

# Course Descriptions

*Christ Our Rock Lutheran High School – 2020-2021*

## Agriculture Education

**Agricultural Science I** (1 credit) Agricultural Science I will look at the basic science of agriculture. We discuss the science of our soils and fertilizers that are used for crops and gardens. We will also delve into the science of botany which will include plant structure, photosynthesis, and some cropping issues.

**Agricultural Science II** (1 credit) Agricultural Science II, Outside the Field, will look at environmental science in respect to ecology, water systems, and forest systems. We will also look at parks, agritourism, establishing prairies, wetlands, wildlife habitat, and aquaculture just to name a few. Natural Resources and Conservation will be studied and discussed. Second Semester will be an introductory Veterinary anatomy comparison between farm animals and pets.

**Agricultural Science III** (1 credit) First semester will focus on food safety. It will examine many of the aspects of maintaining a safe food supply for the consumers of the world. A great deal of this is done on the farm in maintaining healthy animals and protecting harvested crops from weather and insects. The course will also cover the aspects of food safety in factories, dairies and transportation. The second semester will focus on the Internal Combustion engine. It will examine the internal parts and systems of an internal combustion engine. The primary means of instruction will be Power points presentations, videos and by the use of assembling a ¼ scale plastic V-8 engine will be used.

**Agricultural Science IV** (1 Credit) Agricultural Science four during the first semester, will focus on horticulture. Students will examine the farming and harvesting techniques of many horticulture crops such a lawn turf, flowers and orchards. Propagation of horticulture/orchard crops using grafting techniques will also be examined. During second semester, students will discuss modern farming techniques. Students will be exposed to many of the modern day farming technologies as well as some techniques that have revolutionized the industry. GPS, Genetically modified organisms, plant breeding, tissue culture are some of the technologies and techniques that will be explored.

## English

**English I** (1 credit – required for freshmen) – English 1 is a study of the English language with emphasis placed on grammar and its proper use in writing. Students will spend the majority of their time focusing on learning grammar and proper writing techniques. Students will also compose a minimum of eight essays that are at least five paragraphs in length. Literature selections will include short stories, non-fiction articles, *Romeo and Juliet*, *Al Capone Does My Shirts*, and *To Kill A Mockingbird*.

**English II** (1 credit – required for sophomores) – English II is a study of the English language with emphasis placed on public speaking. Students will study and practice various aspects of public speaking. Literature selections will include poetry, short stories, *Julius Caesar* and *A Separate Peace*.

**English III** (1 credit – required for juniors) – English 3 is a study of the English language with emphasis placed on American Literature. Students will spend the majority of their time focusing on American Literature and will also compose a minimum of four essays (one per quarter). Literature selections include *The Narrative of the Life of Frederick Douglass*, *My Antonia*, and *The Great Gatsby*.

**English IV: Fall Semester.** The primary content of the Fall Semester of English 4 is British literature. Students will conduct a survey of major British writers and trace the evolution of the English language. Students will also spend the majority of their time reading and responding to textbook literature selections and the novels *Robinson Crusoe* and *Frankenstein*.

**English IV: Advanced Composition Spring Semester.** The Spring Semester of English IV focuses on expository writing in various rhetorical modes and includes basic grammar review. Students will study all aspects of the formal essay including the introduction, thesis sentence, supporting paragraphs, organization, unity, and conclusion.

**PTC (Professional/Technical/Creative) Writing & Layout** (½ credit) – A study of various types of writing and layout. Students will learn and utilize skills associated with professional, technical and creative writing. Students will learn and utilize skills associated with the layout of publications (as in desk-top publishing). Computer software will be used to do most of the layouts. Students will produce a school newsletter and yearbook as part of this class.

### Fine Arts

**Choir** (1/2 credit per semester) This performance music group will utilize the human voice. The group will learn and develop a repertoire of traditional and contemporary Christian music as well as pop songs and show tunes. The students will learn aspects of music theory and history as well as perform at numerous events throughout the year.

**Band** (1/2 credit per semester)-This performance music group will incorporate traditional band instruments, as well as, guitar (both acoustic and electric), keyboards, and percussion. The group will learn and develop a repertoire of traditional and contemporary Christian music as well as classic and contemporary rock and pep band style music. The students will learn aspects of music theory and history as well as perform at numerous events throughout the year.

**Guitar (1/2 credit per semester)**-In this class students will cover the fundamentals of playing the classical acoustic guitar. The students will learn and understand musical concepts pertaining to playing the guitar as well as some fundamental music theory. The students will be able to play at a beginner's level of guitar playing.

**Music Appreciation** (1/2 credit per semester) – A study of different music throughout history. Students will learn various aspects of music theory and terminology as well as being able to

appreciate the beauty of music in all of its different forms. Units include a look at the 50 greatest composers in history, jazz, rock 'n roll, and film music.

**Concepts of Art** (1/2 credit per semester)-In this class students produce artworks in a variety of media (including but not limited to drawing, painting, sculpture, printmaking, and collage) while experimenting with different styles. As part of this process they will learn the formal elements of Art, art history, aesthetic theories, and Art appreciation.

**Graphic Design** (1/2 credit per semester)-Careers in the creative field are many and varied. In this class students are introduced to the basics of graphic design through researching current careers and completing projects. Some but not all work will be digital. Areas of study include typography, color theory, advertising, photography, installation, packaging, branding, and copyright laws.

**Portfolio Development** (1/2 credit per semester)-This course allows students to continue work in the field of Art where no other classes are offered in the regular schedule and/or does not fit into the class schedule. Students will increase their knowledge and improve their techniques while exploring different subject matter with the media of their choice.

### Foreign Language

**Spanish I** (1 credit) Spanish 1 is an introduction to the Spanish language and the Spanish-speaking world. The course deals with everyday life situations through the teaching of key phrases and expressions, which the students must learn in order to be able to communicate in Spanish. The four basic language skills of speaking, listening, reading and writing are covered, with an emphasis on teaching the students how to be comfortable in speaking Spanish. Provision is made for developing an appreciation of the history, culture, and customs of the countries in which the language is spoken.

**Spanish II** (1 credit) – Spanish 2 is a continuation of the study of the Spanish language and the Spanish-speaking world. The first quarter is a review of Spanish 1 and the remainder of the course covers more advanced study, emphasizing additional vocabulary and additional verb tenses. The course deals with everyday life situations through the teaching of key phrases and expressions, which the students must learn in order to be able to communicate in Spanish. The four basic language skills of speaking, listening, reading and writing are covered, with an emphasis on teaching the students how to be comfortable in speaking Spanish. Provision is made for developing an appreciation of the history, culture, and customs of the countries in which the language is spoken. *Prerequisite – Spanish I*

**Spanish III** (1 credit) - Spanish 3 is an advanced study of the Spanish language and the Spanish-speaking world. The course builds upon the material and skills learned in Spanish 1 and Spanish 2. The four basic language skills of speaking, listening, reading and writing are covered, with the majority of the course taught in Spanish. Provision is made for developing an appreciation of the history, culture, and customs of the countries in which the language is spoken.

At each succeeding level of Spanish the student is expected to use more and more Spanish in classroom work. The third level student is expected to be able to read and discuss

short stories, films, and ideas in Spanish. All verb tenses will have been covered by the end of the year. The student does outside readings from books, newspapers, and magazines. The student is expected to use proper intonation and pronunciation. The Spanish III student not only improves communication skills, but achieves a much better understanding of the Latin American way of life.

**Spanish IV** (1 credit) - Spanish 4 is concentrated on the review, re-use and recombination of previously learned material. The fourth level student is expected to be able to converse in Spanish about general topics for an extended period of time without previous preparation. Most work is presented in Spanish. There is more emphasis on reading and writing, using advanced vocabulary and sentence structures. The student develops the skills of logic and “sensible guessing” through clues in reading. Students in this course participate in numerous individual and group projects and make extensive use of technology

### Mathematics

**Algebra I** (1 credit) – Algebra is a full-year course that includes the study of many different types of equations and expressions that help us understand and use the world around us from a mathematical point of view. As Algebra is the study of mathematical systems using symbols to represent operations and relationships, students will learn how these concepts apply to their daily lives to solve problems.

**College Algebra** (1 credit) College Algebra is a full year course that is based on an entry level college math course. This course aims to stretch the bounds of algebra and trigonometry of which the student has already learned and will hopefully solidify these concepts for the future. Because this course is no longer dual credit, this course will move at a pace that is comfortable for the students to comprehend the topics.

**Geometry** (1 credit) – Geometry covers a broad list of topics, including parallel and perpendicular lines, triangles, quadrilaterals, area, volume, and symmetry. As we study these various topics, the student will gain a better understanding of how these different objects make up the world around us. *Prerequisite – Algebra I*

**Algebra II** (1 credit) – Algebra 2 is a full-year course that includes the study of many different types of equations and expressions that help us understand and use the world around us from a mathematical point of view. This course is designed to culminate and apply previous concepts from past courses to understand many more of the complex phenomena in our world. As Algebra is the study of mathematical systems using symbols to represent operations and relationships, students will learn how these concepts apply to their daily lives to solve problems. *Prerequisite – Algebra I*

**Intermediate Algebra** (1 credit) Intermediate Algebra covers a broad list of topics, including linear equations, exponents & polynomials, rational expression and exponents, and radicals. As we study these various topics, the student will gain a better understanding of how these topics are used in the world around us.

**Pre-Algebra** (1 credit) Pre-Algebra covers a broad list of topics, including algebraic expressions, exponents & polynomials, area and volume, and linear functions. As we study these various topics, the student will gain a better understanding of how these topics are used in the world around us.

**Pre-Calculus** (1/2 credit) It is an introductory course to the mathematics of Calculus. This course will be modeled after the first half of a Calculus I course. The two main concepts of Calculus are differentiation and integration. In this course, students will expand their mathematical horizons as they learn the basics of Calculus in preparation for post-secondary studies.

**Probability and Statistics** (1/2 credit) Students will work with probability, data collection, descriptive and inferential statistics, probability, and technological tools to analyze statistics. The main foci of the course will be exploring data, planning a study, producing models using probability theory, and making statistical inferences. Students will work with statistical measure of centrality and spread, methods of data collection, methods of determining probability, binomial and normal distributions, hypothesis testing, and confidence intervals. Students will use multiple representations to present data including written descriptions, numerical statistics, formulas, and graphs. *Prerequisite Algebra II*

**Trigonometry** (1/2 credit) The topics that will be covered include: trigonometric functions, trigonometric equations and applications, triangle trigonometry, the use of the unit circle and special right triangles, trigonometric identities, Law of Sines and Law of Cosines. This course will also develop in more detail the topics of triangles and trigonometry which are presented in Geometry. Students will advance their skills in using the graphing calculator.

**Calculus** (1 credit) Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions. Behavior of functions will be described using the derivative and integral of the function.

### Physical Education

**Physical Education** (1/2 credit) – A study that defines personal fitness and focuses on the setting, assessing, and achieving personal fitness goals. An emphasis is placed on fitness development and fitness testing. This course also includes a study of the rules, strategies, safety principles, and skills of various indoor and outdoor team sports. The students will be physically active in units of soccer (indoor and outdoor), basketball, softball, volleyball, golf, Ultimate Frisbee, and other indoor/outdoor activities. Students are trained in CPR.

**Athletic Concepts and Conditioning** (1/2 credit)—A study designed to enhance an athlete's performance through strength training, speed and agility drills.

**Life Management** (1/2 credit) – required during freshmen or sophomore year) – Life Management is a study of the aspects of a person's health, including physical/medical, emotional/mental, sexual, relational, and spiritual health. We are creations of our Heavenly Father and the Holy Spirit dwells within us. Therefore, the love of Christ compels us to treat our bodies with respect. This class will investigate and discuss what factors contribute to a person's

level of healthiness and will give practical advice on how to manage a healthy life style. The content of this class is designed to be applied to the students' lives, addressing specific issues and circumstances that students are presently experiencing or will experience during their teenage years. Students will also be given opportunities to anonymously ask questions about various aspects of managing their lives.

## Science

**Anatomy and Physiology** (1 credit) Anatomy and Physiology presents a fascinating, in-depth exploration of the structure and function of the human body. The course will use a systems approach and will emphasize how organs and body systems work together to carry on complex processes. Concepts and principles will be related to familiar health issues, problems and experiences we face as humans. Upon completion of this course, students will have a thorough understanding of the human body and how its parts work together to maintain the delicate equilibrium of life.

**Biology** (1 credit) – Explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Introduces the diversity of living organisms, their structure, function and adaptation.

**Biology II** (1 credit)—An advanced study of the dynamic of life. Topics include cell structure and function, energy transformation, genetics, and taxonomy. *Prerequisite—Biology*

**Chemistry** (1 credit) – As Chemistry is the study of the composition of substances and the physical changes they undergo, students will develop a comprehensive understanding of the elements and compounds that make up our world. This course is designed to cover a broad range of topics, allowing students the opportunity to continue to achieve and build upon their higher-level comprehension skills. Topics include atomic structure, formula writing, chemical reactions, acids and bases, and oxidation-reduction reactions. *Prerequisite – Biology*

**Physical Science** (1 credit)—An introductory study of chemistry, physics, and earth science. Topics include the elements and compounds that make up our world, the interactions of matter and energy, and Earth's processes.

**Physics** (1 credit) – Physics is the study of the interactions of matter and energy. Physics is all around us! It is found in everything from your TV, to your car, to the sports you play. Through the study of Physics, students will examine such topics as motion, force, energy, matter, heat, sound, and light. *Prerequisite – Biology & Algebra I*

## Social Studies

**Civics & Citizenship** (½ credit – required for juniors or seniors) – A study of national, state and local government and how we as United States citizens function within these governments. Emphasis is placed on the Constitution of the United States and the Bill of Rights. Students will understand the various branches of government, as well as political parties, voting and the election process, and civil and criminal law. Students will learn about our rights, duties, responsibilities, and roles as citizens and the importance of being informed and actively involved

in government and our communities. During this course, students will be required to take and pass the U.S. Constitution and Illinois Constitution tests.

**World Geography** (½ credit – required for freshmen) – A study of the physical and cultural geography of our world. Students will examine numerous countries and cultures from around the world. They will understand the world in spatial terms, physical systems, and interaction and influence.

**Modern American History** (1/2 credit) Modern American History studies the history of the United States from 1946 to the present day. We will study how America emerged from World War II as a cultural, political and economic superpower and how it fought a Cold War with Soviet Russia for 43 years. We will also look at post-Cold War America, seeking insight into the nation's future, as it struggles with economic and international challenges.

**Psychology** (1/2 credit) Psychology studies behavior and the individual mental process. The study of psychology offers insights into human behaviors and many of them have practical applications to daily life.

**Sociology** (1/2 credit) Sociology is the study of social structure. In sociology class, we will be learning about society and culture and their impact on our lives and personalities as well as learning how we can have an impact on the society around us.

**Christian Leadership** (1/2 credit-required for juniors)- A one semester course with a faith-based approach designed to prepare students for leadership that will help to develop leadership strengths and weaknesses.

**United States History** (1 credit – required for sophomores) – American History studies the history of the United States from its inception to World War II. The first half of the year will cover the creation of our nation from its colonial roots through the great crisis of the Civil War. During the second semester, we will trace our country's development into an urbanized, industrialized defender of freedom. This course will also examine the pivotal role that women and ethnic minorities have played in the American saga.

**Western Civilization I** (1/2 credit) Western Civilization I is a dual-credit course which examines the development of European political concepts, social changes, intellectual growth, economic philosophies, and religious institutions. Particular emphasis is paid to Christianity's influence on Western Civilization. The course covers the development of western civilization from the ancient Sumerians (ca. 3000 B.C.) through the Renaissance. The course is offered as dual-credit with Kaskaskia College.

**Western Civilization II** (1/2 credit) Western Civilization II is a dual-credit course which examines the development of European political concepts, social changes, intellectual growth, economic philosophies, and religious institutions. Particular emphasis is paid to Christianity's influence on Western Civilization. The course covers the development of western civilization from the Renaissance to the post-World War II modern era. The course is offered as dual-credit with Kaskaskia College.

**Post High School Prep** (1/2 credit-required for seniors) PHS Prep is a one semester course that is designed to prepare students for life after high school. The class prepares student for the academic challenges of college, independent living, financial management and success in the workplace. This course fulfills Illinois' consumer economic requirement.

### Technological Arts

**Computer Applications I** (1/2 credit) – COMPUTER APPLICATIONS 1 IS DESIGNED TO TEACH STUDENTS THE BASIC SKILLS IN TOUCH TYPING, BASIC COMPUTER KNOWLEDGE, KEYBOARD SHORTCUTS, AND BASIC COMPUTER PROGRAMS SUCH AS MICROSOFT OFFICE 2007, PHOTOSTORY, AND POWERPOINT.

**Computer Applications II** (1/2 credit) –COMPUTER APPLICATIONS 2 IS DESIGNED TO TEACH STUDENTS THE SKILLS NECESSARY TO BECOME TECHNOLOGICALLY FLUENT IN THE USE OF NEW PROGRAMS AS WELL AS TEACHING ADVANCED SKILLS IN THE USE OF THE MICROSOFT OFFICE 2007 PROGRAMS. *Prerequisite – Computer Applications I*

**Web Page Design** (1/2 credit)-Students will learn how to create web pages by learning basic HTML, learn how to incorporate Java scripts, and how to create and edit images and video for the web. They will learn the basics of WYSIWYG programs through the use of Microsoft FrontPage 2000, Dreamweaver, and Expression Web.

**Advanced Web Page Design** (1/2 Credit)-Students will continue to improve their skills in creating web pages and graphic design elements. The first semester is devoted entirely to learning Adobe Dreamweaver CS5. During the 2<sup>nd</sup> semester students will develop advanced skills in the use of Adobe Photoshop CS5.q

### Theology

**Biblical Overview** (1 credit, freshman year) – Biblical Overview is a full year course that provides a general survey and understanding of the creation of the world through the Gospels. This is a required freshmen level course which is open to transfer and exchange students as deemed appropriate.

**Church History** (1 credit) – Church history is a full year course that examines the history of the church from the book of Acts through the present. This course is generally offered to a combined section of juniors and sophomores and is offered every other year, alternating with Comparative Religions.

**Comparative Religions** (1 credit) – Comparative Religions is a full year course that examines the spectrum of doctrine and worship practices found in the various Christian denominations, as well as taking a critical look at Christian cults and world religions. This course is generally offered to a combined section of juniors and sophomores and is offered every other year, alternating with Church History.

**Senior Theology** (1 credit)- Senior Theology is a full year course that reviews Holy Scripture and examines application of such to real-life situations. Topics covered may include the Gospel



of John, Paul’s epistles and other general letters of the New Testament, Christian doctrine, the parables of Jesus, Christian ethics, and living and sharing your faith.

Other Electives

**Driver’s Education** (1/2 credit) – Designed to teach students the driving rules and procedures they need to know to pass the driver’s exam and get their Illinois driver’s license. This class will include classroom and “behind the wheel” experiences. The classroom portion is taught on the CORLHS campus during the school day. The “behind the wheel” portion is taught by contracted teachers after the normal school day. *Prerequisite – must be 15 years old before class begins*

**CORLHS Graduation Requirements**

The educational program of Christ Our Rock Lutheran High School is designed to challenge students, but doing so in an environment that helps each child succeed. The following graduation requirements and recommended college prep courses have been set:

<u>Departments</u>	<u>Required for Grad.</u>	<u>Recommended for College Preparation</u>	
Theology	4 credits	4 credits	Or .5 credit per sem. of attendance
English	4	4	Must include English I, II, III, IV
Math	2	3	Must include algebra I and geometry
Science	2	3	Must include biology & chemistry
Social Studies	3	3	Must include Civics & U. S. History
Physical Education/Health	2.5	2.5	Must include PE I / II / Life Management
Fine Arts	2	2	
Technological Arts	1	1	Must include CA I (unless proficiency test)
Foreign Language	-	2	
Electives	<u>5.5</u>	<u>2.5+</u>	Must include PHS Preparation
Total	26 credits	27+ credits	* <i>With an 8 period school day, it is possible to graduate with 32 credits.</i>