

Cole Co. R-1 Program of Studies



2013 - 2014

To Students and Parents:

The 2013-2014 Russellville High School Program of Studies reflects the core values and comprehensive programming which we provide for our students. These course offerings are designed to enrich the knowledge and skills of all students in traditional core and elective classes.

The process of selecting courses for the coming school year is an important process, and we encourage each student to discuss course requests with parents, teachers, and his/her school counselor. We strive to provide a program that will offer students the opportunity to challenge themselves academically but also deliver a balance of meaningful options that will spark creativity, independence, and a well-rounded education.

It is our hope that the 2013-2014 academic year will be personally and academically rewarding and successful!

Sincerely,

Russellville High School Staff

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GRADUATION REQUIREMENTS

In order to be eligible for graduation from Russellville High School, students must successfully complete a minimum of 25 credits, as well as meet the graduation requirements outlined on page 12 of the Student Handbook.

Graduation credit requirements are as follows:

Language Arts – 4 credits	Fine Arts – 1 credit
Mathematics – 3 credits	Practical Arts – 1 credit
Social Studies – 3 credits	Health – ½ credit
Science – 3 credits	Personal Finance – ½ credit
Physical Education – 1 credit	Electives – 8 credits

17 required credits + 8 elective credits = 25 Credits

**All students must pass the United States and Missouri Constitution test prior to graduation.

**All students are required to take 3.5 credits per semester (7 credits per year)

Class Status:

Class status is based on the number of high school credits the student has earned:

Freshman – less than 5.5 credits	Sophomore – 5.5-10.5 credits
Junior – 11-17.5 credits	Senior – 18 or more

**All students are enrolled in 7 credits per year

GRADING INFORMATION

.5 credit is awarded for each semester of satisfactory completed course work.

LETTER	GR. POINTS	*WEIGHTED	PERCENTS
A	4.00	5.00	95-100
A-	3.67	4.58	90-94
B+	3.33	4.16	87-89
B	3.00	3.75	83-86
B-	2.67	3.33	80-82
C+	2.33	2.92	77-79
C	2.00	2.50	73-76
C-	1.67	2.08	70-72
D+	1.33	1.66	67-69
D	1.00	1.25	63-66
D-	0.67	0.83	60-62
F	0.00	0.00	below 60

*weighted points are awarded to specific classes

4 YEAR PROGRESSION FOR CORE COURSES

	GRADE 9	GRADE 10	GRADE 11	GRADE 12
LANGUAGE ARTS 4 CREDITS	LANGUAGE ARTS I	LANGUAGE ARTS II	LANGUAGE ARTS III	LANGUAGE ARTS IV COLLEGE PREP ENGLISH DUAL CREDIT ENGLISH ELECTIVES
SOCIAL STUDIES 3 CREDITS	AMERICAN HISTORY	WORLD HISTORY	MO HISTORY/ AM GOV'T	ELECTIVES
MATH 3 CREDITS	ALGEBRA I A ALGEBRA I GEOMETRY	ALGEBRA I B GEOMETRY ALGEBRA II	GEOMETRY ALGEBRA II MATH ANALYSIS/TRIG	ALGEBRA II MATH ANALYSIS/TRIG COLLEGE ALGEBRA
SCIENCE 3 CREDITS	PHYSICAL SCIENCE	BIOLOGY	BIOLOGY II ZOOLOGY CHEMISTRY ANATOMY/PHYSIOLOGY FORENSICS/SPORTS MED.	BIOLOGY II ZOOLOGY CHEMISTRY ANATOMY/PHYSIOLOGY FORENSICS/SPORTS MED.
PERS. FIN. .5 CREDIT HEALTH .5 CREDIT PE 1 CREDIT	HEALTH/PE	PERS. FIN./PE		

**Students are also required to earn 1 credit of Fine Arts (music, art), 1 credit of Practical Arts (agriculture, business) and an additional 8 credits in order to reach the required total of 25 credits.

LANGUAGE ARTS

Language Arts I Grade 9 1 credit

L.A. I stresses reading, writing, grammatical skills, and vocabulary expansion. The literature includes Greek mythology, short stories, drama, poetry, and novels. The varied writing experiences are designed to improve sentence structure, paragraph construction, and the overall ability to communicate in writing.

Language Arts II Grade 10 1 credit

L.A. II emphasizes reading comprehension, oral and written communication, grammatical skills and vocabulary expansion. The literature will emphasize legends, short stories, drama, poetry, and novels. The varied writing experiences are designed to improve sentence structure, paragraph construction, and the overall ability to communicate in writing.

Language Arts III Grade 11 1 credit

This course is designed for high school juniors. The primary purpose of the class is to prepare the student for the kinds of writing and literature study required beyond high school. A study of American literature, grammar, and composition will complete the course content.

College Prep English Grade 12 1 credit

This course is designed for the college-bound senior. The primary purpose of the class is to prepare the student for the kinds of writing and reading skills required in college course work. A study of English literature will complete the course content along with thorough examination of grammar and writing, ranging from narrative and descriptive essays to a research paper.

Language Arts IV (Career English) Grade 12 1 credit

This course assists students in learning the essentials for communication in today's workplace. Oral communication skills, written communication skills, critical thinking and problem solving will be areas of emphasis. Students will read and respond to writing from a variety of cultures and genres through written and oral discussions. In addition, students will do research, prepare resumes and complete job applications.

Modern Fiction Grade 11-12 .5 credit (1st sem.)

This elective semester course is designed for juniors and seniors who are interested in a class in modern literature. Students must have successfully completed LA II prior to enrollment. In this class, students will read, discuss and write about contemporary novels, short stories and other pertinent forms of modern literature.

Public Performance Grade 11-12 .5 credit (2nd sem.)

This course is designed for juniors and seniors who are interested in a semester class in fundamental speech and/or dramatic performance. In this course, students will learn and practice fundamentals of public speaking and competitive speech events like dramatic interpretation, humorous reading, and extemporaneous speech. Students will also practice dramatic performance.

SOCIAL STUDIES

American History Grade 9 1 credit

This is the study of the historical development of the U.S. It will give an understanding of the democratic ideals which have formed our American system of government. Special attention will

be given to political, social and economic trends. Students will do independent reading and writing.

World History Grade 10 1 credit

This course is a survey of human history from the period of prehistory to the present. The arts, government, economics, religion and the social movements that have shaped our modern world will be studied. Students will be required to do independent reading and writing projects, including essays and term papers. The course is reading and writing intensive.

American Government Grade 11 .5 credit (1st sem.)

This course is the study of the three levels of government (local, state, and national). Among the course objectives are instruction in the three branches of government and in the rights and responsibilities of a U.S. citizen. Students will take the U.S. Constitution Test as a part of this course.

Missouri History Grade 11 .5 credit (2nd sem.)

This course is an in-depth study of Missouri history and Missouri government. Special emphasis is placed on political, social, religious, and economic activities and their impact upon the state. Students will take the Missouri Constitution Test as part of this course.

Economics/Geography Grades 11-12 1 credit

Economics is the study of how we produce and distribute the goods that we need. We emphasize economics and the family, banking and investing, owning and operating a business, government income and expenditure and the business cycle. Geography is the study of how man adapts to and interacts with his physical environment. Course emphasizes locations, regions, relationships, human problems and their relationship to the environment. This course involves extensive work with maps.

SCIENCE

Physical Science Grade 9 1 credit

This course investigates the fundamentals of chemical, physical and related earth and space concepts and principles. Students will explore the structure and properties of matter, the nature of energy and its role in chemical reactions. Study will include force and motion, matter, energy, heat, light, electricity, magnetism and atomic theory.

Biology I Grade 10 1 credit

This course deals with book material on organism classification, basic chemistry, ecology, cellular biology, genetics, cellular respiration, and photosynthesis. Laboratory study includes dissection, microscope work and biological papers.

Biology II Grades 11-12 1 credit

(Prerequisite - Biology I)

This course is a laboratory oriented class designed to expose students to a wide range of lab techniques and experiences. Topics such as microbiology, human biology, plants, vertebrate anatomy, taxonomy, evolution etc., are addressed.

Chemistry Grades 11-12 1 credit

(Prerequisite – 'C' or better in Alg.I)

This course is the study of the physical science of chemicals. It includes topics such as the atomic theory, periodic table, chemical reactions, and stoichiometry. Emphasis will be on the

principles of conservation of mass and energy, an understanding of the elements and their reactivity, and knowledge of basic laboratory procedure. Two and three day lab experiments will be performed with a detailed lab report as a conclusion. Drawings and model assembly will be included. This course is an advanced science course requiring a lot of written work.

Zoology Grades 11-12 1 credit

This course introduces important principles and concepts in the study of animals. Components include the study of cell biology, genetics, ecology, structure, function and development of organisms.

Human Anatomy and Physiology Grades 11-12 1 credit

The content of this course includes an overall review of the cellular physiology followed by an in-depth study of the structure and function of the biological systems as found in the human body. It is recommended only students interested in a related field for college or desiring a greater understanding of the human body enroll in this course.

Forensics Grades 11-12 .5 credit (1st sem.)

The objective of Forensics is to give students a very basic understanding of forensic science and how it is used in criminal cases by using published works and case examples.

Sports Medicine Grades 11-12 .5 credit (2nd sem.)

This class is intended to help introduce students to medical topics, specifically those related to Athletic Training and Sports Medicine. This course will include anatomy and physiology, as well as the prevention, treatment (including taping) and rehabilitation of athletic injuries.

MATHEMATICS

Algebra IA Grade 9 1 credit

In Algebra IA, students will learn properties of algebra. They will perform different operations with rational numbers. They will solve linear equations and inequalities. They will learn to graph on a coordinate plane and learn about slope.

Algebra IB Grade 9 1 credit

In Algebra IB, students will work with polynomials. They will learn to factor trinomials. They will learn trigonometric ratios, statistics and probability. They will work with rational expressions and solve equations.

Algebra I Grades 9-12 1 credit

In this course, students learn algebraic concepts such as number systems, operations, and forms. Students engage in activities which require them to identify, analyze, and solve problems involving the following topics: number sentences in the forms $ax+b=c$ and $ax+b=cx+d$, number properties and formulas, order of operations, graphs of lines, slopes, and parabolas, exponents, functions, functional notation and function language. The course emphasizes the need for students to comprehend the abstract and symbolic nature of algebra.

Algebra II Grades 10-12 1 credit

(Prerequisite - Alg. I)

In this course, students learn advanced algebraic number systems, operations, and forms. They engage in activities which require them to communicate using the language of algebra, and explore variations, graphs, linear relations, matrices, systems, parabolas, quadratic relations, polynomials, functions, powers, roots, exponents, and logarithms. The course emphasizes the need for students to comprehend the abstract and symbolic nature of complex algebraic concepts.

Geometry Grades 10-12 1 credit

(Prerequisite - Alg. I or Alg 1A & 1B)

Students learn foundational geometry concepts from synthetic algebraic, and industry perspectives. Students engage in activities which require them to identify, analyze, and solve problems involving the following topics: segments, angles, triangles, quadrilaterals, polyhedral, circles, spheres, transformations, if-then statements, and proofs. Course work includes the study of how geometry relates to algebra, and how geometry concepts are applied in industrial and technological career fields. This course emphasizes the need for students to comprehend the abstract and symbolic nature of geometry.

Math Analysis/Trigonometry Grades 11-12 1 credit

(Prerequisites - Alg. II)

Areas of study for this course will include exponential power, polynomial, rational, logarithmic and piece-wise functions, along with trigonometric functions and their inverses. Students will investigate and explore mathematical ideas using methods that will help them gain a deep understanding of fundamental concepts, develop multiple strategies for analyzing complex situations, and acquire appropriate technological skills. Students will analyze situations verbally, numerically, graphically, and symbolically. Effective communication skills will be developed so that students will be able to discuss, explain, and justify their thoughts and ideas. While mathematical skills will be developed, teaching will focus on building deep understanding of concepts that will enable students to apply mathematical skills and make meaningful connections to life's experiences.

PHYSICAL EDUCATION

Physical Education Grade 9-12 1 credit

This course is an introduction to physical activities and health concepts necessary to maintaining a healthy and physically active lifestyle. The class will be a combination of various sports and recreational activities. 9th grade students will take this class in combination with Health and earn .5 PE credit and .5 Health credit.

Lifetime Sports Grade Grades 10-12 1 credit

Students will participate in several sports, both individual and team, and will gain knowledge to become an educated participant and spectator throughout life.

Team Sports Grades 10-12 1 credit

Students will study and participate in such teamwork activities as volleyball, touch football, softball, hockey, basketball, soccer, and deck ball.

Body Conditioning Grades 10-12 1 credit

Students will participate in a workout routine designed to improve his/her personal level of fitness and muscle tone. Students will be instructed in the proper methods of weight lifting. Students will also participate in conditioning activities such as rope jumping, aerobic workouts, and running.

Aerobics/Dance Grades 10-12 1 credit

Aerobics is a fitness class utilizing exercises set to increase cardiovascular endurance, muscle endurance and tone, flexibility, coordination and agility. Dance is a fitness class utilizing exercises and dance patterns to promote flexibility, coordination, muscular and cardiovascular endurance.

Health Grades 9-12 .5 credit

Students will be provided information which will promote positive decisions affecting their physical well being. Topics will include chemical substances, cardiovascular resuscitation (CPR), nutrition, sexually transmitted diseases (STD's) and other current health issues.

FOREIGN LANGUAGE

Spanish I Grades 9-12 1 credit

Spanish is an introductory course to the Spanish language and culture. On this level, speaking, understanding, reading, and writing are emphasized, although the major emphasis is on speaking and understanding. Through a series of basic dialogues in the text book, the student becomes familiar with pronunciation and intonation. These dialogues are then incorporated into conversations throughout the chapters.

Spanish II Grades 10-12 1 credit

(Prerequisite - Spanish I)

Spanish II is a continuation of Spanish I. It continues to focus on speaking, understanding, reading, and writing. More emphasis is beginning to be placed on the culture of the Hispanic country and its people.

FINE ARTS

ART CLASSES: All students are welcomed and encouraged to take Art courses in high school! These classes provide students with many wonderful opportunities to learn creative thinking skills and personal expression.

Art I Grades 9-12 1 credit

This course serves three purposes - to give a foundation for further art courses, to meet the fine art requirement for graduation, and to create an awareness and an appreciation for art expression. Basic fundamentals are stressed for successful art experiences. Students will work abstractly and representatively. They will learn to combine elements to achieve harmony, rhythm, balance, and they will learn that the organization of these are necessary for all art expression. They will learn the relationship of line, space, shape, color, and texture. They will learn to letter with skill and acquire a familiarity with lettering styles. Their creativity should be strengthened and they should be a better consumer and producer.

Arts and Crafts Grades 9-12 1 credit

This is an introductory course that focuses on crafts. The course provides students with problem solving experiences in two and three dimensional media, stressing art elements and design principles. The language and history of crafts are emphasized as well as the relationship between the craft object and the elements and principles of design.

Art II Grades 10-12 1 credit

(Prerequisite - Art I)

This course is designed to further develop the fundamentals of art and their application with more experience in the use of art mediums. The student explores ways to express himself in pictorial arts with increased skill in the use of media and techniques.

Sculpture Grades 10-12 .5 credit (1st sem.)

(Prerequisite - Art I)

This course offers the opportunity of working with three-dimensional art forms. A variety of materials will be explored including clay. Emphasis will be on mastering the skills needed to build armatures and finish materials for sculpture. Individual creativity and development is encouraged.

Ceramics Grades 10-12 .5 credit (2nd sem.)

(Prerequisite - Art I)

This is a basic course in ceramics with emphasis on hand construction techniques, design, aesthetics and the creative development of clay objects examining cultural, historical and personal modes of expression. Wheel throwing will be part of this course when a wheel is available. Creative glazing, surface texturing and trimming will be part of the course.

Drawing and Painting Grades 10-12 1 credit

(Prerequisite - Art I)

Students will review design elements and principles. Focus will be on value, color and composition when drawing and painting still-life, landscape, figure, portrait, abstract and architecture as subject matter. Compositional problems, which emphasize the design elements, will challenge critical thinking skills. Individual expression will be encouraged. Students will use a variety of material: pencil, color pencil, chalk pastels, oil pastels, ink, watercolor, tempera and acrylic.

MUSIC CLASSES: The Music Department offers a wide range of courses that develop the three artistic processes of creating, performing and responding at all levels. Students are encouraged to continue their study of a musical instrument or voice throughout their high school years and are invited to enroll in other classes that do not have a performance emphasis such as music appreciation.

Chorus Grades 9-12 1 credit

Chorus consists of the study of music theory, intermediate sight reading, three or four part music of all time periods and genres. All performances, District Music Contest and Conference Choir Clinic are required. Extra rehearsals may be required. You must be in choir class to tryout for the All-District Choir or compete with a solo at District Music Contest.

Music Appreciation Grades 9-12 1 credit

This year long course surveys topics of world music, from each generation of modern culture back to the origin of music making. Section topics include: Preparation for Listening, Listening to American Music, Listening to World Music and Listening to Western Classical Music. Mid-term multicultural papers and term music history projects will be assigned. Each style period – including jazz, rock, classical – will be evaluated with daily assignments and listening assignments.

Band Grades 9-12 1 credit

Band consists of the study of music for each individual instrument. Each student will be responsible for purchasing their technique/book for class. Goals for the class are to participate in marching, pep band, jazz band, concert band, Conference Band and District Music Contest. All performances are required. You must be in band class to participate in Conference Band and any Honor Band available to high school students. If extra rehearsals are necessary, attendance is required.

Jazz Band Grades 10-12 1 credit

(Prerequisite – Band and instructor approval)

This course is open to instrumentalists who have adequately developed technique on their instrument and are interested in performing jazz and popular music. Literature for this ensemble will be selected from the standard "big band" and contemporary repertoire. Intervals, chord structure, chord progressions and improvisation will be studied.

Limited enrollment is by audition with the recommendation of the director.

PRACTICAL ARTS

AGRICULTURE and NATURAL RESOURCES: The Agriculture programs is designed to prepare students for future academic and career paths by offering technical courses designed to develop practical production and management skills. Students are immersed in an educational environment which offers opportunities for hands-on experience and a sound foundation for a career in agriculture/natural resources.

Ag. Science I Grades 9-10 1 credit

A course designed for instruction in animal science, agricultural mechanics, career exploration, leadership and personal development, and supervised agricultural experience. Units may include agribusiness, natural resources, and food science.

Ag. Science II Grades 9-10 1 credit

(Prerequisite - Ag.Sci.I)

A course designed for instruction in plant and crop science, soils, entomology, horticulture, and forestry, and additional instruction in agricultural mechanics, career development, leadership, and supervised agricultural experience.

Landscaping Grades 11-12 .5 credit

(Prerequisites - Ag.Sci.II)

This course includes the basic techniques of landscape design, landscape construction, installation, and maintenance.

Greenhouse Management Grades 11-12 .5 credit

(Prerequisites - Ag.Sci.II)

This course develops a basic understanding of greenhouse techniques. The production of greenhouse crops will be used to demonstrate procedures such as plants started from cuttings, seeds, grafts, and layering. Students will manage their own crop as a greenhouse project. Students will also grow plants for the greenhouse sale in the spring.

Ag. Construction – Woods Grades 11-12 1 credit

(Prerequisite - Ag.Sci.II)

This course is designed for instruction in safety in the wood working shop, tool identification, tool maintenance, modern woodworking, and procedures in project construction. This course will include basic designs, drawing instruments and techniques, plot plans, CADD commands and functions, and architectural CADD applications. This course requires a project to be constructed.

Ag. Construction – Metals Grades 11-12 1 credit

(Prerequisite - Ag.Sci.II)

This course utilizes welding in the development and construction of major metal and wood projects. This course requires a project to be constructed.

Ag. Structures Grades 11-12 .5 credit

(Prerequisites - Ag.Sci.II)

Students in this course will be exposed to the building process of agriculturally related buildings and structures. This course includes electrical wiring, concrete, masonry, plumbing and sewage disposal, farm fences, product handling and processing equipment, and farm buildings. Shop safety, project design and project construction will also be included.

Ag. Power Grades 11-12 .5 credit

(Prerequisites - Ag.Sci.II)

This course develops skills in the maintenance, repair, adjustment, and overhaul of small engines.

Animal Science Grades 11-12 1 credit

(Prerequisite - Ag.Sci.II)

Advanced study in animal production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management, and biotechnology will be included in this course.

Ag. Business and Sales Grades 11-12 1 credit

(Prerequisite - Ag.Sci.II)

This course includes human relations, personal inventory, careers in selling, and other experiences necessary for employment in agribusiness engaged in marketing, purchasing, storing, grading, and transporting supplies and products.

Ag. Communications and Leadership Grades 11-12 1 credit

(Prerequisite - Ag.Sci.II)

This course will enable students to develop the knowledge, attitudes and skills to demonstrate positive leadership for agriculture. Areas of focus include public speaking, extemporaneous speaking, impromptu speaking, written communication, meeting people, good first impressions, personal goals, team work, team/organizational goals, organizing groups to take action and evaluation of team/organizational actions.

Food Science Grades 11-12 .5 credit

(Prerequisite - Ag.Sci.II)

This course includes the areas of food chemistry and nutrition, food additives, food packaging and labeling, evaluation of foods, food microbiology, food processing, food fermentation, principles of sanitation and quality control.

Forest Management Grades 11-12 .5 credit

(Prerequisite - Ag.Sci.II)

This course includes the following aspects of forestry: economic and environmental importance, harvesting equipment and methods, safety, business agreements for the procurement and/or sale of standing timber, surveying and land measurement, scaling and grading, and the equipment and marketing of Missouri wood products.

BUSINESS EDUCATION: Business Education is an integral part of the total academic structure and provides a significant contribution to the education of all students in a business-oriented society. These courses are designed and sequenced to provide those students who desire advanced study at the college or university level, with the business skills essential for successful performance in their chosen area of study, as well as in their future careers. These courses are also designed to enable students to manage their own personal business matters as well as prepare students for successful entry into the business world.

Accounting I & II Grades 10-12 .5 credit each

These courses are designed to build a basic understanding of manual and automated accounting principles, concepts, and procedures. Activities include the accounting equation, the accounting cycle, entering transactions in journals, posting to ledgers, preparing end-of period statements and reports, payroll systems, banking activities and taxes. Accounting I covers proprietorship accounting; Accounting II covers partnership and corporate accounting.

Intro to Business/Entrepreneurship Grades 9-12 .5 credit each

This course is designed to help students deal with the contemporary business world and will cover the different areas of business while giving students an overall understanding of business operations. Marketing topics, such as merchandising, salesmanship, advertising, display, customer behavior, product development and design will also be covered. Entrepreneurship will build upon the business and marketing fundamentals the students learned 1st semester and cover areas such as: creating business plans, presentation of business plans, creating marketing projects and marketing research. This will be accomplished through several hands-on projects and will culminate in the student creating a business plan and advertising.

Computer App. I MS Office/Desktop Publishing Grades 9-12 .5 credit each

Students will learn to use the Microsoft Office software, including Word, Excel, Access, PowerPoint and Publisher by way of several projects throughout the course. An introduction to Multimedia will also be presented to students such as Podcasting, Audacity, Scratch, converting audio and video files, editing audio and video clips and other projects mixed into the course. This class will benefit any student regardless of career choice.

Computer App. II Web Design/Multimedia Grades 10-12 .5 credit

(Prerequisite – 'C' or better in Computer Applications)

Desktop Publishing will explore the elements used in the design of magazines, menus, advertisement, brochures, booklets, newsletters and posters. Microsoft Office Publisher, Photoshop and Adobe Elements software will be utilized to manipulate the graphics and photos used in the design projects and to create and edit audio and video files. Web Design will study ways to design, animate, and maintain interactive websites. Projects include interactive web pages, web banners, rollovers and animated sites using Dreamweaver and Photoshop.

Computer Programming/Network Admin. Grades 10-12 .5 credit each

(Prerequisite – 'C' or better in Computer Applications)

These courses will consist of learning various programming languages such as Java, C++, Visual Basic, and 3D software for game programming. In addition, Computer Network Administration will be studied in order to learn proper setup and maintaining computer networks.

ADDITIONAL CLASSES

Personal Finance Grades 10-12 .5 credit

This course is designed to teach students personal and business management skills. Students will learn about budgeting, comparing insurance rates, interest rates, and filling out federal and state income tax forms. Other topics covered will be payroll, investing, stock market, and credit.

Cadet Teaching Grade 12 1 credit

This course is a senior level course designed to give students valuable skills in communication, educational process and student mentoring. It will allow students to acquire tutoring hours which are required for the A+ program. Students must earn a C or better in the course to earn tutoring hours. Enrollment in this course is by application and interview. Applicants must have an A+ contract on file, be meeting A+ requirements and earning a 2.5 or higher GPA.

School to Work Grade 12 1-3 credits

The purpose of this program is to assist students in being prepared to meet the demands of the workplace and to tie the workplace to the learning environment. The program will allow seniors to leave school to work in a job that pertains to their career path. Students must average 10 hours per week to earn 1 credit, 20 hours per week to earn 2 credits. Students will be required to provide verification of their hours worked and prepare a journal of work experiences. The employer will be asked to complete an evaluation of the student employee to assist in determining the course grade.

DUAL CREDIT CLASSES

Cole R-I High School juniors and seniors may take certain classes and earn both high school and college credit (offered through Central Methodist University). The following courses offered through Central Methodist College may be taken for 3 hours of college credit each. Courses are subject to change due to student interest or low enrollment. Fees are charged for each of the dual-credit classes and the amount will be announced upon actual enrollment. Checks should be made out to the college offering the class and are due either upon receipt of a bill from the college or in the first week of the semester in which the class is taken. Beginning in the 2012-2013 school year, the Dual Credit tuition reimbursement by the school will be discontinued.

To be eligible for dual credit, a student must:

1. Have a minimum GPA of 3.0
2. Earn a 'C' or better to receive college credit
3. Complete proper prerequisite courses
4. Meet ACT requirements for:
 - a. English Comp – 18 or higher on the English subtest
 - b. College Algebra – 20 or higher on the Math subtest

D/C Psychology Grades 11-12 (1st sem) .5 credit

This course is a survey of many factors that influence behavior and the techniques that psychologists use to study these factors. Major topics include: heredity and physiology, development, learning and thinking, motivation and emotion, personality and psychological adjustment, disorder and treatment.

D/C Sociology Grades 11-12 (2nd sem) .5 credit

This course is the study of social interaction and its products: culture, personality, social groups, institutions and social change.

D/C Criminal Justice Grades 11-12 (1st sem) .5 credit

This course is a study of history, nature and function of the criminal justice system in America.

D/C Speech Grades 11-12 (2nd sem) .5 credit

This course involves study of the theory of speech communication with emphasis on the development of specific skills in one-on-one and public speaking situations.

D/C Personal Finance Grades 11-12 (1st sem) .5 credit

This course designed to help students understand the impact of individual choices on 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; simulate use of checking and saving accounts; demonstrate knowledge of 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.

D/C Intro to Business Grades 11-12 (2nd sem) .5 credit

This course will enable the student to learn about the stock market, personnel management, leadership and motivational techniques. This course is a survey of the functions of business, a comparison of the forms or organizations and methods of administration and the interdependence of production, distribution and finance in modern business.

D/C American History Grades 12 1 credit

These courses are a survey from the settlement to the present. Topics include: causes of the American Revolution, democratization, the US Constitution, causes of the Civil War, the decline of laissez-faire, the changing status of Blacks and recent constitutional interpretations.

D/C Eng. Comp. I and II Grade 12 1 credit

These courses are designed to help college-bound seniors think and write logically to create clear, concise, well supported essays. Students will read a variety of literature to develop high order thinking skills and will study expository and persuasive composition to learn how to develop a thesis and how to use different methods of support.

D/C College Algebra Grade 12 (1st sem) .5 credit

(Prerequisite-Alg.II, 3.0 GPA, ACT-20 or higher)

This course is designed to enable students to receive college credit. Higher level algebraic skills in solving linear, quadratic, and higher-order polynomials will be mastered. Exponential and logarithmic functions will be studied with their graphs. Operations using matrices will be explored.

D/C Statistics Grade 12 (2nd sem) .5 credit

(Prerequisite-Alg. II or concurrent, 3.0 GPA, ACT-20 or higher) This course is a study of probability and statistics, stressing organization of data, testing of confidence intervals, and methods of determining probability. It will enable the student to interpret and analyze data and to make predictions and decisions about that data. Many college degree programs require an elementary course in statistics.

NICHOLS CAREER CENTER PROGRAMS

Career and Technical Course Work 3 credits

A career goal or objective directed toward employment or continuing education is highly recommended to enroll in any of these programs. All Nichols classes are by approval only. Enrollment is done through the high school counseling office.

All courses at Nichols Career Center offer 3 credits toward high school graduation each year. RHS students must apply to attend NCC during the spring of the year prior to their attendance. Requirements for attendance include being on-track to graduate in four years of high school, having good attendance, good disciplinary report, and a career goal appropriate to a NCC program.

Students enrolled in a NCC program will enroll in 3 morning classes at RHS. They are released to go to Nichols after the 3rd hour class. Students will have lunch before leaving for Nichols and must ride the bus to and from Nichols Career Center unless their specific program requires personal transportation. Permission to drive must be obtained through the office.

Articulated Credit

Nichols Career Center has developed articulation agreements with State Fair Community College, Linn State Technical College, Ozark Technical Community College and several art

institutes. These agreements allow students who meet certain criteria at their high school to obtain college credit at these institutions. Details and restrictions may be obtained from the program instructor, the counseling office at Nichols Career Center, or the cooperating institution.

Auto Collision Technology I/II Grades 11-12

Skills are achieved through classroom studies and hands-on activities in a well-equipped shop area. Basic skills developed include safety; fundamentals of collision repair; auto glass; part replacement; cutting metal; plastic repair; welding; straightening body panels; masking; refinishing; and detailing. Students receive a Missouri competency profile that will indicate to potential employers and post-secondary institutions the student's ability and skills achieved throughout the two-year course. Attendance and effort are major factors of the student's grade. This program is ASE (Automotive Service Excellence) certified. Articulation Agreement.

Automotive Technology I/II Grades 11-12

This two-year course is an in-depth study into automotive repair and diagnosis, leading to a career in the automotive field. Each year is designed to "stand alone." One year's course of study will include engine performance, air conditioning, and brakes. The next year students will study electrical systems, suspension, and steering. Skills that students learn throughout school are utilized in this course: math and science skills to solve automotive repair problems and communication skills in relating problems and solutions to customers and supervisors. The curriculum is computer based, and students learn a hands-on skill with hands-on learning in addition to written work. The program is ASE (Automotive Service Excellence) certified. Articulation Agreement.

Building Trades I/II Grades 11-12

This course is designed for students wishing to enter one of the building trades such as framing, drywall, roofing, concrete work, painting, or other related trades. The first year is an introductory course designed to teach the basics of carpentry. Areas of study include the following: safety, hand and power tools, plans, specification and codes, footing and foundations, concrete placing and finishing, floor, wall, ceiling, and roof framing, roofing, windows and exterior doors, exterior wall finishing, doors and interior trim, painting, staining, and finishing, and cabinet making. Students can earn a 10-hour OSHA card.

The main class project of second year students is the construction of a five to six room house done by the students inasmuch as building codes permit. Students may qualify for the Carpenter's Apprenticeship union at 55%, 60%, or 65% level of journeyman wages. For selected students a school-to-work and internship is offered. Scholarships are available from the HBA (Home Builders Association). The program is accredited by the AGC (Association of General Contractors). Articulation agreement.

Graphic Communications I/II Grades 11-12

Students gain hands-on experience in the computer and printing lab, learning the various aspects of the graphic communications field. Students will illustrate and design artwork dedicated to design and layout using desktop publishing (InDesign), illustrating (Illustrator), and digital imaging and animation (Photoshop). Students will prepare layouts to be printed on paper, vinyl and textiles. These units include typography, design, color theory, screen printing (t-shirts), vinyl sign making, offset press and bindery. Second year students will build on skills from year one to create advanced projects. Problem solving and communication with the client are stressed. During the second year the majority of the course is hands on, and students are allowed to specialize in their area of interest. Upon completion of year two, students will be ready to enter the job market at an entry level or pursue a degree in the diverse field of graphics. Articulation Agreement.

Computer Technology I/II Grade 11-12

This program provides students the opportunity to acquire real-world skills dealing with computers by using application software, the Internet, hardware and software installation and troubleshooting, networking and programming. First-year students will enhance their problem solving skills by learning the Java programming language and such markup languages as HTML,

DHTML, and JavaScript. In addition, students will receive training in network creation, usage, and manipulation. While considerable time is dedicated to “hands-on” learning activities, multiple learning styles are addressed through the program. Second-year students will enhance their problem solving skills by learning advanced topics in the Java programming language. Web design and technologies will be expanded upon using the Adobe suite of products including PhotoShop, DreamWeaver, and Flash. In addition, students will receive advanced training in network creation, manipulation, and server administration. Those considering this course should know the fundamentals of Algebra and have basic computer skills that include knowledge of word-processing and spreadsheet software such as MS Word and Excel.

Prerequisite: Computer Applications I and “B” or better in Algebra I or a subsequent course such as Geometry. Articulation agreement.

Electronics I/II Grades 11-12

The focus of the Electronics program is to prepare the student to further his/her education in such technical areas as electrical (electrician) or electronic technology, computers and networking, laser technology, data communication, aviation electronics, bio-medical services and the automotive or manufacturing industry. Electronics I/II is a two-year course with each year designed to “stand alone.” Students gain an in-depth understanding of electronic devices and circuits using a combination of lectures, hands-on labs, and computer based educational programs. The student will learn troubleshooting procedures using a variety of test equipment. Students will be exposed to various areas of the electronic service industry.

One year students will study analog electronics, which covers direct, and alternating current, series/parallel circuits, components such as resistors, capacitors, diodes, and transistors. The course will also cover amplifiers, power supplies, control circuits, and filters. The next year students will study digital electronics, which covers digital circuits, logic gates, Boolean expressions, integrated circuits, and numbering systems and their application in devices such as microprocessors, computers, calculators, and timers. The instructor is a certified test administrator for the Electronics Technicians Association. Prerequisite: Algebra I and basic computer skills. Articulation agreement.

Sending school students will take one block daily of Electronics and also be enrolled in a semester of Robotics and a semester of Computer Networking. The Robotics classes will provide the student with a background in the programming and building of robotic devices and their design and uses in the manufacturing industry. The class is divided into four sequential one-term units. The students may take units 1 and 2 their junior year and 3 and 4 their senior year. The networking curriculum is an in-depth study of computer networking with a focus on router and switch configuration, local area networks (LAN) and wide area networks (ANS). The class is divided into four sequential one-term units. The students may take units 1 and 2 their junior year and 3 and 4 their senior year.

Heating, Air Conditioning and Refrigeration I/II Grades 11-12

This class is designed to provide occupational and technical information related to the heating and cooling industry. Basic skills taught in this class are fundamentals of refrigeration, installation and service troubleshooting of residential air conditioners and furnaces, sheet metal fabrication, and electrical wiring of both house wiring circuits and control wiring circuits. The second year of the class is designed to provide the students with advanced troubleshooting and problem-solving skills for all types of furnaces and air conditioners. Fundamentals of commercial refrigeration, commercial air conditioners and furnaces, and advanced sheet metal fabrication are also taught. Students prepare and test for certification of section 608 of the Clean Air Act. Articulation Agreement.

Welding I/II Grades 11-12

Instruction will be given in gas, stick, MIG, and plasma cutting and welding processes. Practice in the preparation of metal for welding and correct application of the welding rods will be included. Students will work on projects after completing welding competencies set for that year. During

the second year, instruction will be given in advanced stick, advanced MIG, and TIG processes. Practice in the preparation of metals for welding, methods of testing welds, and correct applications of proper welds will be included. Students will work with mild steel, stainless steel,

Health Sciences Grade 12

This is a one-year program for senior students who wish to pursue a career in the health field. Students will be introduced to specialized areas through guest speakers and job shadowing in health-related occupations. Basic anatomy and physiology will be included in the curriculum. Students may become certified as a nursing assistant (CNA) provided they meet the necessary requirements before graduation. Clinical experience will be obtained at local hospitals and nursing homes during the second semester. Students must meet all competency requirements, demonstrates appropriate clinical conduct, and maintain an 80% average per term before moving to the clinical portion of the class. Students must also provide their own transportation to the clinical sites. Suggestion: Student should have previous courses in life sciences.