

KNOB NOSTER

HIGH SCHOOL



Course Description Book

College & Career Planning Guide



Knob Noster Public Schools Knob Noster High School

Dear Student:

This Course Description Handbook and College & Career Planning Guide contains a wealth of information to help you plan for your future through appropriate course selections. Regardless of the path you choose, whether it's tech prep or advanced college prep, the ultimate goal is the same for everyone—a successful and satisfying career.

The term "career" refers not only to a job, but also to a combination of work, education, and lifestyle. Developing a successful and satisfying career takes a great deal of planning, training, and hard work. Choosing the right career path is one of the most important decisions you will make in your lifetime. Many times people who do not plan for their career simply accept a job because they need the money. Others change jobs aimlessly, hoping to find a career path along the way. Junior High and Senior High School should be taken very seriously. The courses you take will have an impact on your future career.

Decision-making, particularly career-oriented decision making, may seem to be a difficult task. It is also extremely exciting because you are the one who makes the decisions. You will increase your chances of success if you will take the most demanding academic subjects and select courses closely aligned to your career pathway.

This handbook and planning guide can help you to evaluate options through our school curriculum in order to develop your college and career goals. We hope this booklet will help you prepare for the kind of career you want through setting definite goals and by obtaining the necessary training, education, and experiences that will benefit you after high school.

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Sincerely,

Connie Morris Laura Kennedy Melissa Steerman

Mrs. Connie Morris Mrs. Laura Kennedy Mrs. Melissa Steerman

High School Principal School Counselor School Counselor

COURSE DESCRIPTION HANDBOOK

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HIGH SCHOOL GRADUATION REQUIREMENTS

Units of Credit

A Carnegie Unit of high school credit is the standard of measurement given for the completion of a course covering a regular school year equivalent to 36 weeks of five (5) class periods. One half unit may be given for 18 weeks of five class periods.

Minimum Requirements

Students must meet the minimum requirements for graduation as prescribed by the Department of Education for the State of Missouri which are included in the Knob Noster Public Schools graduation requirements as follows:

To meet high school graduation requirements, a student must complete a minimum of 26 units of credit during grades nine through twelve in a program which should be cooperatively planned by the student, parents, and the school to meet individual needs of the student. The program shall consist of:

Subject Area	Required # of Credit
English Language Arts Social Studies Mathematics Science*	4 credits 3 credits 3 credits 3 credits
Fine Arts Practical Arts Personal Finance Physical Education* Health Electives	1 credit 1 credit ½ credit 1½ credits ½ credits ½ credits 8 ½ credits
	TOTAL: 26 credits

- ★ One additional credit of ELA, math or science can be earned by taking 2-year classes at the Warrensburg Area Career Center or State Fair Career Center. One science credit may be earned by completing the three courses in Vocational Agriculture at KNHS.
- ★ Students with physical disabilities or handicaps may have this requirement waived by the principal with appropriate medical documentation.
 - 1. All students must pass the United States Constitution and the Missouri Constitution tests before graduation. All students must complete 30 minutes of CPR training. Beginning with the graduating class of 2021, all students must pass a local civics test.
 - 2. Eight semesters of attendance are recommended, with a minimum requirement of seven semesters.
 - 3. A maximum of two units of credit may be earned through correspondence courses. (All correspondence course fees are the responsibility of the student.)
 - 4. Special cases such as transfers from other schools will be considered individually.
 - 5. All 9th, 10th and 11th grade students must be enrolled in a math, science, English language arts and social studies class as prescribed in the Course Description Book.



UNIVERSITY OF MISSOURI FRESHMAN ADMISSION REQUIREMENTS

Regular admission of first-time college students or all students graduating from high school requires completion of at least 17 credits (1 credit= 1 year in class) as follows:

English
Mathematics
Science
Social Studies
Fine Arts
World Languages2 credits (same language)

Note: Applicants lacking any of the above core requirements will be reviewed on an individual basis.

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Standardized tests are designed to give a common measure of students' performance. They help compare an individual's performance with the performance of a group of students from a given class, school, or school system. Since large numbers of students throughout the country take the same test, "standards" can be developed to show whether school programs are succeeding and how students are performing. Standardized achievement tests measure how much students have already learned about school subjects such as reading, math, language skills, spelling, or science. On the other hand, standardized aptitude tests measure your students' ability to learn in school. They measure verbal ability, mechanical ability, creativity, clerical ability, or abstract reasoning.

ACT (American College Testing)

The ACT is a battery of four examinations in English, math, reading, and science reasoning, each of which yield separate scores measuring developed abilities. The test is required by many colleges as part of the application process for admission. *The ACT is given multiple places, so go to www.actstudent.org to check for testing locations.*

Advanced Placement Testing (AP)

Students enrolled in AP courses are required to complete the AP examination for which the course has prepared them. Cost of the examination will be paid by the school. Information is available from the teachers of the AP courses. Each college or university determines which of these examination scores it will accept. It is important for students to have accurate information from the school they plan to attend regarding the acceptance of AP credit.

ASVAB (The Armed Services Vocational Aptitude Battery)

The ASVAB measures students' strengths and potential for future success. The ASVAB also provides career information for various civilian and military occupations and is an indicator for success in future endeavors including college, vocational school, or a military career. *The ASVAB is given to all juniors and those seniors who need to retake it for military entrance.*

College Level Exam Program (CLEP)

There are two types of CLEP examinations. The first type is the General Examinations that measure achievement in the liberal arts areas of English composition, mathematics, natural sciences, social sciences, and history. The second is the Subject Examinations, which measure achievement in specific college-level courses. The examinations are comparable to a final exam in a particular undergraduate course. Each college or university determines which of these examination scores to accept. It is important for students to have accurate information from the school they plan to attend regarding the acceptance of CLEP credit. The cost per examination is paid by the student, and the student is responsible for arranging the test with the college's testing office.

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EOC Exams (End-of-Course)

EOC assessments are given in May of each school year. Students taking the following courses will be tested: English II, Honors English II, Sophomores in Pre AP English, Algebra IB, Algebra I, Algebra II if Algebra I EOC was given in 8th grade, Biology and Government. EOC's are required by the state of Missouri for graduation requirements.

EXPLORE

EXPLORE is an achievement test and interest survey that measures performance in math, English, reading and science reasoning, plus provides information about career interests. This is the entry point into ACT's Educational Planning and Assessment System, and is followed by the PLAN and the ACT. Taking this assessment in the ninth grade helps students explore a broad range of options for their futures including planning high school courses, preparing for the ACT, and choosing a career path.

PLAN (Preliminary American College Testing Program)

PLAN is a two-hour version of the ACT given in the fall to Sophomores. The PLAN provides practice for the ACT. It includes tests in English, mathematics, reading, and science reasoning. The test also provides a career interest inventory. It is a good tool for sophomores to use as they start planning for their post-secondary college and career options.

PSAT/NMSQT (Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test)

The PSAT/NMSQT measures verbal and mathematics reasoning skills important for academic success in college. It serves three purposes: gives the student practice for the SAT; is the first step in qualifying for scholarships sponsored by the National Merit Scholarship Corporation and other scholarship programs; and gives the student the opportunity to participate in the Student Search Service. *This test is taken in the junior year for NMSQT qualification*.

SAT (Scholastic Aptitude Test)

SAT is a test used to predict student performance in college. Required by some schools as part of the application process, this three-hour test has two main sections—verbal and math. *The SAT is given multiple places, so go to www.collegeboard.org to check for testing locations.*

TSA (Technical Skill Attainment)

TSA's are given at the local Career Center's for programs that they offer to students.



The following definitions are provided to assist the reader with a better understanding of terminology utilized throughout the Career and Education Planning Guide.

Advanced: Beyond the introductory level of study.

Advanced Placement (AP): College level courses taught at the high school. Students completing the class and passing the AP content exam with a 3, 4, or 5 rating may receive college credit for subject mastery for a college or university. The AP exam must be taken to earn potential credit. AP courses are weighted with an additional 0.5 credit.

Applied: A course with technical and/or practical focus.

Dual Credit (DC): Dual credit courses are those which high school students may take to earn both high school and college credits. Dual credit courses may be taught by regular high school faculty. Students may register for the college course and pay for the credit. The grade received in the class will be the grade on the college transcript. Dual credit courses are weighted with an additional 0.333 credit.

Early Graduation: Completion of required coursework in seven (7) semesters and choosing not to attend for an eighth (8th) semester. The paperwork must be submitted by 1 October.

Embedded Credit: Coursework completed in program through area Career Center classes. Credit can be earned in ELA, science or math.

Honors: Courses with an accelerated curriculum and emphasis on challenging coursework. Courses will prepare students in pursuit of intensive programs and careers in the related content area. Considerations for admission will be based on teacher recommendation and parent permission. Honors courses are weighted with an additional 0.333 credit.

Practical: Having application to real world experience; concepts and practices used in the workplace.

Prerequisite: Any requirement which must be met before advancing to a more difficult level of coursework.

Required: A course which must be completed to meet minimum state and local graduation standards.

Research: Course study requiring extensive use of the library media center, computer lab, and/or other outside resources for the purpose of writing, presentation, or performance.

Rigor: Significant course difficulty level especially in assigned reading, writing, mathematics and/or performance.

Technical: Related to the development and/or use of technology.

Unaccredited: Any public, private, parochial, or home school that lacks proper credentials as determined by officials of the Knob Noster R-VIII School District.

Weighted: A grade weighting system will be implemented for the computation of honor roll and class rank AP classes are weighted with an additional 0.5 credit. The honors and dual credit classes are weighted with an additional 0.333 credit.



What Can Missouri Connections Do for Me?

Determining your future is a life-long journey that requires many decisions along the way! Multiple opportunities await you, so prepare yourself for any option. The decisions are yours! Missouri Connections is a tool to help you make those decisions, create your plan and achieve success as you define it. It is a "one- stop-shop" that takes your education and career planning to a higher level.

With Missouri Connections you can:

- Better understand yourself, explore your interests, and discover your talents.
- Investigate education and career options so you can create an ICAP or "MyPlan" that is right for you.
- Use the abundant resources for college and training exploration, finding options to finance your future education, understanding employment skills, and learning about high demand jobs in careers that interest you.
- Make the connection between school, learning, and your future in the work world.
- Develop a plan as you find answers to these important questions:
 - Who Am I?\
 - Where Am I Headed?
 - How Do I Get There?

<u>The Purpose of Career Paths</u>

The Knob Noster School District has programs to assist all students in choosing and preparing for rewarding careers. A general high school program of study is simply not enough preparation for today's college, technical career, or employment in today's complex workplace. Rather, the program of study must be carefully planned and selected to help ensure that students attain their goals.

CAREER PATHS help give focus and direction to the selection of a high school course of study add to best assist the student in achieving whatever goal he/she has chosen. All high school students are asked to consider Career Paths relevant to their future. Career paths are clusters of occupations and careers that are grouped together because many of the people in them share similar interests and strengths. All paths include a variety of occupations that require different levels of education and training. Career paths provide students with an area of focus, along with flexibility among many options and a variety of ideas to pursue.

CHOOSING A CAREER PATH...

As a part of Knob Noster High School's career planning, each student, working with parents, Panther Hour teacher, and school counselors will develop a program of study centered around one of the sixteen career pathways. The course of study may reflect a general area of interest such as health services or it may concentrate on a specific occupational goal such as becoming a respiratory therapist or a registered nurse. The following activities will enable students to achieve a designated career path:

- Knob Noster students have been involved in activities such as the Career Fair designed to expand awareness of a variety of careers. Activities to explore careers will continue throughout high school.
- Identify interests, ability, and talents.
- Consider the possible careers in each path in relationship to those interests, abilities, and talents.
- Decide which career path seems to fit the students best.
- Select courses that are related to the career path you have chosen.
- Students choose a career path by considering personal interests, personalities and strengths.
- Students develop and revise annually your I-CAP by selecting the courses that are relevant to the variety of occupations in the career path chosen.

HOW PARENTS AND OTHERS CAN HELP...

- Help your child identify interest, abilities, and talents by discussing strengths with them
- Share information about careers and work experiences.
- Arrange for your child to talk with people about careers that are of interest.
- Help your child explore career options through the Missouri Careers website at: www.missouriconnections.org See the Counseling Center staff for login information.

IF A STUDENT CHANGES THEIR MIND...

A career path is a choice; it is NOT a permanent commitment. As students mature and have new experiences, they will learn new things about themselves and may want to change career paths. I-CAP's are reviewed and revised annually. Students will not lose credit for classes already taken if they change career paths nor will changing career paths itself delay a student's graduation date.

Career Paths - - What Are They?

Career paths are clusters of occupations/careers that are combined because many of the people in them share similar interests and strengths. It is important to note the variety of occupations in each pathway that require different levels of education and training.



ARTS & COMMUNICATION

Are you a creative thinker? Do you consider yourself imaginative and innovative? Do you like doing things that are original? This pathway prepares students for occupations related to the humanities and the performing, visual, literary, and media arts. These occupations include architecture, graphic-/ interior-/ and fashion design, writing, film, fine arts, journalism, languages, media, advertising, and public relations.

Explore the following programs of study: Arts, A/V Technology, & Communications

BUSINESS, MANAGEMENT, AND TECHNOLOGY

Do you like being a leader, organizing people, and planning activities? Are you good at communicating with a variety of people? Do you like working with facts or numbers? Do you enjoy carrying through an idea and seeing the end product? This pathway prepares students for occupations related to the business environment. These occupations include entrepreneurship, sales, marketing, computer/information systems, finance, accounting, personnel, economics, and management.

Explore the following programs of study: Business Management & Administration, Finance, Information Technology, or Marketing.

HEALTH SERVICES

Do you like helping people who are sick or helping people stay well? Are you interested in working in hospitals, clinics, or treatment centers? Are you curious about new diseases and how the body works? Do you enjoy interacting with people? This pathway prepares students for occupations related to the promotion of health and the treatment of disease. These occupations include research, prevention, treatment, and related health technologies.

Explore the following programs of study: Health Science

HUMAN SERVICES

Are you friendly, open, and outgoing? Do others consider you understanding and cooperative? Is it important for you to try to make things better for other people? This pathway prepares students for occupations related to economic, political, and social systems. These occupations include education, government, law and law enforcement, leisure and recreation, military, religion, child care, social services, and personal services.

Explore the following programs of study: Education & Training, Government & Public Administration, Hospitality & Tourism, or Law, Public Safety, Corrections & Security.

INDUSTRIAL AND ENGINEERING TECHNOLOGY

Are you mechanically inclined? Do you like to use your hands and build things? Do you enjoy finding out how things work? Are you practical? This pathway prepares students for occupations related to the technologies necessary to design, develop, install, or maintain physical systems. These occupations include engineering, manufacturing, construction, service, and related technologies.

Explore the following programs of study: Architecture & Construction, Manufacturing, Transportation, Distribution & Logistics, or Science, Technology, Engineering & Mathematics (STEM)

NATURAL RESOURCES

Do you like the outdoors? Are you curious about the physical world? Are you interested in plants and animals? Do you enjoy being physically active? Do you like to observe, investigate, and solve problems? This pathway prepares students for occupations related to agriculture, the environment, and natural resources. These occupations include agricultural sciences, earth sciences, environmental sciences, fisheries, forestry, horticulture, and wildlife.

Explore the following programs of study: Agriculture, Food & Natural Resources

Career Clusters Program of Study Templates

"What do you want to do after high school?" That is a question that is asked of our students a multitude of times over the course of their public school education. It's a question that is not easily answered, due to the enormous number of possible post-secondary alternatives that are currently available to our students. Technological advances and global competition have transformed the nature of both education and work. Tomorrow's jobs will require more knowledge and training, highly developed 21st Century Skills, technological skills, and more flexible workers than ever before. Our students need to be prepared for, and informed of, the reality of several job and career changes over the course of their lifetimes. They need to understand that they will have to continually update their knowledge and skills, which may require additional training and/or education.

The Knob Noster School District offers a wide array of courses and experiences to its students. As students review course offerings and activities, we hope to guide them in choosing coursework and experiences that are relevant to their future goals.

In planning for post-secondary goals, students should start with examining where their own interests and talents lie. This can be accomplished in many different ways within the school district; researching middle and high school classes of interest, taking interest and skill inventories, participating in career fairs offered, and taking advantage of the many extra-curricular and enrichment activities available. The school district uses the Missouri Connections online program (www.missouriconnections.org) for interest assessments and to explore the variety of options students have beyond high school.

Using the results of career assessments, students create their personal plan of study for their high school years and beyond. School counselors, teachers, and other district personnel are available to guide students and parents in this important planning process. The planning process is critical to not only meeting graduation requirements, but also to taking the coursework that will ultimately lead to a successful post- secondary transition.

The following program of study templates, serve as a guide, along with other career planning materials, to help students develop their personal plans of study. Courses listed within these program of study templates are recommended coursework only and should be individualized to meet each learner's educational and career goals.

Courses At-a-glance

Course Number	Course Name (* indicates weighted course)	Grad Leve	Sem/Yr	Credit
	IDOTEC Processor	Level		
	BROTC Program		V 7	
HAS 100	AS-100: Aviation History (½ PE credit & ½ elective)	09-12		1
HAS 200	AS-200: The Science of Flight (½ PE credit & ½ elective)	10-12	Year	1
HAS 300	AS-300: Global Awareness (½ Per Finance & ½ elective)			1
HAS 400	AS-400: Cadet Corp Management (1 elective)	10-12		1
HAS 500	AS-500: Aviation Honors Grounds School (College Credit)	11-12	Year	1
	anguage Arts			
HLA 100	ELA I	09	Year	1
HLA 200	ELA II	09-12		1
HLA 201	ELA II 9*	09-12		1
HLA 300	ELA III	10-12		1
HLA 302	Pre AP ELA*	10-12	Year	1
HLA 400	ELA IV	11-12	Year	1
HLA 101	Speech	09-12	Sem	.5
HLA 403	Creative Writing DC*	11-12	Sem	. 5
HLA 401	AP English Language and Composition*	11-12	Year	1
HLA 402	AP English Literature and Composition*	11-12	Year	1
HLA 301	Career English	11-12	Sem	.5
Fine Arts				
HFA 100	Art I	09-12	Year	1
HFA 200	Art II	10-12	Year	1
HFA 300	Art III	11-12	Year	1
HFA 400	Art IV	12	Year	1
HFA 201	Ceramics & Painting	10-12	Year	1
HMU 100	Concert Choir	09-12	Year	1
HMU 103	Experiences in Music	09-12	Sem	.5
HMU 200		09-12	Year	1
HMU 300	Music Theory	11-12	Year	1
HMU 101	Band	09-12	Year	1
HMU 102	Jazz Band	09-12		1
HTH 100	Drama I	09-12		1
HTH 201	Advanced Drama	10-12		1
HTH 101	Introduction to Theatre	09-12		.5
Mathema				
HMA 100		09-12	Year	1
HMA 101	Algebra B	09-12		1
HMA 102	Algebra I	09-12		1
HMA 200	~	09-12		1
HMA 201	Geometry 9	09-12		1
HMA 301	Algebra II Honors*	10-12		1
HMA 401	Trigonometry DC (2 nd semester only)*	11-12	Sem	.5
HMA 402	College Algebra DC (1st semester or Full Year)*	11-12	Sem/Yr	.5 or 1
HMA 500	AP Statistics*	12	Year	1
HMA 500	AP Calculus*		Year	
111VIA 501	AI Calculus	12	icai	1

HMA 300	Algebra II	11-12	Year	1		
HMA 302	Statistics	11-12	Year	1		
HCS 501	AP Computer Science A	11-12	Year	1		
_	Education & Health					
HHE 100	Health	09-12	Sem	.5		
HPE 200	Lifetime Sports and Fitness	10-12		1		
HPE 201	Weightlifting & Personal Fitness	10-12		1		
HPE 101	Freshman Weights	09	Year	1		
HPE 103	Freshman PE	09	Sem	.5		
HPE 300	Sports Education	11-12	Year	1		
HPE 301	Personal Fitness	10-12	Year	1		
PLTW: Pr	re-Engineering Program (Also considered a Practical Art)					
HET 101	Introduction to Engineering Design (IED)	9-12	Year	1		
HET 201	Principles of Engineering (POE)*	10-12	Year	1		
HET 300	Digital Electronics (DE)	11-12	Year	1		
HET 400	Engineering Design & Development (EDD)	11-12	Year	1		
Science						
HSC 100	Biology	09-12	Year	1		
HSC 400	AP Biology*	11-12	Year	1		
HSC 300	Earth Science	10-12	Year	1		
HSC 200	Physical Science	10-12	Year	1		
HSC 403	AP Physics*	11-12	Year	1		
HSC 201	Chemistry DC*	10-12	Year	1		
HSC 401	AP Chemistry DC*	11-12	Year	1		
HSC 301	Anatomy and Physiology*	11-12	Year	1		
HSC 301 HSC 202	Anatomy and Physiology* Chemistry Lab Assistant	11-12 11-12	Year Year	1		
HSC 202 HSC 402	Chemistry Lab Assistant AP Environmental Science*					
HSC 202 HSC 402 Social Stu	Chemistry Lab Assistant AP Environmental Science* Idies	11-12	Year	1		
HSC 202 HSC 402 Social Stu HSS 300	Chemistry Lab Assistant AP Environmental Science* Idies Western Civilizations	11-12 11-12 11-12	Year Year Year	1		
HSC 202 HSC 402 Social Stu HSS 300 HSS 100	Chemistry Lab Assistant AP Environmental Science* Idies Western Civilizations American History I	11-12 11-12	Year Year Year	1		
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HSC 202 HSC 402 Social Stu HSS 300 HSS 100 HSS 200 HSS 201 HSS 301 HSS 302	Chemistry Lab Assistant AP Environmental Science* Idies Western Civilizations American History I American History II (1st semester only) Government (2nd semester only) Sociology (1st semester only) Psychology (2nd semester only)	11-12 11-12 11-12 09-12 10-12	Year Year Year Sem Sem Sem Sem	1 1 1 1 .5 .5 .5		
HSC 202 HSC 402 Social Stu HSS 300 HSS 100 HSS 200 HSS 201 HSS 301 HSS 302 HSS 303	Chemistry Lab Assistant AP Environmental Science* Idies Western Civilizations American History I American History II (1st semester only) Government (2nd semester only) Sociology (1st semester only) Psychology (2nd semester only) Contemporary Issues (1st or 2nd semester)*	11-12 11-12 11-12 09-12 10-12 11-12	Year Year Year Year Sem Sem Sem Sem Sem	1 1 1 1 .5 .5		
HSC 202 HSC 402 Social Stu HSS 300 HSS 100 HSS 200 HSS 201 HSS 301 HSS 303 HSS 400	Chemistry Lab Assistant AP Environmental Science* Idies Western Civilizations American History I American History II (1st semester only) Government (2nd semester only) Sociology (1st semester only) Psychology (2nd semester only) Contemporary Issues (1st or 2nd semester)* AP European History*	11-12 11-12 11-12 09-12 10-12 11-12 11-12	Year Year Year Sem Sem Sem Sem	1 1 1 1 .5 .5 .5		
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HBU 300	Accounting II	11-12	Year	1
HBU 101	Business Technology I	09-12	Year	1
HBU 201	Digital Media DC*	10-12	Year	1
HBU 102	Introduction to Business	9-12	Sem	.5
HBU 103	Business and Personal Law	9-12	Sem	.5
HBU 202	Desktop Publishing/Yearbook	09-12		1
HET 100	Materials and Processing I	9-12	Year	1
HET 200	Materials and Processing II	10-12		1
HET 301	Special Projects in Materials	10-12		1
HFC 100	Career Development and Entrepreneurship	9-12	Year	1
HFC 202	Housing, Home Furnishings, and Equipment	10-12		.5
HFC 200	Nutrition and Wellness	10-12		1
HFC 203	Child Development, Parenting			
HFC 301		10-12		1
	Childcare Management	10-12		1
HFC 400	Career Pathways to Teaching	11-12	Year	1
HAG 100	Introduction to Agriculture	9-12	Year	1
HAG 300	Greenhouse Operation and Management	10-12		1
HAG 301	Personal Finance and Agriculture Business	11-12	Year	1
HAG 302	Landscaping and Turf Management	10-12		1
HAG303	Animal Science	10-12		1
HAG 304	Agriculture Sales, Marketing, and Mgmt	11-12	Year	1
HAG 305	Natural Resources & Conservation	10-12	Year	1
Warrens	burg Area Career Center			
HVT 400	Agriculture Education	11-12	2 or 4	3 or 6
HVT 401	Computer Technology	11-12	2 or 4	3 or 6
HVT 402	Automotive Collision Technology	11-12	2 or 4	3 or 6
HVT 403	Automotive Service Technology	11-12	2 or 4	3 or 6
HVT 404	Construction Technology	11-12	2 or 4	3 or 6
HVT 405	Health Science	11-12	2 or 4	3 or 6
State Fair	r Career & Technology Center (Sedalia) - must receive Su	perint	endent a	pproval
HVT 406	Criminal Justice	11-12		3 or 6
-	Early Childhood Careers	11-12	Year	6 or 8
	Graphic Design	11-12	Year	3 or 6
HVT 407	Industrial Equipment Maintenance	12	Year	9
HVT 408	Precision Machining	11-12	Year	4 Or 11
	Welding Technology	11-12	Year	4 or 8
Miscellar	neous Electives			1 02 0
0714	A+ Tutoring	12	Sem/Yr	0
0714	Cadet Teaching	11-12	Sem/Yr	.5 or 1
0710	Flag Corps (1 st semester only)	09-12		.5
0722	High School Office Aide	11-12	Sem/Yr	0
0723	Library Media Center Aide	11-12	Sem/Yr	0
	Work-Site Learning	11-12	Sem/Yr	
0725	Critical and Creative Problem Solving	09-12		.5 or 1
0726		-		1
1111A	L'II (L'nœligh Language Laggage)			
	ELL (English Language Learner)	09-12		1
0731	ELL (English Language Learner) Innovation Hour *Dual Credit or AP credits	09-12 9-12	Year Sem/Yr	.5 or 1

FINE ARTS

VISUAL ART - Courses Flow Chart

Beginning Courses may be taken in any combination or order	Intermediate Courses require a prerequisite or teacher permission	Advanced Courses require a prerequisite or teacher permission
Art I (1) Prereq: none	Art II (1) Prereq: Art I with a C Average	Art III (1) Prereq: Art II or Ceramics & Painting with a B average
	Ceramics & Painting (1) Prereq: Art I with a C Average	Art IV (1) Prereq: Art III with a B average

HFA 100 Art 1 9-10-11-12 1 credit

Prerequisite – none

Art I fulfills the fine arts requirement and is a prerequisite for all advanced art courses. This yearlong course will focus on the Principles and Elements of Design through a variety of materials and techniques. Students will have the opportunity to develop drawing skills, experience different painting techniques and study 3D sculpting methods. Through the use of different mediums, students will experience many different styles of art from Ancient Greek to Contemporary Art. Students will be introduced to and practice the art criticism process with their own works as well as the works of others. Throughout the duration of this course Art I promotes responsibility, work ethic, and time management. This is an excellent course for the beginning artist as well as artists with advanced skill levels.

HFA 200 Art II 10-11-12 1 credit

Prerequisite: Art I with a C average or better

Art II is an advanced course in which students will focus on the principles and elements of design through a variety of materials and techniques. Students will have the opportunity to further develop drawing skills, experience different painting methods and study ceramic hand building techniques. An advanced level of instruction is given with each medium and much time is spent on the development of skills needed to produce high quality works of art. Students are introduced to and will participate in the art criticism process from the art history approach. Art production is designed to create critical thinking, originality and problem solving.



HFA 201 Ceramics & Painting 10-11-12 1 credit

Prerequisite: Art I with a B average or better, or teacher approval

Ceramics and Painting will be a yearlong course that will focus on ceramic hand building skills and advanced painting techniques. In ceramics, students will heavily study design and construction while applying many different artistic tools, techniques, and materials. In painting, students will be introduced to many different styles and techniques such as, but not limited to, watercolor, gouache, acrylic, and sumi-e. They will focus heavily on developing their skills through the use of the principles and elements of art. Art history, criticisms, aesthetics, and careers will be studied throughout the entire course. Art production is designed to create critical thinking, originality and problem solving.

HFA 300 Art III

9-10-11-12 1 credit

Prerequisite – Art II with a B average

Art III is for the highly motivated and serious art student. Aesthetics, art history, and study through art criticism enables students to understand their own work and work of other cultures and times. A three dimensional perspective will be incorporated into most projects through this course. Many different mediums and combinations of mediums will be used throughout. Students will be introduced to project planning and goal setting processes needed for an Art IV class. A level of high quality work is expected. Art III students will compete in various competitions and display their work in multiple locations.

HFA 400 Art IV

11-12 1 credit

Prerequisite – Art III with a B average

Art IV is designed for the highly motivated and serious art student. Students will focus on goal setting, time management, rubric development, portfolio building, art criticism and the development of a personal style. First semester students will focus their projects around the study of art history and styles of master artist. Second semester students will work towards developing their own personal style and portfolio building for scholarship and professional opportunities. Students will produce work in a variety of mediums and techniques. A level of high quality work is expected. Art IV students will compete in various competitions and display their work in multiple locations.

DRAMA

HTH 100 <u>Drama I</u> 9-10-11-12 1 credit

Prerequisite – none

This class is specifically designed for those interested in the play and other performance opportunities. Students will be expected to participate in at least one competition and help with our own competition and school play(s). The course concentrates on studying in-depth plays of significant dramatic merit, acting in styles and presentation of various periods of dramatic history, and presentation of a variety of individual dramatic materials. The class will also include a study in Theatre History, Technical Theatre and in-depth aspects of Theatre production.

HTH 200 Advanced Drama

10-11-12

1 credit

Prerequisite: Completion of Drama I with a recommended B average and teacher approval.

HTH 101 Introduction to Theatre 9-10-11-12 1 credit

Prerequisite - None

This course will introduce students to various aspects of the theatrical production as well as examine drama through multiple media and its influence on culture.

** Additional credits may be available online through State Fair Community College. See your counselor for details.

MUSIC



HMU 100 Concert Choir 9-10-11-12 1 credit

Prerequisite – None

Concert Choir is for students who enjoy and want to learn more about singing. Students will work on the fundamentals of singing, part singing, simple sight-reading, and the fundamentals of music as well as aspects of music appreciation including listening, musical theatre, and music history. Students are required to perform at all scheduled concerts and competitions. To re-enroll students must have a B or better average.

HMU103 Experiences in Music 9-10-11-12 1 credit

Prerequisite – None

This class is for students who have an appreciation for music but don't want to participate in a performance-based course. Students will be introduced to the elements of music through exploration of music theory, concert observations, computer programs, web based instruction, listening assignments, and music production. We will also examine music's influence on our culture through various media.

HMU 200 Show Choir 9-10-11-12 1 credit

Prerequisite – Students must audition for this class

Show Choir is a specialized choir class involving all of the skills and activities of choir combined with rigorous choreography including theatrical movement and dance. Students enrolled in Show Choir are

required to attend all scheduled performances and competitions. Members may have to purchase certain items of the Show Choir outfit.

HMU 300 Music Theory 10-11-12 1 credit

Prerequisite – Band, Jazz Band or Choir experience

Music theory is an important part of the foundation for any musician for several reasons. Music theory, like language, enables us to understand the structure and meaning behind a musical composition.

HMU 101 <u>Band</u> 9-10-11-12 1 credit

Prerequisite – Students entering high school band should have a minimum of three years playing experience and must possess basic music reading and group participation skills as approved by the instructor.

This course stresses the understanding of music notation and vocabulary, elements and styles of music, as well as having a command of performance and listening skills. Marching band in the fall converts to a concert band upon completion of marching responsibilities near the end of 1st quarter. The band performs at various civic events, school music programs, and MSHSAA contests and festivals. All public performances participated in by the band are required. Excuses other than personal illness or family weddings and funerals may be considered on an individual basis (work will not be an excused absence). Some of the larger and unique instruments are available from the school at no charge, but most students own their own instruments.

HMU102 Jazz Band 10-11-12 1 credit

Prerequisite: Students entering high school jazz band should have a minimum of three years playing experience

This course explores jazz styles such as swing, rock, Latin, and blues through the big band ensemble. Instruction will also include basic improvisation. The jazz band performs at various civic events, school music programs, home basketball games and MSHSAA contests/festivals. All public performances participated in by the band are required. Excuses other than personal illness or family weddings and funerals may be considered on an individual basis (work will not be excused). must possess basic music reading and group participation skills as approved by the instructor.

0717 <u>Flag Corps</u> 9-10-11-11 ½ credit

Prerequisite: Auditions for this group typically occur in February of the preceding school year.

This course is offered during first semester only for a half of *elective credit*. The flag corps participates at all home football games and parades and competitions attended by the Panther Pride Marching Band. Students will be responsible for learning and memorizing flag routines for these public performances. All public performances participated in by the flag corps are required. Excuses other than personal illness or family weddings and/or funerals may be considered on an individual basis (work will not be excused).



Air Force Junior Reserve Officer Training Corps (JROTC)

Program Description: The Air Force Junior Reserve Officer Training Corps (AFJROTC) is a program for high school students focused on developing citizens of character dedicated to serving our nation and communities. Each year the course is divided into three categories: Aerospace Science (AS) 40%, Leadership Education (LE) 40%, and Wellness 20%. Students are provided a uniform free of charge and are required to wear the uniform once each week and must meet Air Force grooming standards. A uniform cleaning fee may be assessed if the uniform is not turned in clean and pressed at the end of the year. Books and materials are provided by the Air Force. Instructors are retired Air Force personnel who are certified in JROTC instruction. Guest speakers and field trips are included as part of the curriculum. Wellness, an official part of the Air Force Junior ROTC program, is reinforced through an exercise program focused upon individual baseline improvements with the goal of achieving or exceeding a national standard as calculated by age and gender. Students do not have any future military commitment, but ROTC scholarship opportunities are available for top-performing students. At the discretion of each military service, advanced enlistment grade credit is normally available to students completing three or more years of the program.

Beginning Course	Intermediate Courses require a prerequisite	Advanced Courses require a prerequisite
AS-100: Aviation History Prereq: none	AS-200: The Science of Flight Prereq: AS-100	AS-400: Cadet Corp Management Prereq: AS-300
	AS-300: Space Exploration Prereq: AS-100	A-500 : Aviation Honors Ground School Prereq: AS-200. Requires SASI approval for enrollment. New cadets considered case-by-case. 5 College Credit Hours.
Note: AS-100 is open to all students grades 9-12	Note: AS-200 & AS-300 are offered every other year. Requires SASI approval for enrollment.	Note: AS-400 requires students to have completed 2 year of JROTC classes. Requires SASI approval for enrollment.

HAS 100 AS-100: Aviation History 9 or 1st year students 1 credit

Prerequisite: None

Embedded Credit: ½ credit in Physical Education and ½ credit for Elective

The Aviation History course focuses on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and a brief

astronomical and space exploration history. It is interspersed with concise overviews of the principles of flight to include basic aeronautics, aircraft motion and control, flight power, and rockets.

Leadership Education 100: Traditions, Wellness, and Foundations of Citizenship: The leadership curriculum introduces cadets to AFJROTC and provides a basis for progression through the rest of the AFJROTC program while instilling elements of good citizenship. It contains sections on cadet and Air Force organizational structure; uniform wear; customs, courtesies, and other military traditions; health and wellness; fitness; individual self-control; and citizenship.

Health and Wellness: This component makes up 20% of instructional time to motivate cadets to lead active healthy lifestyles beyond program requirements and into their adult lives. Cadet baselines are established using the Presidential Fitness Challenge Program and the AFJROTC Wellness Program. This component consists of 19 exercises that target and develop all muscle groups with sufficient anaerobic and aerobic intensity.

HAS 200 AS-200: The Science of Flight 10-11 1 credit

Prerequisite: Completion of AS-100, 1st Year Cadet Program

Embedded Credit: ½ credit in Physical Education and ½ credit for Elective

Note: AS-200 is offered to 2nd & 3rd Year JROTC Cadets every other year

This is a science course designed to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. This course begins with an introduction to basic aerodynamics such as the forces of lift, drag, thrust, and weight. The course then moves to discussion regarding the atmosphere and weather. After developing an understanding of the environment, how that environment affects flight is introduced. Students also learn basic navigation including map reading, course plotting, and the effects of wind. The portion on the Human Requirements of Flight is a survey course on human physiology. Discussed here are the human circulatory system, the effects of acceleration and deceleration, and protective equipment.

Leadership Education LE 200: Communication, Awareness and Leadership stresses communications skills and cadet corps activities. Information is provided on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development. Written reports and speeches compliment academic materials. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects.

Health and Wellness: This component makes up 20% of instructional time to motivate cadets to lead active healthy lifestyles beyond program requirements and into their adult lives. Cadet baseline is established using the Presidential Fitness Challenge Program and the AFJROTC Wellness Program. This component consists of 19 exercises that target and develop all muscle groups with sufficient anaerobic and aerobic intensity.

HAS 300 AS-300: The Exploration of Space 10-11 1 credit

Prerequisite: Completion of AS100

Note: AS-300 is offered to 2nd & 3rd Year JROTC Cadets every other year

Embedded Credit: ½ credit in Personal Finance (second Semester) and ½ credit for Elective

The Exploration of Space: This science course includes information about space science and exploration. The course begins with the study of the space environment from the earliest days of interest in astronomy and early ideas of the heavens, through the Renaissance, and into modern astronomy. It provides a study of the earth, sun, stars, moon, and solar system, including the terrestrial and outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories, unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. The section on manned spaceflight focuses on the Space Shuttle, space stations and beyond, covering milestones in the endeavor to land on the moon and to safely orbit humans and crafts for temporary and prolonged periods. The course covers the human aspect of spaceflight, focusing on the human experience in space. It also examines the latest advances in space technology, including robotics in space, the Mars Rover, and commercial uses of space.

<u>Global Awareness:</u> This is a customized course about the world's cultures. The course is specifically created for the US Army, Marine Corps, Navy, and Air Force Junior ROTC programs. It introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region.

Leadership Education-300 (LE): A Life Skills and Career Opportunities textbook is helpful to students deciding which path to take after high school. Information on how to apply for admission to college or to a vocational or technical school is included. Information on how to begin the job search is available to students who decide not to go to college or vocational school. Also available is information about financial planning and how to save, invest, and spend money wisely, as well as how not to get caught in the credit trap. Students are informed about real life issues such as understanding contracts, leases, wills, warranties, legal notices, and personal bills. Citizen responsibilities such as registering to vote, jury duty, and draft registration are also presented. For those students who may be moving into an apartment of their own, information is presented on apartment shopping and grocery shopping skills. There is information on how to prepare a résumé and the importance of good interviewing skills. If there are students who are interested in a career in the military, with the federal government, or an aerospace career, information is also provided for them.

Personal Finance: Understanding and managing personal finances are key to one's future financial success. This one-semester course (offered second semester) is based on the Missouri Personal Finance Competencies and presents essential knowledge and skills to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. Students will also learn to apply decision-making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success.

HAS 400 AS-400: Cadet Corps Management 12 1 credit

Embedded Credit: ½ credit in Physical Education and ½ credit for Elective

The cadets manage the entire corps during their fourth year in the JROTC program. This hands-on experience affords the cadets the opportunity to put the theories of previous leadership courses into practice. All the planning, organizing, coordinating, directing, controlling, and decision making will be

accomplished by the cadets. They practice their communication, decision making, personal-interaction, managerial, and organizational skills.

Leadership Education-400: Principles of Management: This is the 4th course in leadership education. This course provides exposure to the fundamentals of management. Throughout the course many ethical dilemmas, case studies, and role play activities are built into the lessons.

Aerospace Science 410: Survive Return: The Survival text is a synthesis of the basic survival information found in Air Force Regulation 64–4 Survival Training. The survival instruction will provide training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. Survival also presents "good to know" information that would be useful in any situation. The information is just as useful to an individual lost hunting or stranded in a snowstorm.

Health and Wellness: This component makes up 20% of instructional time to motivate cadets to lead active healthy lifestyles beyond program requirements and into their adult lives. Cadet baseline is established using the Presidential Fitness Challenge Program and the AFJROTC Wellness Program. This component consists of 19 exercises that target and develop all muscle groups with sufficient anaerobic and aerobic intensity.

HAS 500 AS-500: Aviation Honors Ground School 12 1 credit

Prerequisite: None; must be approved by SASI (minimum 3.0 GPA)

College Credit: 5 hours through Embry Riddle Aeronautical University (2 Semesters)

The intent of the AHGS program is to provide AFJROTC cadets an academically challenging course for top achievers in the program. Entry into ground school should be earned by high achievement in other AFJROTC courses and involvement in the cadet corps. This course is the foundation for students interested in receiving a private pilot's license. The material covered is an advanced, more in-depth study of aerospace topics. Aviation Honors Ground School (AHGS) is taught as the Aerospace Science component of an AFJROTC class replacing other AS curriculum for third- and fourth-year cadets only. Since AHGS should be taught as an "honors" class, instructors may define this course in WINGS using the 60%-40% AS/LE mix and weighted. The student must have written approval from the SASI/ASI prior to registering and must be a junior or senior honor student. The student must demonstrate potential and aptitude and must have successfully completed a minimum of 2 years of AFJROTC coursework to include AS 200: The Science of Flight: A Gateway to New Horizons and maintained a grade of C or better. The course should receive "honors" (e.g., advanced) credit and must have principal approval. When the course is completed, students should be prepared to take and pass the Federal Aviation Administration (FAA) written examination per requirement of the Federal Aviation Regulations CFR 61-102, Sections 61.103 & 61.105.

Additional JROTC Information

Cross-Town Agreement: A Cross-Town Agreement exists between Knob Noster High School and several surrounding school districts. This agreement has been established to allow students from area high schools to participate in Air Force Junior Reserve Officer Training Course classes and activities at Knob Noster High School (KNHS).

All guidelines for discipline established by the Knob Noster R-VIII Board of education or Knob Noster High school will be in effect. The SASI, with the concurrence of the KNHS principal, may remove any student for failure to maintain AFJROTC standards. Disciplinary referrals will be sent to the sending high school for disposition.

Attendance is reported daily to the student's home high school by the SASI. The SASI will report grades to the student's home high school on the schedule required of all teachers and the grades for AFJROTC will appear on report cards, along with all other grades.

All students are invited and encouraged to participate in AFJROTC activities. Example of some of the co-curricular activities offered are:

- Drill and color guard team competitions
- Honor Guard team presenting the colors at sporting events, assemblies and others
- Raider team is a highly intensity physically fit team that competes in competitions
- Flight Simulator program introduces cadets to basic flight principles and flying aircraft
- Cyberpatriot is a program designed to teach students to defend against cyber-attacks on computers
- Marksmanship learning a precision support requiring focus and discipline
- Rocketry program learning to build, launch and modify your own vehicles

... just to name a few.

PHYSICAL EDUCATION & HEALTH

STUDENTS MAY NOT BE ENROLLED IN MORE THAN 1 PERIOD OF PE DURING ANY ONE SEMESTER AT KNOB NOSTER HIGH SCHOOL

HPE 200 <u>Lifetime Sports & Fitness</u> 10-11-12 1 credit

This course is designed to teach students the importance of sports and activities throughout a lifetime. In this course, the student will learn the rules and guidelines of activities they can participate in throughout their life. These activities include Disc Golf, Ultimate Frisbee, Ping Pong, Cornhole, Shuffle Board, Golf, Volleyball, Tennis, Pickle Ball, Floor Hockey, Kan Jam, Ladder Golf, ETC.

HPE 201 Weightlifting & Personal Fitness

10-11-12 1 credit

This is a co-educational course for students who are serious about increasing strength and fitness. A high level of participation and effort is expected.

HPE 101 Freshman Weights 9 1 credit

This is an co-educational course for freshman who have completed their high school Health requirement during summer school prior to their freshman year. It is intended for students who are serious about increasing strength and fitness.

HPE 103 Freshmen P.E 9 ½ credit

Students will learn a variety of sports and fitness activities needed to be active for a lifetime. Students will be active throughout the year and will learn about and try to live a lifestyle that is healthy and active.

HPE 300 Sports Education 11-12 1 credit

Prerequisite- Lifetime Sports ℰ Fitness

This course is designed to advance the knowledge of individual and dual sports. During the course students will research all aspects of the activities including scorebook, officiating, sports management, announcing, scouting, and sports apparel. For each activity students will be placed in teams to organize all aspects of the activity throughout the sporting season. This course is not game play driven but is more driven toward how to run a sports organization.

HPE 301 Personal Fitness 10-11-12 1 credit

This course will provide students the opportunity to develop cardiovascular endurance, flexibility, and muscular strength through a variety of activities. Some activities to be covered but not limited to: aerobics, Zumba, yoga, Pilates, power walking, running, and fitness bands. This is a high participation class for self-motivated students dedicated to personal fitness.

HHE 100 Health 9-10-11-12 ½ credit

NOTE: Students should be aware that only 3 units of credit in ANY Physical Education course will be figured in computing Grade Point Average, Honor Roll or Class Rank after the Freshman year. Students may enroll in only one (1) unit of physical education during each of their sophomore, junior, and senior year unless approved by the principal.

** Additional credits may be available online through State Fair Community College. See your counselor for details.

ENGLISH LANGUAGE ARTS

The required English courses are ELA I and ELA II. <u>All courses</u> in which a student earns English credit toward the four units required for graduation include the following components: reading (independently and in-class), writing, speaking, listening, research, and analysis. If a student is intending to apply to a university, he or she should complete two units of credit in courses that are designated as Advanced Placement.

CAREER & COLLEGE READINESS

The following is a suggested approach to scheduling your English Language Arts courses:

English Language Arts Students must have 4 credits to graduate.				
8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
	Year	r-Long Courses (1 cr	edit)	
	ELA I Standard English course for students in 9th grade.	ELA II+ Standard English course for students in 10th grade.	ELA III Standard English course for students in 11th grade.	ELA IV Standard English course for students in 12th grade.
ELA I (8) Advanced level English course for students in the 8th grade. This course counts as 1 ELA credit towards high school graduation.	ELA II (9)+ Advanced level English course for students in 9th grade, especially those who took ELA I 8 last year.	Pre AP ELA* Advanced level English course for students in 10th grade, especially those who took ELA II 9 last year.	AP Lang.* Open to all students in 11th or 12th grade interested in Advanced Placement. This course is recommended BEFORE AP Lit.	AP Lit.* Open to all students in 11th or 12th grade interested in Advanced Placement. This course is recommended AFTER AP Lang.
		-	Semester Cou	rses (.5 credit)
			Career English Open to all students in I looking for an alternative credit option. (1st semestre)	ve or additional English
			Public Speaking Open to all students in looking for an alternative credit option. (2nd semes)	ve or additional English
			Creative Writing DC* Open to all students in 11th or 12th grade looking for an alternative or additional English credit option. (any semester)	
Additional DC English courses may be through SFCC.		courses may be offered		

^{*}These courses are advanced/weighed.

⁺ These courses are EOC tested areas.

HLA 100 ELA I 9 1 credit

Prerequisite: None

English Language Arts I (ELA I) is a course that covers the basic skills of reading, writing, speaking, and listening. ELA I reviews the parts of speech and sentence structures. The course also emphasizes writing for different purposes including narrative, expository, analytical, and argumentative. The course provides a variety of readings that will prepare students for more advanced ELA courses.

HLA 200 ELA II 10 1 credit

Prerequisite: ELA I

Note: ELA II is an EOC tested area

English Language Arts II (ELA II) is the standard English course for students in 10th grade. The course includes the reinforcement of skills learned in ELA I and more advanced study in communications and literary interpretation. Emphasis will be placed on higher-level thinking skills, vocabulary development, and mechanics and usage skills in the context of writing. ELA II covers real-world writing purposes and preparation for EOC assessment.

HLA 201 ELA II 9 9 1 credit

Prerequisite: ELA I 8 or teacher recommendation

Note: ELA II 9 is an EOC tested area

English Language Arts II 9 (ELA II 9) is an advanced level English course for students in 9th grade. It is especially intended for those students who took ELA I 8 last year. The content of the course will be similar to the on-level ELA II curriculum but will include additional texts and writing practices.

HLA 300 <u>ELA III</u> 11 1 credit

Prerequisite: ELA II

English Language Arts III (ELA III) is the standard English course for students in 11th grade. The course is designed to provide high school juniors with a historical and stylistic knowledge of American literature with the intention of building student reading, writing, speaking, and listening skills. The curriculum will include advanced work in literary and rhetorical analysis, as well as preparation for the ACT.

HLA 302 Pre AP ELA 10-11 1 credit

Prerequisite: ELA I or ELA II 9 or teacher recommendation

Pre AP English Language Arts 10 (Pre AP ELA) is the advanced level English course for students in 10th grade. It is especially intended for those students who took ELA II 9 last year. The content of the course will be similar to the on-level ELA III curriculum but will include additional texts and writing practices. This course is weighted.

HLA 400 ELA IV 12 1 credit

Prerequisite: 3 high school English credits

English Language Arts IV (ELA IV) is the standard English course for students in 12th grade. ELA IV is primarily a British Literature course, where students will practice the skills of reading, writing, speaking,

listening, and critical thinking in regards to literary study, but also in relation to argumentative and personal communication techniques.

HLA 301 <u>Career English</u> 11-12 ½ credit

Prerequisite: 2 high school English credits

Career English is designed for 11th or 12th grade students seeking practical skills and practice in career reading and professional writing. Topics covered will include employee manuals, resumes, formal letters and emails, personal finance, plus college and job applications.

HLA 101 Speech 11-12 ½ credit

Prerequisite: None

Public Speaking is designed for 11th or 12th grade students and covers the basic processes of speech communication techniques which will benefit all students, regardless of post-high school intentions. This course focuses on growing interpersonal, intrapersonal, and group communication skills. Public Speaking is a project-based course that focuses on presentational skills through demonstrative, informative, and persuasive speeches.

HLA 403 <u>Creative Writing (Dual Credit)</u> 11-12 ½ credit

Prerequisites: 2 high school English credits & 3.0 GPA

Dual Credit: 3 units college credit from State Fair CC

Creative Writing is a dual credit course where students participate in a study and practice in the techniques of writing poetry, fiction, nonfiction, and/or drama. Emphasis is placed on the recognition of those techniques in published works and their utilization in original work. Peer evaluation and individual conferences with the instructor are employed. This course is weighted.

HLA 401 AP English Language & Composition 11-12 1 credit

Prerequisites: 2 high school English credits

AP English Language and Composition (AP Lang) is open to all students in 11th or 12th grade interested in Advanced Placement. This course is recommended before AP Literature and Composition (AP Lit). This course emphasizes the craft of rhetoric, including both the reading and the writing of argument. Students will write ideas to a range of audiences, for a variety of purposes, and in a variety of modes. This course also seeks to prepare students to successfully complete the AP English Language and Composition exam. This course is weighted.

HLA 402 <u>AP English Literature & Composition</u> 11-12 1 credit

Prerequisites: 2 high school English credits (recommended after AP Language & Composition)

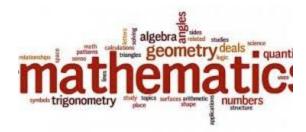
AP English Literature and Composition (AP Lit) is open to all students in 11th or 12th grade interested in Advanced Placement. This course is recommended for students to take after they have successfully completed AP English Language and Composition (AP Lang). AP Lit emphasizes the deep reading of complex literary texts (poetry, fiction, and drama) from multiple selected sources. AP Lit also emphasizes the development of writing skills towards crafting strong composition, and students will connect their writing to their reading of literature. This course seeks to prepare students to successfully complete the AP English Literature and Composition exam. This course is weighted.

** Additional credits may be available online through State Fair Community College. See your counselor for details.

MATHEMATICS

MATH DEPARTMENT SEQUENCE CHART AND POLICY

ALL 9th, 10th and 11th grade students are required to be enrolled in a math course. All students must take the ALGEBRA I End of Course Exam prior to graduation.

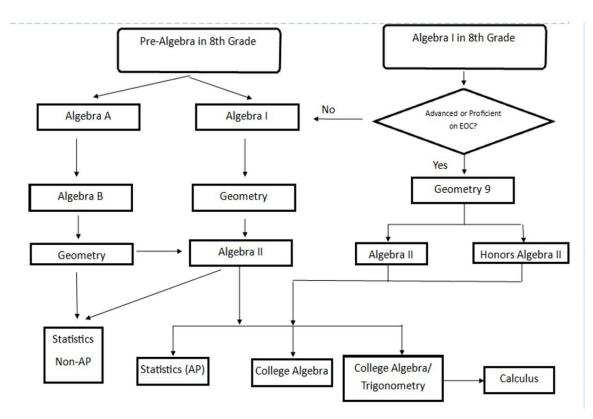


Parents and students are strongly encouraged to investigate college admission requirements before choosing a math sequence path in the 9th grade. <u>Many colleges require 4 units of credit in Algebra I and higher to gain admission.</u>

If a student fails to pass their current math course, then it must repeated. The repeated course may be taken during the following school year or, if offered, during summer school.

The chart shows ideal sequence paths and may not cover individual situations. The prerequisite are omitted from the chart, however detailed prerequisite information is in the course description section..

Section Note: All students will be required to take the Algebra I EOC before graduation. Additionally, students must be *proficient* or *advanced* on the Algebra I EOC to be eligible for the A+ Program. There are options if a student does not meet these standards. See the A+ Coordinator for details.



HMA 100 Algebra I-A

9

1 credit

Prerequisite: Recommendation from 8th grade math teacher

Algebra A is the first in a two-part series of courses that teaches Algebra I in two years. This course provides a review of pre-algebra topics such as expressions, equations and inequalities in addition to working with linear equations and inequalities to describe relationships.

HMA 102 <u>Algebra I-B</u>

9-10

1 credit

Prerequisite: Algebra I-A

Algebra B is the second in a two part series of courses that teaches Algebra I in two years. Units covered include exponential functions, factoring polynomials, quadratic equations, statistics, and rational & radical expressions.. Students in Algebra IB will take the Algebra I EOC exam in May.

HMA 103 Algebra I

9-10

1 credit

Prerequisite: Pre-Algebra or recommendation from 8th grade math teacher

Algebra I is a course designed to give a basic understanding of algebraic concepts and to contribute to the acquisition of algebraic skills. Algebra I is designed to stimulate the student's appreciation of a precise language of mathematics through a problem-based curriculum and enables the student to understand the fundamental structure of algebra. Students will explore one- and two-variable statistics, linear equations, linear inequalities, systems of equations, interpret functions, exponential functions, quadratic functions, and quadratic equations. *Students in Algebra I will take the Algebra I EOC exam in May*.

HMA 200 Geometry

10

1 credit

Prerequisite: Algebra I

Geometry is a course designed to help students develop visualization skills of both two and three-dimensional figures through a problem-based curriculum. Students study the basic properties of one-and two-dimensional shapes and three-dimensional objects based on theorems, postulates and definitions. The volume and surface area of three-dimensional shapes are also studied. The year is finished out with a coordinate geometry introduction. Both inductive and deductive reasoning skills are emphasized throughout the year. Students will need a compass, protractor and ruler.

HMA 201 Geometry 9

9

1 credit

Prerequisite: Honors Algebra I or Algebra I (B or higher) in 8th grade with teacher recommendation

This is the second course in the advanced placement math sequence. Students should expect an accelerated pace in this course. The structure of a mathematical system is emphasized with concepts being introduced as definitions, postulates, and theorems. The writing of proofs is an integral part of this course with the two-column format used extensively. Plane figure concepts to include points, rays, segments, lines, angles, circles, and polygons are emphasized but solid geometry is also presented. Algebra I topics are also

integrated in this course to include number systems, solving equations and inequalities, graphing, linear equations, quadratic equations, and radicals.

HMA 300 Algebra II 10-11 1 credit

Prerequisite: Geometry or Geometry 9

The purpose of this course is to build mathematical connections through the study of equations and functions using a problem-based curriculum. Linear, quadratic, polynomial, rational, exponential and logarithmic functions will be explored. The course will also cover systems of linear equations, systems of linear inequalities, and matrices while building upon a strong understanding of powers, roots, and radicals. This course is preparatory for the Advanced Math Topics course.

HMA 301 Honors Algebra II 10-11 1 credit

Prerequisite: Completion of Geometry with a grade of B- or better. Other considerations for admission will be based on teacher recommendation and parent permission. (Enrollment in Geometry and Honors Algebra II concurrently is not recommended.)

The purpose of this course is to increase understanding of the complex number system through algebraic equations and inequalities. The study of functions is the foundation of this understanding. Polynomial, rational, exponential, and logarithmic functions are the main functions covered. Trigonometric functions are introduced. Technology will be used to explore multiple mathematical representations. This course will prepare students in pursuit of math intensive programs and careers.

HMA 401 Trigonometry DC 11-12 ½ credit

Prerequisite: Algebra II

For Dual Credit: Math 1112 at UCM, students must have a Math ACT score of 22 or higher and 3.0 GPA or higher.

This course includes the study of the six trigonometric functions — their characteristics, graphs, and a variety of applications. Inverse trigonometric functions, trigonometric identities and solving trigonometric equations are studied as well as the Law of Sines and Law of Cosines. This class is an important course for a student planning to pursue a degree in math, science or computer science. A student may earn 2 hours of college credit through UCM upon completion of the course.

HMA 402 <u>College Algebra DC</u> 11-12 ½ or 1 credit

Prerequisite: Algebra II

For Dual Credit: Math 1111 at UCM, students must have a Math ACT score of 22 or higher (or 19–21 and B– or better in Alg2) and 3.0 GPA or higher.

College Algebra is a continuation of the study of algebra. Topics include solving equations, inequalities and applications. Characteristics and applications of piecewise-defined, polynomial, rational, exponential and logarithmic functions are studied as well as combining functions. Solving systems of equations with three variables, linear programming, and nonlinear systems are also introduced. A student may earn 3 hours of college credit through UCM upon completion of the course.

HMA 302 Statistics 11-12 1 credit

Prerequisite: Algebra I and Geometry

This course is designed to provide the student a working knowledge of statistics using collection and organization of data, running appropriate statistical tests on the data, and drawing conclusions from the results of the tests. Algebra and Geometry concepts will also be reviewed during the year long course.

HMA 500 AP Statistics 11-12 1 credit

Prerequisite: None

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- 1. **Exploring Data**: Describing patterns and departures from patterns.
- 2. **Sampling and Experimentation**: Planning and conducting a study.
- 3. **Anticipating Patterns**: Exploring random phenomena using probability and simulation.
- 4. **Statistical Inference**: Estimating population parameters and testing hypotheses.

Students who successfully complete the course and exam may receive credit, advanced placement or both for a one-semester introductory college statistics course.

HMA 501 AP Calculus (Dual Credit) 12 1 credit

Prerequisite: College Algebra /Trigonometry

For Dual Credit at UCM: Students must have a Math ACT score of 26 or higher and 3.0 GPA or higher.

The Calculus course is primarily a review of analytic geometry, trigonometry, and pre-calculus; an introduction to differential calculus, which solves problems dealing with the tangent to a curve and the velocity of a particle at an instant in time, and an introduction to integral calculus which deals with the calculations of areas of regions with curved boundaries. This course will prepare students to successfully complete the AP Calculus exam. A student may earn 5 hours of college credit through UCM upon completion of the course.

HSC 501 AP Computer Science A 11-12 1 credit

Prerequisite: Algebra I; AP Computer Science Principles

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. Note: Some institutions of higher education may require four units of academic credit in mathematics for college admission, thus the use of computer science as a mathematics credit may have an adverse effect on college admissions.

SCIENCE

Parents and students should consider the following guidelines before selecting science courses. The type of science program a student selects should be reflective of the student's career goals and academic ability. Please pay close attention to the prerequisites for each course.

ALL 9th, 10th and 11th grade students are required to be enrolled in a science course. All students must take the Biology End of Course Exam prior to graduation.

All students must have 3 units of science to graduate from Knob Noster High School.

Most colleges require at least 3 year-long science courses

(and one of those courses must be a laboratory class).

Beginning Courses may be taken in any combination or order	Intermediate Courses require a prerequisite or teacher permission	Advanced Courses require a prerequisite or teacher permission
Biology Prereq: none	Chemistry DC Prereq: Algebra I with a C Average	AP Biology Prereq: Algebra I with a C average and Biology & Physical Science or Chemistry
	Physical Science Prereq: Algebra I	AP Physics Prereq: Algebra II with a C average
	Earth Science Prereq: None	AP Chemistry Prereq: Algebra I with a C average
		Anatomy & Physiology Prereq: Biology & Physical Science or Chemistry
		AP Environmental Science Prereq: Algebra I, Biology & Physical Science or Chemistry

HSC 100 Biology 9-10 1 credit

Prerequisite: None

Biology is a basic course designed to introduce students to the nature of science, biomolecules, cells, photosynthesis, cellular respiration, genetics, ecology, and evolution. The year culminates with the EOC exam taken at the end of 2nd semester. All students entering KNHS as freshmen are required to take this full year course. *The state of Missouri requires successful completion of this course for graduation.*

HSC 400 AP Biology 11-12 1 credit

Prerequisite: Algebra I and a recommended C average and Biology, Physical Science or Chemistry.

This is an upper level biology course designed for juniors and seniors. Specific areas to be covered include the history of life, evolution, classification, bacteria and viruses, protists, fungi, and animals. This course also seeks to prepare students to successfully complete the AP Biology exam. Current enrollment in Physical Science or Chemistry is permitted.

HSC 300 Earth Science 10-11-12 1 credit

Prerequisite: None

This course involves an exploration of geological aspects of minerals, rocks, weathering, erosion, landforms development, plate tectonics and weather. The astronomy of the solar system and nearby galaxies will be also be studied.

HSC 200 Physical Science 10-11-12 1 credit

Prerequisite: None

This course is primarily designed for sophomores and juniors and recommended for students who have chosen career paths in Arts & Communications; Business, Management, and Technology; or Human Services. Topics covered will include atoms, periodic table, chemical reactions, acids and bases, nuclear changes, motion and forces, work and energy, and electricity and magnetism. Laboratory work will be used to provide students with an opportunity to apply the skills they have been taught. Not available to students who have passed Chemistry or Physics. All sophomores at KNHS are required to take either Physical Science or Chemistry.

HSC 403 AP Physics 11-12 1 credit

Prerequisite: Algebra II with a C or better recommended or current enrollment in Algebra II

Physics is a math intensive study of several related physical sciences including 1 and 2 dimensional kinematics, dynamics, rotational and circular motion, momentum and impulse, energy, simple harmonic motion, sound and light waves, electrostatics, and DC circuits. A great deal of time is spent with laboratory experiments and demonstrations. This course also seeks to prepare students to successfully complete the AP Physics exam in order to receive nationally recognized college credits (8 to 10 hours depending on the college or university).

HSC 201 Chemistry (Dual Credit) 10-11-12 1 credit

Prerequisite: Algebra I and a recommended C average. This course has the potential for up to four (4) hours of college credit from the University of Central Missouri upon completion.

Dual Credit: CHEM 1104 Introduction to the Sciences - Chemistry (through UCM) Students must have a 3.0 GPA. Sophomores will need a signed letter of recommendation from the Principal AND Counselor. No minimum ACT score is required.

Chemistry is the study of the structure and properties of matter and the changes which matter goes through. Chemistry topics covered in this course include scientific measurement, chemical names and formulas, chemical reactions, molar relationships, stoichiometric relationships, gas laws, atomic structure, electron

arrangement, periodic laws, states of matter, acids and bases. Laboratory work will be used to provide students with an opportunity to apply what they have learned. Students should have a mathematical background, which includes Algebra I. Chemistry is a weighted course. *All sophomores at KNHS are required to take either Physical Science or Chemistry*.

HSC 401 AP Chemistry (Dual Credit) 11-12 1 credit

Prerequisite: Open to juniors and seniors who have completed Chemistry and recommended C average or better.

Dual Credit: Chem 1131 General Chemistry I (through UCM) This course has the potential for up to five (5) hours of college credit from the University of Central Missouri upon completion. Students must have a 3.0 GPA and a minimum ACT score of 24.

AP Information: Possibility of 5–10 hours of college credit through the AP program if a score of 3 or higher is reached on the AP College Board exam in May.

Advanced Chemistry is the further study of structure, properties, and changes of matter. The course is designed to be college preparatory in nature. It will expand upon the topics discussed in Chemistry and introduce new topics such as aqueous reactions, thermochemistry, and electrochemistry. Laboratory work will supplement the coursework and provide students with a hands-on approach to the topics being covered. This course also seeks to prepare students to successfully complete the AP Chemistry exam. AP/DC Chemistry is a weighted course.

HSC 301 Anatomy & Physiology 11-12 1 credit

Prerequisite: Biology & Physical Science or Chemistry

This is an advanced course in which students learn concepts dealing with anatomy & human physiology. Topics include biochemistry and biological organization of cells, tissues, organs and systems. Dissections will be used as a teaching tool in this course. This is a course intended primarily for juniors and seniors, but sophomores in the Health Services career path may enroll with instructor approval.

HSC 202 <u>Chemistry Lab Assistant</u> 11-12 1 credit

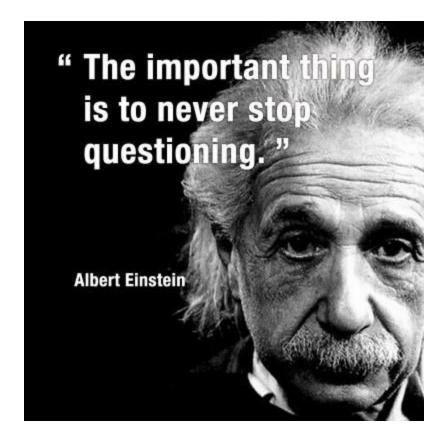
Prerequisite: Prior chemistry grades, quality of laboratory skills as exhibited in Chemistry class and the written application will be used to determine enrollment. Students interested in enrolling must submit a written application and receive instructor approval. There are a limited number of slots. This course is open to juniors and seniors who are concurrently taking or have completed Chemistry DC or AP/DC Chemistry. *Students wishing to enroll in this course must follow the format for Independent Study*.

Students will use skills from chemistry to maintain and manage a laboratory setting. Students will specifically be in charge of setting up lab equipment and making appropriate chemicals for labs to be completed by other classes. Inventory of lab equipment and materials will be maintained. Students will be responsible for helping keep the lab, lab storeroom, and equipment clean in addition to other duties assigned. Chemistry Lab Assistant students will follow a self-paced chemistry curriculum to help enhance and reinforce what they have previously learned along with being introduced to new topics not covered in other science courses. Chemistry Lab Assistant students may be responsible for maintaining a chemistry web page for KNHS. A Chemistry Lab Assistant student must have superior knowledge of chemistry principles and laboratory safety skills.

Prerequisite: Algebra I, Biology & Physical Science or Chemistry

Environmental Science is a study of the interrelationships between organisms and their physical surroundings focusing on the effects man has within the worldwide ecosystem. This course provides students with knowledge to evaluate choices that can reduce the negative impact man has made on the environment and optimize worldwide living standards. The course emphasizes the development of scientific principles, which allow students to identify and analyze environmental problems and associated risks. Students also examine solutions that can resolve/ prevent ecological problems through critical and creative thinking skills. This course will focus on hands-on activities that expand understanding beyond the classroom.

** Additional credits may be available online through State Fair Community College. See your counselor for details.



SOCIAL STUDIES

To meet graduation standards all students must:

- earn 3 credits of Social Studies,
- pass state and US constitution tests and civics test in Government,

9 TH GRADE:	10 TH GRADE:	11 TH GRADE:	12 TH GRADE:
ALL Freshmen MUST enroll in	ALL Sophomores MUST enroll in	ALL Juniors MUST enroll in	Courses available to all Seniors:
American History	American History II and Government	Western Civilization	AP European HistoryPsychology I
		OR	Sociology ICivil War
		AP European History	Civil Rights MovementComparative World Religion
			• Contemporary Issues
			Seniors who may need to make up a course for graduation may also take:
			American HistoryWestern CivilizationGovernment

HSS 300 Western Civilization 11 1 credit

Prerequisite: None

This course is REQUIRED for juniors. This course is a survey of European history from the Ancient Greek and Roman periods through the Scientific Revolution. The major course of study examines political, economic, cultural, and military developments during this period, as well as its contributions to modern man.

HSS 100 American History I 9 1 credit

Prerequisite: None

This course is REQUIRED for freshman and will cover the American experience. From Reconstruction to the Cold War the student should acquire the ability to evaluate our present problems from a study of our past

HSS 200 American History II

10

½ credit

Prerequisite: None

This course is *required* for sophomores. This course covers the most important political, cultural, social, economic events and personalities of our 20th century as they relate to the American experience from progressivism through the Reagan Era. The student should acquire the ability to evaluate our present problems from a study of our past.

HSS 201 Government

10-11-12

½ credit

Note: This course is *required* for sophomores and graduation.

Government covers the most basic functions and roles of our government on national, state, and local levels. Areas of concentration include: Powers and characteristics of the three branches of government, rights and responsibilities of the American citizen, the legal process, and comparative government systems. The course analyzes the various modes and facets of government throughout the American experience from 1607 to 1828. The student will take a comprehensive End of Course exam and the U.S. Constitution test during this course.

HSS 3010 Sociology I

11-12

½ credit

Prerequisite: None

Sociology is the study of the institutions man must have to live in groups. An investigation is made of how these institutions such as family, religion, and education relate to both society and the individual. Areas of study include the social institutions, race relations, socialization, social stratification, and poverty. Group experiments and individual projects are a part of the course and include the following: personality evaluation, determining personal goals, examination of public opinion and mass propaganda, and an examination of social stratification.

HSS 302 Psychology I

11-12

½ credit

Prerequisite: None

This course is designed as an introduction to psychology. Students will study leading psychologists, major theories of psychology, and how various theories apply to the individual. Special emphasis is placed on classical and operant conditioning.

HSS 302 <u>Contemporary Issues</u>

11-12

1/2 credit

Prerequisite: None

Contemporary Issues is a general course of study investigating the components of contemporary American society. Areas to be studied include domestic, economic, and societal problems which are relevant to the American way of life. Students are expected to participate in debates, group work, and individual oral presentations.

HSS 400 <u>AP European History</u>

11-12

1 credit

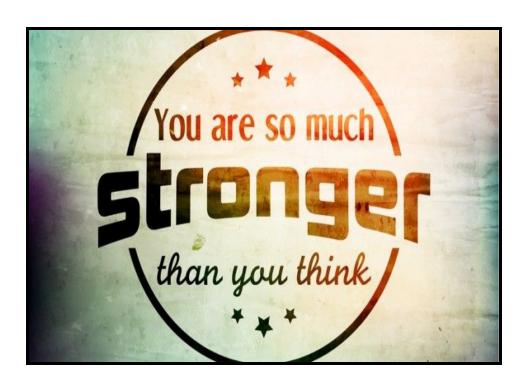
Prerequisite: None

This course will focus on European cultural, economic, political, and social development from the Renaissance to the modern world. Emphasis will be placed on the unfolding of history as a fundamental part

39

of understanding the world we in which we live. Students will use a broad range of material, including literature and art, and learn how to analyze historical evidence and express historical understanding in writing. This course also seeks to prepare students to successfully complete the AP European History exam

** Additional credits may be available online through State Fair Community College. See your counselor for details.



WORLD LANGUAGES

While a World Language class is not required for graduation, those students who will pursue college at a 4-year institution need to take 2 years of the same language to meet the college admission requirements.

Beginning Courses	Intermediate Courses	<u>Advanced Courses</u>
French I Rec: Student should have at least a C average in previous English Language Arts course Spanish I Rec: Student should have at least a C average in previous English Language Arts course	French II Prereq: Completion of French I with a recommended C average Spanish II Prereq: Completion of Spanish I with a recommended C average	French IV Prereq: Completion of French III with a recommended B average AP Spanish Language & Culture Prereq: Completion of Spanish III with a recommended B average
Note: If French or Spanish is taken in 7th or 8th grade without an exit exam or high school credit, then the student will move to French I or Spanish I. Note: If Spanish I or French I is taken in 8th grade and has taken an exit evam and received credit, then they will they will proceed into French II or Spanish II.	French III Prereq: Completion of French II with a recommended B average Spanish III Prereq: Completion of Spanish II with a recommended B average	Spanish IV Prereq: Completion of AP Spanish Language & Culture with a recommended B average

FRENCH

HFLF 100 French I 9-12 1 credit

Recommendation: Student should have at least a C average in previous English Language Arts course

French I equips students with a novice-level understanding of the French language and Francophone culture. This course emphasizes speaking, reading, and writing (i.e., in the present tense) in real-world contexts.

HFLF 200 French II 9-12 1 credit

Prerequisite: Completion of French I with a recommended C average

French II builds on skills acquired in French I by equipping students with a low intermediate-level understanding of the French language and Francophone culture. Students learn additional skills for

communicating and interpreting ideas with an emphasis in speaking and writing (i.e., across a range of timeframes), centered on either an everyday context or a cultural topic.

HFLF 300 French III

10-12

1 credit

Prerequisite: Completion of French II with a recommended B average

French III builds on skills acquired in French I and II by equipping students with a mid-intermediate level of understanding of the French language and Francophone culture. Students learn more advanced skills for communicating and interpreting ideas conveyed in speech/writing (i.e., across a range of timeframes), centered on either an everyday context or a cultural topic. There is a heavy emphasis on reading real-world texts, including a study of French literature. The learning experience is very hands-on, preparing students to apply their knowledge in rigorous, real-world contexts.

HFLF 400 French IV

11-12

1 credit

Prerequisite: Completion of French III with a recommended B average.

French IV builds on skills acquired in French I –III by equipping students with an upper–intermediate level of understanding of the French language and Francophone culture. Students learn more advanced skills for communicating and interpreting ideas conveyed in speech/writing (i.e., across a range of timeframes and mood), centered on either an everyday context or a cultural topic. There is a heavy emphasis on reading real–world texts, including a study of French literature. The learning experience is very hands–on, preparing students to apply their knowledge in rigorous, real–world contexts.

SPANISH

HFLS 100 Spanish I

9-12

ı credit

Recommendation: Student should have at least a C average in previous English Language Arts course

Spanish I equips students with a novice-level understanding of the Spanish language and the culture of the Spanish-speaking world. Students learn fundamental skills for communicating and interpreting ideas conveyed in speech/writing (i.e., in the present tense), centered on either an everyday context (e.g., family, food, and weather) or a cultural topic (e.g., Día de Muertos, La Navidad, etc.). The learning experience is very hands-on, preparing students to apply their knowledge in rigorous, real-world contexts.

HFLS 200 Spanish II

0 - 12

1 credit

Prerequisite: Completion of Spanish I with a recommended C average

Spanish II builds on skills acquired in Spanish I by equipping students with a low intermediate-level understanding of the Spanish language and the culture of the Spanish-speaking world. Students learn additional skills for communicating and interpreting ideas conveyed in speech/writing (i.e., across a range of timeframes), centered on either an everyday context (e.g., travel, homelife and daily routine, and professions) or a cultural topic (e.g., Día de Muertos, La Navidad, etc.). The learning experience is very hands-on, preparing students to apply their knowledge in rigorous, real-world contexts.

HFLS 300 Spanish III (Pre-AP)

10-12

1 credit

Prerequisite: Completion of Spanish II with a recommended B average

Spanish III builds on skills acquired in Spanish I and II by equipping students with a mid-intermediate level of understanding of the Spanish language and the culture of the Spanish-speaking world. Students learn more advanced skills for communicating and interpreting ideas conveyed in speech/writing (i.e., across a

range of timeframes and moods), centered on either an everyday context (e.g., technology, environment) or a cultural topic (e.g., La Guerra Civil en El Salvador). The learning experience is very hands-on, preparing students to apply their knowledge in rigorous, real-world contexts.

HFLS 400 AP Spanish Language & Culture 11-12 1 unit

Prerequisite: Completion of Spanish III with a recommended B average

AP Spanish Language and Culture is equivalent to an upper-intermediate level college course in Spanish. Students cultivate their understanding of Spanish language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges. The learning experience is very hands-on, preparing students to apply their knowledge in rigorous, real-world contexts.

HFLS 403 Spanish IV 12 1 credit

Prerequisite: Completion of AP Spanish Language & Culture with a recommended B average

Spanish IV uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretative), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on constructing relevant cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism). This course will prepare students to successfully challenge the AP Spanish Literature & Culture exam.

** Additional credits may be available online through State Fair Community College. See your counselor for details.

ENGINEERING COURSES



Project Lead the Way (PLTW) is a national non-profit organization established to help schools give students the knowledge they need to excel in high-tech fields. The PLTW curriculum is generally 1/3 theory and 2/3 application. PLTW instructors use project-based, hands-on experience to teach students the key **elements** and skills of engineering and technology-based careers by immersing them in real-world engineering problems. Benefits to students who take PLTW courses include:

- Opportunity to learn math, science, and technology in a hands-on, relevant way
- Opportunity to explore engineering and other technology-based careers before college
- Exposure to the latest computer software and equipment used by industry and colleges
- Projects that teach how to communicate effectively and work as a team

Beginning Courses	<u>Intermediate Courses</u>	<u>Advanced Courses</u>

Introduction to Engineering Design (IED)

Prereq: Currently enrolled in or successful completion of Algebra I or Algebra IB, and in a college preparatory science class.

Principles of Engineering (POE)

Prereq: IED or Robotics Team

Digital Electronics (DE)

Prereq: IED ℰ POE

Engineering Design & Development Capstone (EDD)

Prereg: IED & POE

HET 100 <u>Introduction to Engineering Design (IED)</u>

9-10-11-12 1 credit

1 credit

Prerequisite: Currently enrolled in or successful completion of Algebra I or Algebra IB, and in a college preparatory science class.

In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. This course is designed for 9th or 10th grade students.

HET 201 Principles of Engineering (POE) 10-11-12 1 credit

Prerequisite: Introduction to Engineering Design (IED)

Principles of Engineering (POE) is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high tech career POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

HET 300 <u>Digital Electronics (DE)</u> 11-12

Prerequisite: Completion of Introduction to Engineering Design (IED) and Principles of Engineering (POE) with a grade of at least a C in both courses.

Note: Digital Electronics will be offered during the 2020-21 school year, and then continued on every other year.

Digital Electronics (DE) is the study of electronic circuits that are used to process and control digital signals as opposed to analog signals that are varying. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world electronics. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc. The major focus of the DE course is to expose students to the design process of

combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation Digital Electronics is one of three foundation courses in the Project Lead The Way high school pre-engineering program. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

HET 400 Engineering Design & Development (EDD) 11-12 1 credit

Prerequisite: Completion of both Introduction to Engineering Design (IED) and Principles of Engineering (POE) with a grade of at least a C in both courses.

Note: Engineering Design & Development (EDD) will be offered during the 2019-20 school year, and then continued on every other year.

EDD is the PLTW capstone course that allows students to design a solution to a technical problem of their choosing. This is an engineering research course in which students work in teams to research, design, document, construct, test, and refine a solution to an open-ended technical problem by applying an engineering design process. At the conclusion of the course, students will present and defend their original solution. The EDD course provides an opportunity for students to apply all the skills and knowledge learned in previous Project Lead The Way courses including the use of 3D design software to develop and document design solutions to the problem their team has chosen. This course also engages students in time management, presentation and teamwork skills, a valuable asset to students in the future.

PRACTICAL ARTS

Note: In addition to the courses offered at Knob Noster High School (KNHS), some courses listed in the Practical Arts section are taught at Warrensburg Area Career Center (WACC) or State Fair Community College (SFCC). These courses are denoted with their school acronym in the course description.

Explanation of Embedded Credit:

Some courses in this section allow students to earn "Embedded Credit" upon the completion of the course. A ½ credit per year will be awarded to students in the area of Math, English Language Arts, Science, Personal Finance, or Physical Education depending on the program. The student must complete one 3-hour Career and Technical Education (CTE) program and earn a grade of "C" or above for both the CTE program and the embedded credit criteria. Some programs offer two ½ credits in different subjects, for example: Applied Mathematics and Applied Communications.

The Embedded Credit program is designed to help students meet graduation requirements. Students should work with a high school counselor to determine graduation status. The credit is awarded by the high school, not by WACC or SFCTC.

AGRICULTURE

Agricultural Education is a 4-year program for students interested in any agricultural career. Participants are encouraged to participate in Future Farmers of America (FFA), the largest youth organization in the U.S.

HAG 100 Introduction to Agriculture 9-10-11-12 1 credit

Prerequisite: None

Is a yearlong course will combine Agriculture Science 1 curriculum and Agriculture Science 2 curriculum. The first semester will focus on an introduction to the FFA Organization and an introduction to animal sciences. The second semester will focus on developing SAE projects and an introduction to plant sciences.

HAG 300 Greenhouse Operation & Management 10-11-12 1 credit

Prerequisite: Introduction to Agriculture

This course will introduce students to greenhouse operations and care. The class will look at types of greenhouses, heating and cooling systems, pests, and disease control. We will also discuss types of plants, watering techniques, artificial reproduction of plants, and costs of all aspects of greenhouse operations. Most of the class will take place in the greenhouse facility and involve mathematics and hands on work. *There is a \$25 course fee for this class*

HAG 301 Personal Finance & Agriculture Business 10-11-12 1 credit

Prerequisite: Introduction to Agriculture

This is a one year course, with the first semester emphasizing Personal Finance principles, and the second semester focusing on Agricultural Sales. This course will cover a wide range of topics including: income, money management, spending and credit, saving and investing, marketing, salesmanship, and presentation skills. This course will have an emphasis in agricultural topics, and will meet the state requirements for a half credit of Personal Finance and a half credit elective course. This class will not be counted in the 3 courses necessary to receive a science credit.

HAG 302 Landscape & Turf Management 10-11-12 1 credit

Prerequisite: Introduction to Agriculture

This course will cover a wide range of topics including: opportunities in the landscape and turfgrass industries; how plants grow; hand and power tools; installation and maintenance of trees, shrubs, bedding plants, and groundcovers; turf grass; site analysis and evaluation; plant identification and selection; design elements; and cost estimates. This course is a 1-year course.

HAG 303 Animal Science 10-11-12 1 credit

Prerequisite: Introduction to Agriculture

Encourages research and- systems approach to beef, dairy, swine, horses, goats, sheep, and poultry. This advanced course is suitable for 11th and 12th grade students. Topics to be covered include: nutrition, genetics, reproduction, and animal health.

HAG 304 Agribusiness Sales, Marketing & Management 10-11-12 1 credit

Prerequisite: Introduction to Agriculture

This course will cover the role of agricultural business in the economy, career opportunities, personal skills, basic economic principles and agricultural business activities. Students will study the process of creating a sales presentation and will then present their own sales presentation.

HAG 305 Natural Resources & Conservation 10-11-12 1 credit

Prerequisite: Introduction to Agriculture

This is an agriculture education course offering that prepares students for activities in the conservation and/or improvement of natural resources such as soil, water, air, forest, fish, and wildlife for economic and recreational purposes. Students will develop an understanding and appreciation for Missouri's natural resource systems and conservation management. Students will analyze and comprehend forest management practices, stream & water management, grassland conservation, hunter education, and fisheries and wildlife management. Rationale: Natural resources and conservation of those resources is one of Missouri's largest growing sectors of agriculture. A solid background in habitat management, soil science, entomology, grassland management, soil and water, stream and pond management, forestry, and fish and wildlife management is essential for students interested in natural resources as a career. This class will also include an emphasis on Supervised Agricultural Experience (SAE) and possible SAE projects.

BUSINESS EDUCATION

<u>9th Grade</u>	10th Grade	11th Grade	12th Grade
Business Tech I	Desktop Publishing/ Yearbook	Accounting I	Accounting II
Intro to Business (semester course)	Digital Media	Business Law (semester course)	Desktop Publishing/ Yearbook
		Desktop Publishing/ Yearboo	Digital Media III
		Digital Media II	

HBU 100 Personal Finance 11-12 ½ credit

Note: Personal Finance is a MO graduation requirement

Understanding and managing personal finances are key to one's future financial success. This one semester course is based on the Missouri Personal Finance Competencies and presents essential knowledge and skills to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. Students will also learn to apply decision making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise spending, saving and credit decisions and to make effective use of income to achieve personal financial success.

HBU 200 Accounting I 10-11-12 1 credit

Prerequisite: None

Accounting involves the study of double-entry bookkeeping for small service and merchandising businesses. It will include recording journal entries, posting, and preparing financial reports. At least two practice sets, with books and business papers, will be used to simulate actual business situations. Much of the work is automated and the student will utilize the computer.

HBU 300 Accounting II 11-12 1 credit

Prerequisite: Accounting I

Provides students with the knowledge of various accounting procedures. This course will cover departmentalized accounting, corporate accounting, general accounting adjustments, management accounting, and cost accounting. Mini-activities and business simulations will be covered in this class.

HBU 101 <u>Business Technology I</u> 9 1 credit

Prerequisite: None

Business Technology I students will introduce the student to Microsoft Office, Excel, Access, PowerPoint and Publisher. Students will learn about job opportunities available in business and develop skills and knowledge

needed to succeed in business. In addition students will further develop keyboarding and business math skills.

HBU 201 <u>Digital Media ((Dual Credit)</u> 10 1 credit

Prerequisite: None

Dual Credit: This course is aligned with the University of Central Missouri in the areas of Introduction to Radio Broadcasting and/or Introduction to Digital Media for dual credit.

In Digital Media, students will be provided content for employment in career areas that include digital media skills. Demand in this area will continue to expand as businesses utilize advanced desktop publishing and social media skills to increase their production efficiency, marketing outreach and improve the creativity and quality of business digital media. In addition, units in this class will focus on multimedia forms such as graphics, audio, video, web page design and maintenance, and electronic editing and presentation skills. This course may require time outside of class to record necessary information.

HBU 102 <u>Introduction to Business</u> 9-10-11-12 ½ credit

Prerequisite: None

The course is designed to provide the student with a basic understanding of how a modified free enterprise system functions. Business structures and technology will also be discussed. Business math and communications applications will be stressed throughout the course. Career information concerning major business occupations will be presented to help in wise career decision-making. Students will complete assignments, including hands-on activities to show them what the real world of business is like. Topics will include communication and interpersonal skills, employability skills, entrepreneurship, business operations, forms of business organizations, and business careers.

HBU 103 Business & Personal Law 11-12 ½ credit

Prerequisite: Introduction to Business

Students receive instruction in areas that affect both business and individuals. As law emanates from various governmental and judicial entities, students must possess a fundamental understanding of law and the foundations of our legal system. The impact of international business and technology has created an additional demand for students to have a general knowledge of international law. Among the areas of study will be: contracts, insurance, purchasing, rental/leasing agreements, along with tort and financial law.

HBU 202 <u>Desktop Publishing/Yearbook</u> 10-11-12 1 credit

Prerequisite: B average in the student's most recent Language Arts class

Students will be introduced to journalistic writing, computer and traditional page layout techniques, picture taking, along with the principles and responsibilities of producing the school's yearbook, the Knobna. This course is open to seniors. There are a limited number of slots available. Interested students must submit an application, a letter of recommendation from a faculty member, and be approved by the instructor. Applications are available from the counselor's office.

** Additional credits may be available online through State Fair Community College. See your counselor for details.

FAMILY & CONSUMER SCIENCES

Beginning Course	Intermediate Courses require a prerequisite or teacher permission	Advanced Courses require a prerequisite or teacher permission
Career Development & Entrepreneurship	Child Development, Parenting	Childcare Management
	Nutrition & Wellness	Career Pathway to Teaching

HFC 100 <u>Career Development &</u>

Entrepreneurship 9-10-11-12 1 credit

Prerequisite: None

This course is designed to give the student general knowledge in all disciplines of the Family and Consumer Sciences curriculum. Students will study information that will help prepare for family life by emphasizing development of attitudes and values, food and nutrition, family living, careers, and entrepreneurship.

HFC 200 Nutrition & Wellness 10-11-12 1 credit

Prerequisite: Career and Family Leadership

This course prepares students to study the nutritional value of food as well as to develop an understanding of the significance of food. Students will have hands-on practice in reading and writing recipes. Students will learn various tools and equipment used in food preparation, the techniques of meal planning, and the importance of safety and sanitation. A one-day job shadowing experience is arranged for each student during the semester.

HFC 203 Child Development, Parenting 10-11-12 1 credit

Prerequisite: Career and Family Leadership

This course is designed to teach students about families, parenting skills, teen pregnancy, and preparing for birth. It also provides basic knowledge of child development and growth and provides a variety of personal experiences that will give students an understanding of the role of caregivers. Students will also have the opportunity to spend time with Baby-Think-It-Over.

HFC 301 Childcare Management 10-11-12 1 credit

Prerequisite: Career and Family Leadership

Note to Student: Enrollment in this course students will be responsible for traveling to and from the child care center in their own vehicle. This course must be taken in conjunction with an Independent Study Course.

Course content will include child care and development concepts that have significance for those who are interested in working a child care occupation or other child-related professions, as well as for potential parents. Students will have the opportunity to be working hands on with children ages 3–5 in an actual pre school. There will be an emphasis on early childhood education. Students are required to teach age appropriate lessons to preschoolers and evaluate the progress of a preschooler in the class. Actual participation will be required of students.

HFC 400 <u>Career Pathway to Teaching</u> 11-12 1 credit

Prerequisite: None

The goal of the Career Pathway to Teaching course is to provide Knob Noster High School students a framework to explore, discern, and prepare themselves for professions in education and training. The course includes three primary elements/settings: learning about topics related to the teaching profession (as a cohort at the high school), observing the teaching and learning process (completed independently during class time in PreK-Grade 8 classrooms), and completing a practicum that allows students to put theory into action through classroom instruction/coursework (also completed independently during class time in PreK-Grade 8 classrooms). Furthermore, eligible program participants can enroll in two University of Central Missouri (UCM) courses for dual credit — Intro to Teaching Profession (EDFL 2100) and Intro Field Experience (FLDX 2150) — as well as complete tutoring hours for A+ Program guidelines.

INDUSTRIAL TECHNOLOGY

HET 100 Materials & Processes I 9-10-11-12 1 credit

Prerequisite: None

This course is a study of the operations involved in the transformation of woods, metals, and plastics into usable products with special emphasis placed on technical information, qualities, specifications, and standards. Activities include experimenting, creating, designing, constructing, and evaluating products built using hand tools, machine tools, or constructed with the aid of automated or computerized manufacturing.

HET 200 Materials & Processes II 10-11-12 1 credit

Prerequisite: Materials and Processes I

This course is a further study in the area of woods, metals, and plastics. Students are expected to complete a major project

HET 301 Special Projects in Materials 11-12 1 credit

Prerequisite: Materials & Process I & II and instructor approval

Advanced applications, research and design fundamentals, and experimentation will be major areas of exploration in this class. The course is designed to follow the format of an Independent Study course.

MISCELLANEOUS

0714 <u>A+ Tutor</u> 11-12 No Credit

Prerequisite: Approval of A+ Director, School Counselor and Principal

This class is a semester in length whereby a student who is in good standing with the A+ Schools Program may be assigned a location within the District to complete their tutoring requirement as specified by the State A+ School requirements. A separate application requesting placement as an A+ Tutor is required when submitting your enrollment form. Applications may be picked up from either the counselor's office or from the A+ Schools Director. There are a limited number of slots available.

o716 <u>Cadet Teaching</u> 11-12 ½ credit

Prerequisite: The course is open to juniors and seniors who have a minimum overall GPA of a 2.50, no failing semester grades, and a record of good school attendance and citizenship.

This semester or year long based course is designed to help high school students who are interested in entering the teaching profession and affords students an opportunity to work in a classroom under an experienced teacher to gain insight in the problems educators encounter on a routine basis. Assessment is determined by attendance, presentations/participation, and written work/reports. Membership in Future Teachers of America (FTA) is recommended. There will also be an additional mandatory 2-hour training session prior to the beginning of the school year.

0717 <u>Flag Corps</u> 9-10-11-12 ½ credit

Note: Auditions for this group typically occur in February of the preceding school year

This course is offered during first semester only. The flag corps participates at all home football games and parades and competitions attended by the Panther Pride Marching Band. Students will be responsible for learning and memorizing flag routines for these public performances. All public performances participated in by the flag corps are required. Excuses other than personal illness or family weddings and funerals may be considered on an individual basis (work will not be excused).

o722 <u>Student Office Aide</u> 12 No Credit

Prerequisite: This course is only available to juniors and seniors who have displayed above average effort in areas of attendance, citizenship, and scholarship.

This class is a semester or year in length whereby the student is placed in the office to gain experience in office etiquette. Responsibilities are, but not limited to, copying, filing, organizing, and delivering messages. A separate application requesting placement as an office aide is required when submitting your enrollment form. Applications can be obtained from the counselor's office. There are a limited number of slots.

0723 <u>Library Media Center Aide</u> 11-12 No Credit

Prerequisite: This course is only available to juniors and seniors who have displayed an above average effort in areas of attendance, citizenship and scholarship.

This course is a semester or year in length whereby the student is placed in the library media center (LMC) under the supervision of the LMC instructor. Responsibilities will include, but are not limited to becoming familiar with operating the electronic card catalogue system, inventory of incoming and existing LMC resource materials, along with other duties assigned by the instructor. A separate application requesting placement as a library media center aide is required when submitting your enrollment form. A student must interview with the Library Media Center instructor. There are a limited number of slots. Applications may be picked up at either the counselor's office or LMC.

0725 Work-Site Learning 12 ½-1 credit

Work-Site Learning is a senior only course designed to provide additional and/or specialized experience for a student beyond the traditional classroom setting. Students get practical exposure to the business world, a heightened awareness of educational and career choices, real-world perspectives on the importance of education, an increase in self-esteem and motivation to succeed, an improvement of interpersonal skills, and a development of critical employment skills. An average of 7½ hours of work per week is required for each period of worksite learning. Grading is done by the employer through an extensive evaluation sheet. Grades assigned are either pass or fail. Students may take only one period of worksite learning per semester.

o726 <u>Critical & Creative Problem Solving</u> 9-12 1 credit

Prerequisite: Teacher or counselor recommendation

A comprehensive curriculum for gifted and high-achieving students centered on skills that are integral in all disciplines and all facets of life. Student activities are designed to enhance critical and creative thinking, problem solving, research and technology skills, leadership ability, and social and emotional needs. Emphasis is placed on managing and optimizing personal strengths and interests and identifying future educational and career opportunities. Specific topics of study may include high stakes test preparation, communication skills, academic success strategies, community service, and personal development.

1118 <u>ELL/English Language Learner</u> 9-10-11-12 1 credit

Prerequisite: Students who have a first language other than English and possess a limited English proficiency

This course develops the English skills they need to succeed academically and function in their everyday tasks.

0731 <u>Innovation Hour</u> <u>9-10-11-12</u> ½ or 1 credit

Students will select a topic they are passionate about. They will develop an inquiry question about this topic, research it, and plan a project with a culminating presentation. Meeting in the SmartZone, the course will encourage the use of technology in creative ways to solve modern problems. Students will also have the opportunity to work with experts in their selected fields for feedback on their projects. This course may be taken as a semester or full-year course. This will be offered as an elective credit. Rationale: Innovation Hour is built on the Google platform of Genius Hour or 20% time but would provide students a focused process for identifying a problem, finding and creating a solution, and

marketing that solution to a real-world audience. This course would allow students to dig into a topic they're excited about, learn about that student-selected topic, create a product with their new-found knowledge and skills, and market that product to a real-world audience.





Warrensburg Area Career Center



Entry into the Warrensburg Area Career Center (WACC) program is not automatic; placement is based upon a mutual agreement between WACC, the Knob Noster High School administration and the student. The WACC option is open to juniors and seniors only. A student's academic progress, attendance, and behavior are all considered when selecting students for enrollment at WACC. Students must arrange transportation home from KNHS on Wednesday afternoons.

Dual/Articulated Credit: Students receiving the "Passport to the Future" award may also be eligible for college credit through the Metropolitan Community Colleges, Vatterott College and State Fair Community College, University of Central Missouri, Linn State College and the Construction Apprenticeship Tech Prep Consortium in Kansas City. Your instructor, the WACC counselor or the Director should be contacted for additional requirements concerning articulated or dual credit.

AGRICULTURE TECHNOLOGY

Dual/Articulated Credit; Students can earn 4 credits at State Fair Community College for WELD 101 by completing both Agriculture Construction I & II.

HVT 400 Agriculture Construction I 11-12 3 credits

The vocational agriculture program emphasizes developing knowledge, understanding, and skills in agribusiness, agriculture production, agricultural mechanics, conservation, and horticulture.

HVT 400 Agriculture Construction II 11-12 3 credits

Occupational experience is obtained on the farm, in a non-farm agricultural business, in the school's greenhouse, construction laboratory and land laboratories.

COMPUTER TECHNOLOGY

HVT 401 Computer Technology I 11-12 3 credits

Prerequisite: None

Embedded Credit: 1 credit Applied Communications available upon completion of Information Technology I

않 II

Dual/Articulated Credit: Students will earn 3 credits through State Fair Community College for course NET 140. Students completing Computer Technology I & II can earn 3 credits for course NET 142.

Recommendation - It is strongly recommended that a student have solid skills as a computer user before starting the program. In addition, it is very useful to have a home computer and a reliable internet connection. It is best if this computer is not one other household members rely upon.

A typical student will have CompTIA A+ certification knowledge during their first year. This certification is an international industry credential that validates the knowledge of networking professionals with at least nine months of experience in network support or administration or adequate academic training. Earning this certification demonstrates that a candidate can describe the features and functions of networking components, and possesses the knowledge and skills needed to install, configure and troubleshoot basic networking hardware, protocols, and services. CompTIA Network+ certification is proof of professional achievement, providing: a viable career path; enhanced job opportunities; proof of professional achievement; and foundational knowledge for advanced certification.

HVT 401 Computer Technology II 12 3 credits

Prerequisite: Computer Technology I

Students receive advanced instruction and pursue practical applications with respect to information covered in Computer Technology I. Students take Microsoft Certification tests as final exams.

AUTOMOTIVE COLLISION TECHNOLOGY

HVT 402 <u>Automotive Collision Technology I</u> 11-12 3 credits

Auto Body students will learn to examine, estimate, and repair damaged automobile and truck bodies, align and re-form, fill and shape, smooth, prime and repaint auto body damage and replace panels, fenders, trim and glass.

HVT 402 <u>Automotive Collision Technology II</u> 11-12 3 credits

Other skills to be learned will include: use of Mig welders, plastic welders, electric and air grinders and sanders, suction feed paint spray guns, use of body fillers, masking and paint mixture, estimating and billing, ship safety, and paint booth operation and safety.

AUTOMOTIVE SERVICE TECHNOLOGY

Embedded Credit: 1 credit of Applied Mathematics & 1 credit of Applied Communications available upon completion of Automotive Service Technology I & II

Dual/Articulated Credit: Students completing Auto Service Technology I can earn 5 credits through State Fair Community College for course AUTO 101. Students completing Auto Service Technology I & II and passing the NATEF with 75% or higher can earn 13 credits at State Fair Community College for the following courses: AUTO 113 (5), AUTO 115 (5), and AUTO 116 (3).

HVT 403 Automotive Service Technology I 11-12 3 credits

This course includes an introduction to automobile engine and chassis design, fuel systems, engine lubrication, automotive electricity, clutch, brake, transmission, and wheel suspension systems. Students will learn by studying theory and by actual hands-on experience in the above-mentioned areas. Also, students learn the proper use, care, and cleaning of tools, equipment, and the shop.

HVT 403 <u>Automotive Service Technology II</u> 11-12 3 credits

During the second year auto mechanic students expand upon skills and fundamentals learned in Automotive Service I.

CONSTRUCTION TECHNOLOGY

The Construction Trades program teaches entry-level employment skills through a variety of construction activities. During the 2-year program, the class builds a house to be sold on the open market, which is an excellent occupational experience for each student. Graduates may pursue employment in foundation or concrete work, framing, roofing, residential electrical, plumbing, drywall, painting, finish carpentry, and floor covering.

In the construction industry, carpenters must provide their own hand tools on the job. Students are encouraged to buy their own set of hand tools for the class in order to be career-ready upon completion of the program. Instructors will provide a list of recommended tools. Provisions will be made for students who are financially unable to provide their own tools. Students are required to wear enclosed shoes that entirely cover the foot, as well as long pants in the lab and on job sites. Boots are recommended.

The Construction Trades program is accredited by the Association of General Contractors. An agreement with the Kansas City Carpenters Joint Apprenticeship Committee allows students to earn credit toward becoming a journeyperson level carpenter if they meet the requirements. This provides a head start in apprenticeship toward becoming a professional carpenter.

Embedded Credit: 1 credit of Applied Mathematics & 1 credit of Applied Communications available upon completion of Construction Trades I & II

Dual/Articulated Credit: Students completing Construction Technology I will earn 3 credits through State Fair Community College for the course CNST 145. Students completing both Construction Technology I & II will earn 6 credits hour for the course CNST 146.

HVT 404 <u>Construction Technology I</u> 11-12 3 credits

Prerequisite: None

Recommendation - Previous woodshop and general math classes

First year students gain instruction and practice in jobsite preparations, concrete foundation and flatwork, framing, roofing, and setting windows and exterior doors. There is a \$5 fee for OSHA training and an OSHA-10 card, which is required by many employers?

HVT 404 Construction Technology II 12 3 credits

Prerequisite: Construction Trades I

Second year students gain instruction and practice in exterior finish, electrical and plumbing work, drywall installation, and interior finishes. Students work on a site building a home and putting into practice the skills and knowledge they learned from Construction Technology I. Students are required to wear long pants and shoes that cover the entire foot in lab areas and on job sites. Boots are recommended.

HEALTH SCIENCE

Embedded Credit: ½ credit Applied Communications & ½ credit Life Science available upon completion of Health Science I & II

Dual/Articulated Credit: Students completing Health Science I & II can earn 6 credits through State Fair Community College for the following courses NURS 114 (2), NURS 116 (3).

HVT 405 <u>Health Science I</u> 11-12 3 credits/yr

The first few months are spent in the classroom and laboratory, where the student develops fundamental concepts of anatomy and physiology, medical terminology, personal health and hygiene skills, mental health, pre-employment preparation, field trips, and visits with health care professionals. Students practice skills in the lab such as monitoring blood pressure, temperature, pulse and respiration, sterile technique, isolation procedures, assessment development, and other basic health care skills.

HVT 405 <u>Health Science II</u> 11-12 3 credits/yr

The second half of the year, students select health care careers in the areas of their interest—such as radiology, veterinary medicine, child care, dental offices, laboratory, etc.—and work with health care professionals in area clinical facilities. Students are given the option of being certified in Cardiopulmonary Resuscitation, Red Cross First Aid, and Nursing Assistant in long-term care facilities.



Early College Program

The Early College program is a dual credit partnership agreement between the Knob Noster school district and State Fair Community College (SFCC). The program is designed to allow high school students who qualify to earn dual high school credit and college credit by taking on-site and online classes. Students may earn college credit as a high school student and graduate with two-year Associate of Arts degree (64 credit hours) from SFCC at the same time.

Enrollment in the Early College Program is available to junior and senior level students who have a grade point average of 3.0 or better on a 4.0 scale. Students must also have the recommendation of their high school principal to participate. Additionally, students must have ACT or Accuplacer placement scores appropriate to the dual credit classes being taken. Sophomores and freshman students wanting to take dual credit classes have specific requirements for eligibility. See your counselor for current information.

The Early College Program is not eligible for financial aid or the use of A+ monies. Tuition for dual credit courses at State Fair is \$79 for on-campus courses and \$94 for online courses.

Associates of Arts

The Associate of Arts (AA) degree from SFCC is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree.

If you're undecided on a major, the AA degree can serve as a springboard to explore new interests. It allows for flexibility and provides a wide choice of classes. We're here to help you discover the huge variety of academic programs and transfer options available to you with an Associate of Arts degree.

General Edu	cation Core	42 hours		satisfy the state requirement for stitution. Students transferring	
Written Com	munications	6 hours		tory or national government fr	•
ENGL 101	English Composition I	3 hours	institution wh	nen in Missouri or out-of-state	may need to
ENGL 102	English Composition II	3 hours	rs complete POLS 102 Missouri Constitution for an academic ½ credit hour.		r an
Oral Commu	mications	3 hours			
COMM 101	Public Speaking	3 hours	Economics		
			ECON 101	Principles of Macroecon.	3 hours
Social & Behavioral Sciences		9 hours	ECON 102	Principles of Microecon.	3 hours
Must include	courses from at least two disci	plines,	Geography		
including at l	east one Civics course.		GEOG 101	World Geography	3 hours
			Psychology		
Civics			PSY 101	General Psychology	3 hours
HIST 101	US History Before 1877	3 hours	PSY 210	Lifespan Development	3 hours
HIST 102	US History Since 1877	3 hours	Sociology		
POLS 101	American/National Gov.	3 hours	SOC 100	General Sociology	3 hours

Mathematical Sciences		3 hours	Physical Sci		
MATH 113	Mathematical Reasoning	3 hours	PHYS 103	Intro to Physical Science	3 hours
MATH 114	Precalculus Algebra	3 hours	Physics		
MATH 119	Statistical Reasoning	3 hours	PHYS 105	College Physics I w/ Lab	5 hours
			PHYS 118	General Physics I w/ Lab	5 hours
Natural Scie	nces	7 hours			

Must include courses from at least two disciplines, including one course with a lab component.

Humanities & Fine Arts 9 hours

Must include courses from at least two disciplines with one course from the Performance discipline.

Astronomy

EASC 120	Intro to Astronomy	3 hours	Art		
Biology			ART 101	Art Appreciation	3 hours
BIO 100	General Biology	3 hours	World Langu	age	
BIO 105	Wildlife Conservation	3 hours	FREN 101	Elementary French I	3 hours
BIO 112	General Biology w/ Lab	5 hours	SPAN 101	Elementary Spanish I	3 hours
BIO 125	Biology I w/ Lab	5 hours	SPAN 102	Elementary Spanish II	3 hours
Chemistry			Literature		
CHEM 101	Intro to Chemistry w/ Lab	5 hours	LIT 107	American Literature	3 hours
CHEM 123	General Chemistry w/ Lab	5 hours	Music		
Geology			MUS 101	Music Appreciation	3 hours
EASC 101	Intro to Earth Sci. w/ Lab	5 hours	Performance	•	
EASC 106	Physical Geology w/ Lab	5 hours	ART 112	Drawing I	3 hours
EASC 118	Environmental Geology	3 hours	Philosophy		
Life Sciences			PHIL 101	Intro to Philosophy	3 hours
BIO 103	Human Biology	3 hours	PHIL 102	Ethics	3 hours
BIO 207	Human Anatomy w/ Lab	4 hours	Religion		
BIO 208	Human Physiology w/ Lab	4 hours	PHIL 104	Living Religions	3 hours
			Theatre		
			THEA 107	Intro to Theatre	3 hours

General Education Elective

Select additional hours from the general education categories listed above for a minimum total of 48 hours to meet the general education core.

6 hours

Electives 22 hours

A maximum of 4 credit hours may be applied for THEA 115. Physical education activity and wellness courses (PE, PEAC, WELL or WL prefix) may be accepted as elective credit for a maximum of 3 credit hours.

Degree Total 64 hours



Dual Credit Opportunities

Dual Credit with State Fair Community College (SFCC) is a partnership agreement between the KN School District and SFCC. The program is designed to allow high school students who qualify to earn dual high school credit and college credit by taking on-site and online classes. Students may earn college credits as a high school student and use those credits earned toward their high school diploma. Students who wish to take dual credit courses must have a grade point average (GPA) of 3.0 or better on a 4.0 scale. Additionally, students must have ACT or Accuplacer placement scores appropriate to the dual credit classes being taken. Sophomores and freshman students wanting to take dual credit classes have specific requirements for eligibility, see your counselor for current information. Students may take any online courses at SFCC that meet the prerequisite for the course.

KNHS Course	SFCC Course Equivalent	Cost of Course	Requirements	
College Algebra (online)	Math 114: Precalculus Algebra	for current rates. Discounted	for current rates. Discounted Dual Credit Han	current rates. Discounted Dual Credit Handbook
Creative Writing	ENGL 106: Creative Writing (Elective)	rates may be available for students who qualify for free/reduced lunches.		
Composition I (Ind Study)	Comp I			
Composition II (Ind Study)	Comp II			
Literature (Ind Study)	Introduction to Literature			



Dual Credit Opportunities

Central Missouri provides high-performing high school students with challenging, high-quality, college-level courses. These courses help enrich and extend the high school curriculum, provide introductory college experiences, avoid unnecessary duplication of coursework, and help students accelerate their progress while reducing the cost of earning a college degree. Our program also ensures the dual credit course requirements and content are the same, or equivalent, to the same course taught on campus.

KNHS Course	UCM Course Equivalent	Cost of Course	Requirement
Chemistry I		\$85 per credit hour Total: \$340	No Math req. at this time.

AP Chemistry	Chem 1311 General Chemistry	\$85 per credit hour Total: \$425	ACT Math score 24+
Business Technology I	CTE 1210 Managing Information	\$85 per credit hour Total: \$255	GPA: 3.0+
Digital Media		\$85 per credit hour Total: \$255	GPA: 3.0+
KNHS Course	UCM Course Equivalent	Cost of Course	Requirement
Introduction to Engineering (IED)	CTE 1300 – Introduction to Engineering Design (IED)	\$255	Course Grade of B EOC Score of 6
Principles of Engineering (POE)	ENGT 1000 – Principles of Engineering (POE)	\$255	Course Grade of B EOC Score of 6
Engineering Design & Development (EDD Capstone)	CTE 4000 – Engineering Design & Development (EDD)	\$255	
Digital Electronics (DE)	ET 1050 – Digital Principles & Applications (DE)	\$340	

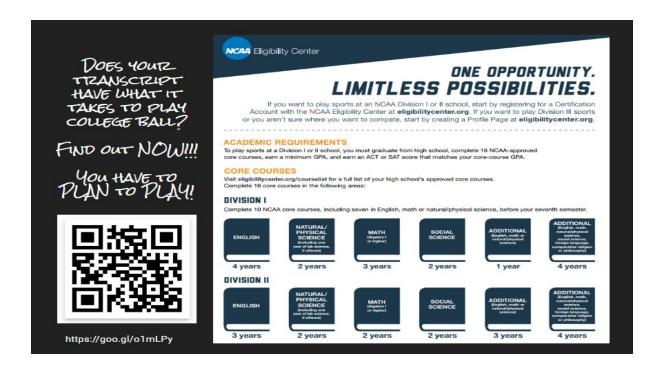
Engineering classes can receive articulated credit through the PLTW partnership with UCM. No Book purchase required. All PLTW engineering classes here at KNHS are currently Lab fee with the exception of the EDD capstone that currently requires investment in materials for Senior Projects. **Credit requires a B in class and 6 out of 9 EOC score required for credit.** No Pre Pay required, paperwork and fee payment is ONLY required to be routed routed for qualifying students after class concludes IF student wishes to get credit from UCM. **Your instructor will have the necessary application paperwork for you to receive dual credit from UCM.**



Dual Credit Opportunities

KNHS Course	MO S&T Course Equivalent	Cost of Course	Requirement
Introduction to Engineering (IED)			Course Grade of B EOC Score of 6
Principles of Engineering (POE)	MECH ENG 1720	\$200	Course Grade of B EOC Score of 6

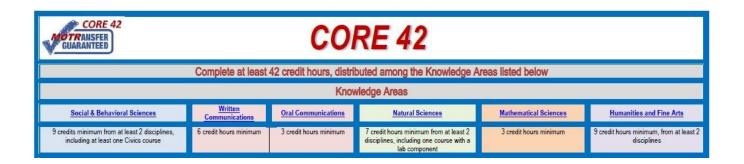
Students who have taken two high school Project Lead The Way classes (Introduction to Engineering Design (IED) and Principles of Engineering (POE) are invited to use this form to apply for three hours of credit for the Missouri S&T Interdisciplinary Engineering 20 course (IDE 20) required for all Missouri S&T freshman engineering students. Students must have taken the PLTW courses at a certified PLTW high school, have an 80 % (B) or higher in the classes, and score a 70% or higher on the PLTW EOC college-credit exams for each class. The fee is \$200. Students may also visit MO S&T's website referencing PLTW https://pltw.mst.edu/undergradcredit/undergradcredit/





The Missouri Department of Higher Education (MDHE) has put into place the CORE 42 Transfer Guide for students attending a 2-year community college prior to attending a 4-year university to earn their Bachelor's degree. This program guarantees the transfer of credit from the 2-year college to the 4-yr university. For more information visit MDHE's site https://dhe.mo.gov/core42.php.

Student can electronically track their courses through the MDHE website at https://web.dhe.mo.gov/dhe/coursetransfertracker/homepage.faces



CORE 42 Course Inventory Social & Behavioral Sciences and Civics					
Written Communication	ons and Oral Communications				
Composition I Composition II Technical Writing Fundamentals of Public Speaking	 Introduction to Communications Interpersonal Communication Small Group Communication Argumentation & Debate 				

Natural Sciences				
Astronomy Essentials in Biology Biology Essentials in Chemistry Chemistry I Physical Geography Geology Essentials in Human Biology Human Biology Essentials in Physical Sciences Essentials in Physics Physics I Physics I with Lab	Astronomy with Lab Essentials in Biology with Lab Biology with Lab Essentials in Chemistry with Lab Chemistry I with Lab Physical Geography with Lab Geology with Lab Essentials in Human Biology with Lab Human Biology with Lab Essentials in Physical Sciences with Lab Essentials in Physics with Lab Advanced Physics I with Lab			
Mathen	natical Sciences			
• Pre-Calculus Algebra • Mathematical Reasoning & Modeling	Statistical Reasoning Pre-Calculus			
Humani	ties & Fine Arts			
 Art Appreciation Art History I Western Civilization I Western Civilization II Creative Writing (Fiction, Poetry, Nonfiction, Dramatic Script) Introduction to Film Studies French I French II Spanish I Spanish II World Language I World Language II Music Appreciation (General, Rock/Pop, Jazz) Music Fundamentals World Music Music History I Acting I (Acting, Voice/Diction, Theatre Techniques, Stage Movement, Stage Combat) Directing I (Directing, Stage Management) Music Performance (Choir, Band, Orchestra) Script Analysis (Script Analysis, Playwriting) Stagecraft (Stagecraft, Scenic Design, Costuming, Theatre Drafting, Stage Makeup) 	Studio Art (Drawing, Painting, Graphic Arts, Sculpture, Ceramics, Multimedia) Introduction to Literature (Fiction, Poetry, Drama) American Literature (Pre-Civil War, Post-Civil War) British Literature (Beginning to 18th Century, Late 18th Century) Multicultural Literature (African-American, Native American, Latino/Latina) Women's Literature World Literature (Begins with Antiquity & Ends Around 1660, Begins Around 1660 & Extends to Present Day) Introduction to Philosophy Introduction to Ethics World Religion Theatre Appreciation Children's Theatre History of the Musical Theatre History I Theatre History II World Drama			

ADDITIONAL INFORMATION

Taking Additional Coursework

Both UCM and SFCC allow students to take other online or seated courses through UCM or SFCC that are offered in the evening or during the summer. Please check with the school to see what their offering are.

Application Deadline

College or University	Application Deadline to Institution	Deadline to KN Teacher	
State Fair Community College	Teacher will give students the date	Teacher will assign date	
Univ. of Central Missouri	Teacher will give students the date	Teacher will assign date	
MO Univ. of Science & Tech.	Upon completion of course	Teacher will assign date	

AP Coursework and Dual Credit

AP courses culminate with an AP exam—administered by the College Board, a non-profit organization that oversees the program. The test is administered during the school day at KNHS using proctors. If a student passes the exam with a score of a 3, 4, or 5, then the college or university he/she attends may grant a specific number of college credits depending on the score and the test taken. There is a fee charged to the student to complete the exam. The majority of all colleges and universities in the United States accept AP credit. Students who have severe financial hardship may qualify for some assistance. See a counselor or principal for information.

Since there are many AP exam offerings, students may elect to take additional AP exams even if we do not have a specific course for that exam. There are times when students have had enough prior coursework to score well on an AP exam without currently being enrolled in an AP course at KNHS.

Transferring Dual Credit

Students that need to transfer their dual credit will need to contact the school from where they received the dual credit and have an official transcript sent to the college to which they are applying. Most colleges have a Transfer Guide that will tell how classes will transfer to that specific college. To find this information, students should type "Transfer Guide" into the search engine of the college to which they are applying.

The following chart is the current offerings in AP and Dual Credit. These lists are subject to change.

AP Courses	Dual Credit at KNHS	Dual Technical Credit at WCCC or SFCTC*	
English: AP Literature & Composition AP Language & Composition Social Studies: AP European History Science: AP Biology AP Chemistry AP Environmental Science Math: AP Calculus AP Statistics AP Computer Science A World Languages: AP Spanish Language & Culture	English:	Automotive Technology I & II Automotive Service I & II Construction Trades I & II Health Science I & II	

Knob Noster High School 2020-21 Course Request Planning Form

Name:				Graduation Year:		
Intended Career/Career Cluster:					Panther Hr. Advisor	
Post Seco	ndary Plans: (C	heck what you	are cur	rently think	ing about)	
0	4-year College 2-year College Technical School Military			u V	pprenticeship /ork ther:	
schedule w guarantee	where most appr enrollment in th	opriate. Request ne preferred sem	ing a sen	nester based	nd semester and will be placed in a course during a specific semester	
Course	ster Course Ro # Course Tit			Course #	Course Title	
Course	- Gourse III			Gourse #	Course Title	
requests a make it im reason, it i	nd teacher availa possible for som	ability. During the students to be ents complete at	e schedu enrolled	uling process I in all course <u>ee alternate</u>	ffered during the year depends on there are often conflicts that arise es which have been requested. For requests for each semester.	which
 Student Si		 Date	-	 Parent Signo	ature Date	