspective, and instruction in the critique process. Advanced courses may encourage students to refine their creative processes and develop their own artistic styles following and breaking from traditional conventions.

Wheel Throwing

1st semester – 1 high school credit – grades 9-12 – prerequisite: none

Engages students in learning experiences with creative production on the pottery wheel. This course provides students with the knowledge of ceramic techniques (kiln firing, glazing) and processes with an emphasis on creative design, aesthetic inquiry, and craftsmanship.

Painting

2nd semester – 1 high school credit – grades 9-12 – prerequisite: none

Provides a foundation in painting using a variety of techniques and media (such as watercolor, tempera, oils, acrylics), emphasizing observation and interpretation of the visual environment, life drawing, and imaginative painting. These courses typically include applying the elements of art and principles of design, along with a study of art and artists from a worldwide perspective, and instruction in the critique process. Advanced courses may encourage students to refine their creative processes and develop their own artistic styles following and breaking from traditional conventions.

Hand-Building

2nd semester – 1 high school credit – grades 9-12 – prerequisite: none

Engages students in learning experiences with creative production using hand building methods such as coil, slab, relief, and pinching. This course provides students with the knowledge of ceramic techniques (kiln firing, glazing) and processes with an emphasis on creative design, aesthetic inquiry, and craftsmanship.

Sculpture

1st quarter – 0.5 high school credit – grades 9-12 – prerequisite: none

Sculpture courses promote creative expression through three-dimensional works. These courses explore representational and abstract sculpture through subtractive (carving), additive (modeling), and assemblage techniques in one or more media. This includes the production of representational and abstract sculptures while incorporating elements of art and principles of design, along with a study of historical and contemporary sculpture and sculptors from a worldwide perspective. This course also provides instruction in the process of responding to art through analysis, critique, and interpretation for the purpose of reflecting on and refining work.

Digital Drawing

2nd quarter – 0.5 high school credit – grades 9-12 – prerequisite: none

Students will use digital media techniques to create their art. Instead of paints, pencils and canvas, students use software programs such as Adobe Photoshop, Illustrator, and Ibis paint to create their art. Instruction provides the process of responding to art through analysis, critique, and interpretation for the purpose of reflecting on and refining work.

Photography

3rd quarter – 0.5 high school credit – grades 9-12 – prerequisite: none

Photography provides students with an understanding of photographic media, techniques, and processes. This course focuses on development of photographic compositions through manipulation of the fundamental processes of artistic expression. Students may learn to make meaningful visual statements with an emphasis on personal creative expression to communicate ideas, feelings, or values. Students engage in critiques of their photographic images, the works of other students, and those by professional photographers for the purpose of reflecting on and refining work.

Crafts

4th quarter – 0.5 high school credit – grades 9-12 – prerequisite: none

This course helps students apply fundamental processes of artistic expression to the materials and accompanying aesthetics of crafts. Projects may include a wide range of crafts; some possibilities include calligraphy, macrame, string art, wood burning, mask-making, crocheting, barn quilts and so on.

Business Course Descriptions

Accounting (high school)

1st semester – 1 high school credit – grades 11-12 – prerequisite: none

This course provides students with the principles of bookkeeping and accounting to prepare them for further education in the field. Emphasis is on the analysis of transactions and recording them in journals and subsidiary ledgers.

Keyboarding I

1st semester – 1 high school credit – grades 9-12 – prerequisite: none

Students will first review main parts of the computer, proper keyboarding techniques and in time, improve accuracy and speed in their keyboarding abilities. Also, students will learn how to type and format a variety of personal and business letters, reports, tables, and outlines. Along with keyboarding, students should improve their proofreading and correcting skills.

Advanced Keyboarding

Two semesters – 2 high school credits – grade 12 only – prerequisites: Keyboarding I & Computer Business Apps (NICC BCA212)

This class is responsible for the production of the school yearbook. Through instruction in this course, the student will learn how to operate a digital camera, use various computer software programs, become familiar with the materials needed to prepare a publication, arrange eye-appealing materials, create and format various business documents, and learn to work with his/her peers in a dependable, responsible manner.

General Business I

2nd semester – 1 high school credit – grades 9-12 – prerequisite: none

This class covers basic business principles including economic systems, economic roles, economic measurements, management, marketing, business structures, international business, human resources, and financial reports.

General Business II

1st semester – 1 high school credit – grades 9-12 – prerequisite: none

This class features information on consumers, personal finance (bank accounts and savings strategies), risk management (insurance), and credit.

Sports & Entertainment Marketing

1st semester – 1 high school credit – grades 10-12 – prerequisite: none

This class helps students develop an extensive understanding of marketing concepts and theories that apply to sports, entertainment and business. Areas covered in this course include: the basics of marketing, target marketing and segmentation, sponsorship, event marketing, promotion and marketing plans.

Intro to Accounting (ACC-115)

2nd semester – 1 high school/3 college credits – grades 11-12 – prerequisite: HS Accounting

This course builds upon the content learned in the high school Accounting course. It provides students with the principles of bookkeeping and accounting to prepare them for further education in the field. Emphasis is on the analysis of transactions and recording them in journals and subsidiary ledgers. Additional topics include payroll records, income and social security taxes and the introduction of computerized accounting through the use of spreadsheets.

Employability Skills (WBL-110)

2nd semester – 1 high school/2 college credits – grades 10-12 – prerequisite: none

Basic introduction to skills necessary for an entry-level employment position. Students will do job searches, prepare resumes and a career portfolio, and learn helpful tips for applying, interviewing and getting a job.

Information Computing (CSC-116)

2nd semester – 1 high school/2 college credits – grades 11-12 – prerequisite: none

This course presents the basic concepts of information systems and computer literacy. The course incorporates theory as well as hands-on practice which focuses on spreadsheets and database management systems (DBMS). Students will explain the components of an Information System (IS), demonstrate word processing techniques, skills in spreadsheet applications and database management. illustrate a presentation and discuss the strategies and security of an Information System (IS).

Intro to Computer Business Applications (BCA-212)

2nd semester – 1 high school/3 college credits – grades 9-12 – prerequisite: Keyboarding I

An overview of application software concepts through hands-on exercises using business application software. Stresses practical use of spreadsheet, word processing, database, and graphic programs.

English Course Descriptions

English 9

Two semesters – 2 high school credits – grade 9 – prerequisite: none

This course will give Freshmen a basic overview of English skills in reading, writing, listening and speaking. Students will study in a literature-based environment with readings that will promote multiple levels of comprehension skills, higher-order thinking skills, and interpersonal skills. Literary forms to be explored will be short stories, the novel, nonfiction, and Shakespearean dramas. Writing workshops will provide students the opportunity to improve skills in writing, grammar and mechanics through a variety of written work. Students will work toward the mastery of the Iowa Common Core English Standards in listening, writing, reading, language and speaking.

English 10

Two semesters – 2 high school credits – grade 10 – prerequisite: English 9

This course will give Sophomores a comprehensive course that explores the various aspects of the English language through the studies of oral communication, reading, writing, vocabulary, and grammar. Close reading strategies and critical thinking skills help students comprehend novels, plays, short stories, and essays. Grammar, writing, and vocabulary lessons complement the readings. Students will work toward the mastery of the Iowa Common Core English Standards in listening, writing, reading, language and speaking.

English III

Two semesters – 2 high school credits – grades 11 & 12 – prerequisite: English 9 & 10

This course provides an overview of several literary works within American literature. Close reading strategies and critical thinking skills will be emphasized to help students comprehend primary resources and thought-provoking literature, including poetry, drama, short stories, and novels. Grammar, writing, and vocabulary complement the readings. Students will work toward the mastery of the Iowa Common Core English Standards in listening, writing, reading, language and speaking.

Mass Media

2nd semester (even years) – 1 high school credit – grades 11 & 12 – Prerequisite: English 9 & 10

In this course students will study the importance of mass media as pervasive in modern life at the local, national, and global levels. Students recognize the impact of mass media messages through news, entertainment, and persuasion on contemporary society. Students analyze and evaluate the history, governance, and ethical issues of mass media to gain a perspective of how influential mass communication has become. Students prepare for their roles as informed and engaged citizens in a democracy. Projects through technology will enhance student learning and experience. Students will use media literacy and communications skills to become writers, speakers, or media producers who address content issues and the impact of mass communication. Students will become knowledgeable consumers of mass media information.

Contemporary Literature

2nd semester (odd years) – 1 high school credit – grades 11 & 12 – prerequisite: English 9 & 10

Students will have the opportunity to read a wide variety of literature included in Language Arts in the genre of novels, short stories, poetry, fiction, mystery, culture, biography and drama. Through reading, writing, and discussion, students will develop higher levels of understanding, become

reflective readers, and display the ability to form judgements and evaluations about a text and its relationship to self and the real world.

English Skills

1st semester – 1 high school credit – grades 11 & 12 – prerequisite: English 9 & 10

This course will prepare students with life skills in the areas of relationships, employment, society, meeting challenges, making discoveries, and facing reality. Students will learn through short stories, nonfiction events, in-depth reading, practice scenarios, and class discussion. Workshops will be provided in writing, critical thinking, speaking, and vocabulary. Students will experience life skill training guided by the standards of 21st Century Skills and Common Core Language.

High School Speech

1st semester – 1 high school credit – grades 11 & 12 or instructor approval – prerequisite: English 9 & 10

Students in this course will study a variety of speech presentations and gain experience in front of the class by preparing a narrative, demonstrative, informative, debate, or others to name a few. Students will learn to evaluate professional presentations as well as their classmates. Standards of Common Core Language and 21st Century Skills will guide instruction.

Comprehensive Drama

2nd semester – 1 high school credit – grades 11 & 12 or instructor approval – prerequisite: English 9 & 10

Students will gain the basic understanding of stage production and terminology. Knowledge of the following major elements of theater will be studied: performers, audience, director, theater space, and design. Activities will enhance the student's experience with the projection of emotions and actions. Students will be evaluated through their performance and participation. Standards of Common Core Language and 21st Century Skills will guide instruction.

Health Course Descriptions

Health I

1st semester – 1 high school credit – grades 10-12 – prerequisite: none

This course prepares the student to assess their own lifestyle, personality, ability to deal with stress and at-risk behaviors. Skills that students will develop include intervention skills for substance abuse, skills for stress management, how to build self-esteem, eating disorders, and dealing with loss and depression. This course is open to any sophomore through senior who has an interest in helping others. It is strongly recommended for individuals entering the professions (counseling, social work, nursing, and education).

Health II

2nd semester – 1 high school credit – grades 10-12 – prerequisite: none

Prerequisites: None. This course is designed to help the student grasp an understanding of the nervous system, senses, chemical regulators, respiratory system, cardiovascular system, heredity, infectious diseases, public health, health services, and first aid. It is strongly recommended to individuals who have an interest in learning more about the workings of their body and how it is affected by disease and are entering health related professions.

Family and Consumer Science Course Descriptions

Sports Nutrition

One semester - 1 high school credit- grades ?? - prerequisite: none

This course will provide students with a comprehensive understanding of the nutritional needs of athletes and physically active individuals. Students will learn how to develop individualized nutrition plans for athletes and physically active individuals, based on their specific needs and goals. The course will also cover the latest research in sports nutrition and how to apply it to practice.

Work and Family I & II

Two semesters – 2 high school credits – grades 10-12 – prerequisite: none

As an introductory and comprehensive family and consumer sciences class, this is meant to provide exposure to several topics. Included units are personal growth and management, finance, consumer skills, clothing, housing, food skills, child development/parenting, sewing, interpersonal skills, and job preparedness.

Child Development I

1st semester – 1 high school credit – grades 10-12 – prerequisite: none

This course explores family life and development with special attention to children's growth in emotional, social, physical, and intellectual areas. It begins with thinking about parenting and concludes with age 3. Included in this time are experiences with an empathy belly and a "fake" baby.

Child Development II

1st semester – 1 high school credit – grades 10-12 – prerequisite: none

In this class, students learn about development in children ages four through 18 in addition to other issues involved with children and child-centered careers. The class has been fortunate enough to interact with elementary students as well to see real life examples of the information they are learning about.

Foods I

1st semester – 1 high school credits – grades 10-12 – prerequisite: none

Just as it sounds, this course builds basic food preparation and nutrition skills for a portion and then moves into a lab setting along with more information and application practice with preparing different types of food.

Foods II

2nd semester – 1 high school credits – grades 10-12 – prerequisite: Foods 1

This course is a continuation of Foods I and deals with food information and labs that become progressively more complex. Hospitality and food industry work skills are also included in this class.

Life Skills

Two semester – 2 high school credits – grades 10-12 – prerequisite: none

During this semester-long class, students explore financial management, laundry, mending clothes/basic sewing skills, foods skills, job seeking skills, and other requested adult living subject areas.

Relationships

Two semester – 2 high school credits – grades 10-12 – prerequisite: none

This course analyzes the different relationships that take place across the lifespan including friendship, dating, engagement, marriage, and the child/parent relationship. The class also focuses on the subjects of self, divorce, being single, and others that may influence relationships.

Interior Design

Two semester – 2 high school credits – grades 10-12 – prerequisite: none

During this course, students learn about all stages of housing development and design. Samplings of units include history of housing, housing regulations, house planning, housing style, and housing design.

Fashion Merchandising

Two semester – 2 high school credits – grades 10-12 – prerequisite: none

This course delves into all aspects of fashion history, techniques, and trends during the first portion. The second part of this course focuses on applying production techniques and marketing methods learned in the previous portion. A highlight of this class for many is the field trip to Iowa State's "Behind-the-Scenes" day where students get first-hand experience with fashion design and production.

Industrial Technology Course Descriptions

Machine Drawing

1st semester – 1 high school credit – grades 10-12 – prerequisite: Intro to Manufacturing

This course is offered to students who are interested in acquiring skills needed to read and produce drawings common to industry. Drafting concepts to be covered include: sketching, orthographic projection, pictorial views, dimensioning, section views, auxiliary views, and architectural floor plans. These drawings will be produced both by using traditional manual design methods and also by utilizing computer design methods and software. Design software used includes Google Sketchup Pro, AutoCad, VCarve and Torchmate CAD. Students will be given the opportunity to design then produce a product using either the CNC Router or CNC Plasma Table. Any costs involved with the project are the responsibility of the student.

Machine Woods Technology

2nd semester – 1 high school credit – grades 10-12 – prerequisite: Intro to Manufacturing

This course is offered to students who are interested in learning the basic skills of cabinet making, designing projects, and problem solving. The activities in this course are designing and constructing a major piece of furniture, or a suitable substitute. All student projects are subject to instructor approval. All material, hardware, and other costs involved with the project are the responsibility of the student.

Special Projects

1st or 2nd semester – 1 high school credit – grades 11-12 – prerequisite: Machine Woods & Metals/Welding

The course is designed for students that have successfully completed other Industrial Technology classes and want to further their skills in areas they've studied previously. This course could also give students a chance to learn new skills in topic areas that scheduling conflicts have prevented them from being able to take. The costs involved with this course will vary, depending on the student's choice of activities. (Instructor approval is required for admission to this class.)

Metals/Welding

1st or 2nd semester – 1 high school credit – grades 10-12 – prerequisite: Intro to Manufacturing
This course is offered to students interested in acquiring the skills needed to perform basic welding, cutting, and metal forming operations. Areas of study include: SMAW(stick) welding, GMAW (wire) welding, GTAW (TIG) welding, Soldering, Brazing, Oxy/Acetylene welding. Resistance (spot) welding and sheet metal layout. Students will build a metal toolbox for a project, with a cost of \$10 to \$20.

Advanced Metals/Welding

1 semester – 1 high school credit – grades 10-12 – prerequisite: Metals/Welding
This course builds on the skills learned in the first metals class and also exposes students to additional skills in the metal working industry. New areas studied include: threads/fasteners, foundry (casting aluminum), CNC plasma cutting, and metal lathe work. Time will be allotted for students to build a project that incorporates metal. Projects are subject to instructor approval, and any costs are the responsibility of the student.

Introduction to Manufacturing

2 semesters – 2 high school credit – grades 9-12 – prerequisite: none
This course is geared toward helping students learn the basic skills of most manufacturing industries. Students will learn the foundational skills to take other classes within industrial technology. Activities include drafting, print reading, machine operation and workplace safety. There is generally an expense of \$10-\$20 for this course.

Manufacturing Processes

1 semester – 1 high school credit – grades 10-12 – prerequisite: Intro to Manufacturing
This course is offered for students interested in operating a production company. The students will choose a product design, manufacture, and sell that product. Areas of study include: business structure, company organization, product selection and design, calculating selling prices, and material estimation.

Power Systems (COULD BE AG CREDIT OR I-TECH CREDIT)

1 semester, 1 high school credit -- grades 9-12. Prerequisite: Introduction to Manufacturing
This course is offered for students interested in learning about small gas engines. During this course students will learn the difference between 2 cycle and 4 cycle engines. Students will also disassemble and reassemble a small gas engine.

Math Course Descriptions

Pre-Algebra

Two semester – 2 high school credits – grade 9 – prerequisite: 8th grade math

This course is designed to introduce students to algebra skills, with a strong focus on linear functions. It includes mathematical concepts for simplifying expressions, solving equations, and graphing linear functions. It also introduces the basics of working with roots and exponents.

Algebra I

Two semester – 2 high school credits – grade 9 or instructor approval – prerequisite: 8th grade math

This course is designed to emphasize the study of multiple representations of linear and non-linear functions. It includes mathematical concepts for working with algebraic expressions, equations, and inequalities; analyzing, solving, and graphing linear functions, linear inequalities, systems of equations, quadratic functions, and exponential functions; and introduces concepts from statistics and probability.

Modern Geometry

Two semester – 2 high school credits – grade 10 or instructor approval – prerequisite: Algebra I

This course is designed to emphasize the study of the properties and applications of common geometric figures. Inductive and deductive reasoning is used to problem solve with two- and three-dimensional geometric figures. It includes the study of transformations and right triangle trigonometry. There is an emphasis on writing proofs to solve (prove) properties of geometric figures.

Practical Geometry

Two semester – 2 high school credits – grades 9-10 or instructor approval – prerequisite: Pre-Algebra or Algebra I

This course breaks down concepts from Modern Geometry. There is a strong emphasis on two and three dimensional figures, tessellations, and real world applications of geometric concepts.

Algebra II

Two semester – 2 high school credits – grade 11 or instructor approval – prerequisite: Modern Geometry

This course is designed to build upon the concepts from Algebra I. It includes mathematical concepts for working with algebraic functions; analyzing, solving, transforming, and graphing quadratic functions, exponential and logarithmic functions, polynomial functions, rational functions, and radical functions; and introduces concepts from trigonometry.

Functions, Statistics, Trigonometry, and Pre-Calculus

Two semester – 2 high school credits – grade 12 or instructor approval – prerequisite: Algebra II

This course is designed to build upon the concepts from Algebra II. It includes mathematical concepts for working with algebraic functions and analyzing, solving, transforming, and graphing polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions. It introduces concepts from statistics including measures of center and measures of spread, and concepts from probability including both discrete and continuous probability distributions.

Trade Math

1st semester – 1 high school credit – grades 9-12 – prerequisite: none

This course is designed to apply mathematical concepts to real world situations. In this class students study basic math and problem solving skills.

Consumer Math

2nd semester – 1 high school credit – grades 9-12 – prerequisite: none

This course is designed to introduce students to financial basics: checking accounts, savings accounts, simple and compound interest, state and federal tax concepts, etc.

Music Course Descriptions

Chorus (Vocal Music)

Two semester – 2 high school credits – grades 9-12 – prerequisite: none

HS Chorus is the elective vocal ensemble at West Central available to high school students.

Members are required to take part in several co-curricular performances throughout the year, including state solo/small ensemble festival and state large group festival. All choir members receive individual or small group voice lessons with the instructor. Extra musical opportunities such as honor choirs are available to members. A continuation of sight reading, music theory, and music history are addressed within the course's 4-year sequential curriculum. The HS choir will travel as an ensemble during the spring of even years (2024), with the expectation that students are eligible for the trip if they are enrolled for the full school year.

Band (Instrumental Music)

Two semester – 2 high school credits – grades 9-12 – prerequisite: none

The major performing groups within the high school instrumental music program are: 1) Concert Band, which focuses on music for the formal concert setting; 2) the BLUE DEVIL MARCHING BAND, which performs at home football games; 3) Pep Band, which performs at home basketball games. In addition the students are given the opportunity to work on solo and ensemble literature throughout the year and perform these pieces at state solo and ensemble festival in the spring. The students receive weekly lessons to help master the concepts and techniques specific to their instrument. Students are exposed to an overview of music history and theory through music of all time periods. The HS band will travel as an ensemble during the spring of odd years (2025), with the expectation that students are eligible for the trip if they are enrolled for the full school year.

Music Theory

2nd semester – 1 high school credit – grades 9-12 – prerequisite: Concurrent enrollment in Band or Choir, with a solid foundation of basic music-reading skills

This course is designed to introduce students to basic music theory concepts. Course content will include: musical terminology, the science of sound production, note names, clef studies, basic rhythm construction, key signatures, scale construction, interval study, triad construction, chord structure, four-part voice leading, sight-singing, and ear training.

Physical Education Course Descriptions

Zero Hour PE

Two semester – 0.5 high school credits – grades 9-12 – prerequisite: none

Emphasis on strength and conditioning. Olympic lifts will be taught and learned each day. Emphasis is on individual improvement not on a specific target weight that must be reached. This is a highly active class that requires students to be dedicated, to be on time, and dedicated to working hard towards individual goals and improvement. Athletes are highly encouraged to take this class. Note: class meets from 6:30am-7:30am

Physical Education

Two semester – 0.5 high school credits – grades 9-12 – prerequisite: none

Is offered to students who want to participate in traditional team games, such as volleyball, football, kickball, and other team games. There will also be individual games such as badminton, pickleball, Frisbee golf, and others. In all PE classes, there is an emphasis on fitness along with having fun in each class period. Student input is taken into consideration when deciding which activities are done in class.

Arranged PE

Two semester – 0.5 high school credits – grades 9-12 – prerequisite: none

Is offered to students at the instructor's discretion. This class meets during the student's study hall time. The purpose is to meet the needs of students whose schedules do not fit the traditional PE hours. Activities include helping with the elementary PE classes and keeping a fitness journal. Students enrolled in arranged PE will work one on one and in small groups with elementary students.

Science Course Descriptions

Physical Science

Two semester – 2 high school credits – grades 9-10 – prerequisite: none

This course covers topics from chemistry and physics including atoms, molecules, the periodic table, chemical reactions, nuclear reactions and nuclear power, Newton's 3 laws of motion, gravity, momentum, energy, heat & temperature, as well as waves.

Environmental Science

Two semester – 2 high school credits – grades 9-10 – prerequisite: none

This course covers topics including nuclear fusion, life cycles of stars, geological time-line of Earth, fossils, cycles of Earth, landforms, weather, climate, sustainability, and environmental issues.

Biology

Two semester – 2 high school credits – grade 11 – prerequisite: none

This course covers topics from photosynthesis, cellular respiration, homeostasis, DNA replication, mitosis, genetics, evolution, natural selection, adaptation, behavior, human activity in the environment, and human anatomy.

Computer Science

Two semester – 2 high school credits – grades 10-12 – prerequisite: none

This course covers topics including coding, the internet, web design, game design, programming, careers in computer science, data analysis, and robotics. Students can take this class multiple times and create individual projects that fit their interests and skill level.

Chemistry

1st semester (odd years) – 1 high school credit – grades 11-12 – prerequisite: physical science

Learn how the materials in your life change, such as iron to rust on your car or how a battery is constructed. This course covers topics from atomic and electronic structure of atoms, nuclear reactions, periodic trends, molecular structure, heat & calorimetry, mole calculations (stoichiometry), acids & bases, reaction rates, and some organic chemistry. Note: 2nd semester will be either high school or college chemistry.

Intro to Chemistry and Lab (CHM 110 & 111)

2nd semester (even years) – 1 high school credit/4 college credits – grades 11-12 – prerequisite: first semester high school chemistry

This course covers topics from atomic and electronic structure of atoms, nuclear reactions, periodic trends, molecular structure, heat & calorimetry, mole calculations (stoichiometry), acids & bases, reaction rates, and some organic chemistry. There is an extended lab period one day a week.

Physics

1st semester (even years) – 1 high school credit – grades 11-12 – prerequisite: physical science

Learn how energy and matter interact so you can do useful things. This course covers topics from kinematics (laws of motion), gravity and planetary motion, momentum, energy, electricity, magnetism, waves (sound and optics), some fluids and some thermodynamics (heat & engines). Note: 2nd semester will be either high school or college physics.

Survey of Physics including lab (PHY 106)

2nd semester (odd years) – 1 high school credit/4 college credits – grades 11-12 – prerequisite: first semester high school physics

This course covers topics from kinematics (laws of motion), momentum, energy, electricity, magnetism, waves (sound and optics), and thermodynamics (heat & engines). There is an extended lab period one day a week.

Social Studies Course Descriptions

9th Grade American History

Two semester – 2 high school credits – grade 9 – prerequisite: none

This course counts for two American History credits, which is the requirement for graduation. Students study all aspects of American History from Reconstruction through the Vietnam War. There is a wide range of topics covered that include but are not limited to: Reconstruction, the Gilded Age, Industrial America, the Progressive Era, WWI, the Roaring 20's, Great Depression, WWII, the Cold War, Korean War, Civil Rights Movement and the Vietnam War.

World Cultures

Two semester – 2 high school credits – grade 10 – prerequisite: none

This course counts as a World History credit for Social Studies. Students study the geographical, historical, economic and political structures of regions throughout the world. Through the in-depth study of these regions students learn the major characteristics of different cultures in our world today, while also having a strong understanding for the reasons such distinct cultures have formed.

American Government

1st semester – 1 high school credit – grades 11-12 or instructor approval – prerequisite: none

The American Government course is a graduation requirement. Students study all aspects of the United States government. The Constitutional key concepts and the three branches of our

government will be covered in depth. Students will analyze the historical basis of our government, while comparing our political and economic system to other systems in the world today.

Consumer Economics

2nd semester – 1 high school credit – grades 10-12 – prerequisite: none

This course counts as a financial literacy credit. Students will cover a wide variety of topics that help with finances. Some of the many topics covered include: how to do your taxes, risk & rewards of numerous types of investments, credit & credit scores, budgeting, social security, and a variety of insurances.

Current Events

1st semester – 1 high school credit – grades 9-12 – prerequisite: none

Students analyze a plethora of events within the past decade. We analyze current happenings in the news, while studying past historical root causes. The curriculum changes from semester to semester based on current local, national, and world occurrences.

World Geography

2nd semester – 1 high school credit – grades 10-12 – prerequisite: none

This course counts as a World History credit for Social Studies. The course is based around teaching the five themes of geography: location, place, region, movement, and human-environment interaction. Students will learn how geographic factors influence human behaviors.

Recent American History

1st semester – 1 high school credit – grades 10-12 – prerequisite: none

This course studies American History post-Vietnam War to present. The course is taught in units organized around presidencies. Numerous major events will be covered such as The Cold War, Iranian Revolution, Iran-Iraq War, The Gulf Wars, War on Terror, etc.

Street Law

2nd semester – 1 high school credit – grades 10-12 – prerequisite: none

Students study a variety of different types of law. They will analyze civil, criminal, family, consumer, and housing law. There are also a variety of other mini-lessons such as purchasing car insurance that have real-world relevance.

Introduction to Psychology (PSY:111)

1st semester – 1 high school credit/3 college credits – grades 10-12 or instructor approval – prerequisite: none

A survey of psychology including theoretical and experimental findings and applications from areas such as physiology, learning, memory, personality, social, abnormal, therapy and health psychology.

Psychology of Human Relations (PSY:112)

2nd semester (even years) – 1 high school credit/3 college credits – grades 10-12 or instructor approval – prerequisite: none

Covers all types of interactions among people-their conflicts, cooperative efforts, and group relationships. It is the study of the beliefs, attitudes, and the behaviors that cause interpersonal conflict in our personal lives and work situations.

Developmental Psychology (PSY:121)

2nd semester (odd years) – 1 high school credit/3 college credits – grades 10-12 or instructor approval – prerequisite: none

An introductory course in human growth and development throughout the lifespan. The developmental stages include prenatal, infancy/toddlerhood, early and middle childhood, adolescence, early, middle, late adulthood and death and dying.

Spanish Course Descriptions

Spanish 1

Two semester – 2 high school credits – grades 9-12 – prerequisite: none

This course is an introduction to the Spanish language. Flashcards, games, activities, and technology are used to apply new vocabulary, such as useful phrases, colors, numbers, the alphabet, and beginning conversation. Videos, projects, and research will focus on the culture of Spanish-speaking countries. Homework and assessments will be given as needed. A good, working knowledge of English grammar is an advantage to any student taking this course. Note: Check with college as to world language requirements for admission.

Spanish 2

Two semester – 2 high school credits – grades 10-12 – prerequisite: Spanish 1

This course builds upon the ability to speak, understand, read, and write as taught in Spanish 1. Flashcards, games, activities, and technology are used to apply new vocabulary, such as the weather and describing yourself and others. Verb tenses include regular and stem-changing present-tense verbs. Communication and listening activities play a larger role as students work toward speaking 100% Spanish. Videos, projects, and research will focus on the culture of Spanish-speaking countries. Homework and assessments will be given as needed. Additionally, Spanish 2 includes several projects to apply the vocabulary. Note: Check with college as to world language requirements for admission.

Spanish 3

Two semester – 2 high school credits – grades 11-12 – prerequisite: Spanish 2

Continues to develop the ability to understand, read, and write while emphasizing the goal to speak in Spanish. Communication and listening activities play a larger role as students practice hearing and speaking 100% Spanish. Flashcards, games, activities, and technology are used to apply new vocabulary, such as healthy foods, emotions, and preparing for a birthday party. More complex verb tenses are introduced. Videos, projects, and research will focus on the culture of Spanish-speaking countries. Homework and assessments will be given as needed. Additionally, Spanish 3 includes several projects to apply the vocabulary. Note: Check with college as to world language requirements for admission.

Spanish 4

Two semester – 2 high school credits – grade 12 – prerequisite: Spanish 3

Continues to develop the ability to understand, read, and write while speaking in Spanish. Speaking 100% Spanish is the ultimate goal. Flashcards, games, activities, and technology are used to apply new vocabulary, such as shopping, being on vacation, and helping in the community. More complex verb tenses are introduced. Videos, projects, and research will focus on the culture of Spanish-speaking countries. Homework and assessments will be given as needed. Additionally,

Spanish 4 includes several projects to apply the vocabulary. Note: Check with college as to world language requirements for admission.